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# DALLA terra DEGLI<mark>INNOVATORI</mark>



India as a country is abundant with natural resources, and its wonderful people. But as an economy we are lagging behind in collaborative growth, technological up gradation, and a lot, which is need of the hour. Even with campaigns like Make in India, the majority of advanced manufacturing are still imported, and it's a very long way for us to develop as a global manufacturing economy. We are aware of the fact that Germany, Japan, Taiwan, Korea, China are some of the major countries who have set up their businesses and manufacturing setups in the country, What about Italy? It's one of the six global leaders in manufacturing, second in Europe.

A lot of Italian companies are doing business with India for more than seven decades, and when the idea mooted by Ravindra Moolya of Speroni India to bring out with a special issue on Italian machine tool manufacturers. we grabbed the opportunity to take our innovative journey to unwind the journey both countrymen took for quite some time. It was overwhelming support we received from the CEO & Secretary General of Indo Italian Chamber of Commerce & Industry (ICCI), Mr. Claudio Maffioletti and his team, who not only welcomed the initiative but also worked along with us a Technology Partner to make this a grand success.

Personally, for me, Italy's synonym has been Cavalier Surendra Kumar for a very long time. I started my career in Delhi with Business Press in 1996, and it was lucky for me to have him as one of my initial customers, and over the years the relationship has grown closer. He represents several decades of industrial growth in India, and we are proud to feature him as our Machine Maker for this edition. We are sure, you will find this edition a wonderful read.

Cheers!

Hari **Shanker** Managing Editor







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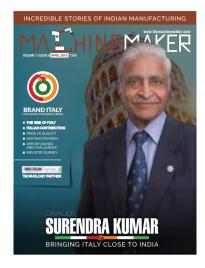
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# **CONTENTS**





# On the cover

58 SURENDRA KUMAR
Chief Executive
Precision International

# **Interview**

48 RAVINDRA MOOLYA
Director, Speroni India
Private Limited

# **Industry survey**

76 ITALIAN COMPANIES
IN INDIA
Generalised survey

# FORM IV

Statement about ownership and other particulars about newspaper MACHINE MAKER to be published in the first issue every year after the last day of February

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- Names and addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital.
- 1. Hari Shanker A G, B201, ARIANA, Survey No:91/3, Wakad, Pune 411057
- $2.\,Siji\,\,Nair,\,Sreehari,\,Vellanad,\,Thiruvananthapuram-695543$
- I, Hari Shanker A G, hereby declare that the particulars given above are true to the best of my knowledge and belief.

sd/-

Date: 1st March 2019 Signature of Publisher

# Manufacturing review

- 10 Register yourself with Udyog Aadhaar in 5 mins
- 12 Manufacturing growth slopes down to 6 month low
- 13 Upcoming Projects

# Main feature

- 16 Brand Italy for Indian Manufacturing
- 18 Indo-Italian Bilateral Trade Relation
- 20 The rise of Italy destination for manufacturing
- 24 Leonardo Da Vinci: 500 years of design & invention
- 26 Italian masters in the world of discoveries
- 28 Italian contribution to the Indian industries
- 42 Price vs Quality two differing economies
- 44 Destination Incredible India
- 46 Opportunities and Challenges that lie ahead

# **Special feature**

- 56 Indo Italian companies
- 58 Tecno System
- 60 Salvagnini Group
- 62 Motovario
- 64 CFT Rizzardi
- 68 Speroni India
- 70 Lubritalia
- 72 Interpump Group
- 74 Colombo Filippetti

# Made in India

78 Burrgon electro chemical deburring machine

# **Case story**

82 Renishaw metal 3d printing technology

# Technology

84 TwinCAT 3: Machine learning for all areas of automation



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**Standard Parts** for Die & Mould Making



# **FIBRO India Association** With HEMA, Germany for

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required by Machine tool OEMs

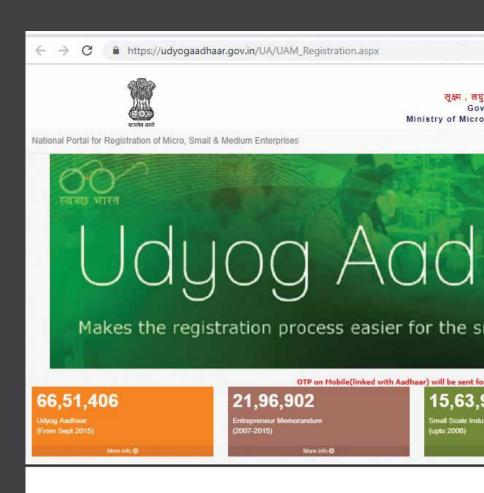


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# Register yourself with Udyog Aadhaar in mins

'Mera Adhaar, Meri Pehchaan', gives you the advantage to know your rights and utilise them to make a name and an identity for yourself. And now with this, you, as an enterprise would be able to take advantage of all the government schemes.



Indian government these days is taking a lot of painstaking efforts to introduce to its citizens the best of governmental schemes. The schemes that are beneficial to the MSMEs and SMEs. Udyog Aadhaar has come up with the best and easy way to help all the small business sectors register their enterprises to enjoy the provisions of the government.

Udyog Aadhaar makes the registration process for all the small business sectors easier. There are companies who avoid getting involved in these schemes due to the tedious and exhausting processes. But little do the people know that now, within a flick of a moment, they would be able to register themselves to avail the best governmental schemes.

Aadhaar Number: While filling online Udyog Aadhaar form, be sure to fill the 12 digit Aadhaar number issued by the government in the appropriate field.

Name of Entrepreneur: Be sure to fill the name in accordance with the Aadhaar card. (\*Note- If the name is not filled the same way as mentioned in the Aadhaar card, you will not be able to fill the form further.)

Once the Aadhaar number and the Name have been filled, now you have to validate it and

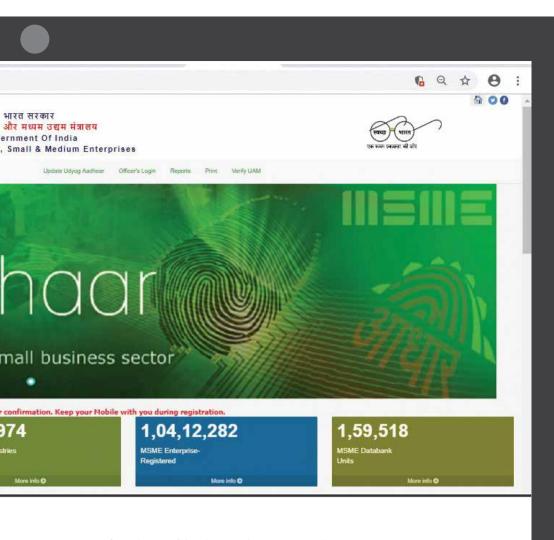
generate the OTP. Only after this, you would be able to fill the form further. OTP will be sent to your mobile number registered with UIDAI. Social category: Here, you are expected to select the category you belong to. In the later stages, the proof of belonging to SC, ST or OBC may be asked.

Gender: Select the gender of the entrepreneur.

**Physically Handicapped:** Mention the Physically Handicapped status.

Name of the Enterprise: You must fill the name of the Enterprise by which it would be known and legal to conduct business. Type of organisation: Select from the given list the type of organisation the enterprise is. PAN Number- If you are a co-operative, Private Limited, Public Limited, you need to enter the PAN Number.

Location of the plant- You are provided with the provision to add multiple plant locations in one registration.



YES! 5 minutes of data input and you are a registered enterprise. Seems interesting and even time-saving. To initiate the first step is to get your Udyog Aadhar registered with MSME ministry. Not sure about how to be in pace with the registration process? Have no worries. Take a look at the mentioned steps and within no time, you would have registered yourself for the governmental schemes.



Your registration has been successfully completed. You, as an enterprise, are now registered for all the government schemes!!

With the government's different schemes and provisions, the small and medium scale industries would now be able to outgrow in their respective businesses. The initiative by Udyog Aadhaar is applaudable to make every process for the small business easy and worth. This helps us envisage the future of India in the manufacturing and service sectors.

Date of commencement: Here; fill the exact date of the commencing of operations of the business.

Previous registration details: If the Udyog Aadhaar has already been generated previously provide that number in the appropriate place.

Bank details: Include the details used for running the Enterprise.

Major activity- Chose the activity the enterprise is involved in. If into both

manufacturing and services, choose the one which has a major share.

National Industry Classification code (NIC Code): Choose the NIC code which includes the activities.

Person employed: Mention the number of people employed.

Investment in Plant and Machinery/ **Equipment:** Include the total investment in setting up the plant and machinery. DIC: If you are based in the location of

Enterprise, you need to fill in the location DIC.

Submit: Next, click on submit to generate the OTP which would be sent to the email id mentioned.

Enter the OTP received on mobile, enter the captcha and submit



# **India's Export Business** Witnesses a Shift to Higher Value- Added Manufacturing

India is now expectedly exporting a higher value-added manufacturing item which is providing an indication to the country's new trade dynamics. India's export business is gradually inclining in favour of high-value-added manufacturing. Also, there is a rebellious shift in the exports away from traditional manufacturing like the textiles and gems and jewellery.

The bimonthly monetary policy statement (MPS) 2018-19 reviews the relative shift of export away from primary and traditional low value-added exports to higher valueadded manufacturing and technologydriven items.

Despite the major challenges of protectionism, tough global conditions and domestic front constraint, the export business has grown here in India. This

change in the trend of export is inducing new trade strategies of growth of the Indian market.

Comparing the key items of export between 2011-2012 and 2018-19, the results reveal a significant increase in the share of engineering goods. The shift has proclaimed a measure of flexibility to

> export demand in the international trading environment.

Also, a hike in the interest equalisation rates for MSMEs exports from 3 per cent to 5 per cent provides the Reserve Bank of India hope for a further rise in exports. According to the firm belief of the manufacturing experts, a combination of rupee depreciation and the rising standards of manufacturing companies

will continue to brace the high-tech



# Pininfarina unveils world's high performance electric car Battista

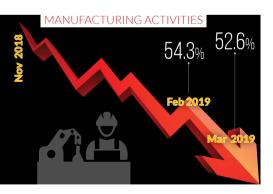
When it arrives in 2020, the Battista will be the most powerful car ever designed and built in Italy. Automobili Pininfarina, owned by India's Mahindra group, has unveiled the world's first luxury electric hyper performance car Battista. With 1900 BHP and 2300 NM of torque, this electric car can go from 0-100 kmph in under two seconds, 0-300 kmph in less than 12 seconds with a top speed of 350 kmph, making it faster than a Formula 1 car.

The Battista sports a carbon fibre monocoque chassis and a carbon fibre body. The weight distribution of the T-shaped 120 kWh battery pack is configured to optimise the Battista's dynamic potential, with four motors independently distributing torque and power to each wheel, delivering all the benefits of modern torque vectoring. Powering the motors is a 120 kWh lithium-ion battery pack that gives the car a a potential zero-emissions range of up to 450 kilometres.

According to the company, there will be a limited roll out of 150 units of the cars which will be handcrafted in Italy and allocated equally among the regions of North America, Europe and Middle East/Asia. Customer service will be delivered through some of the world's best luxury car retail specialists, from Los Angeles to London to Tokyo. In terms of style, the car sports a classy long and flowy design with elements from other Pininfarinas and Ferraris. Functionality forms part of the design scheme too with the integrated bonnet scoop, carbon splitters and rear diffuser which also adds downforce. M

# Manufacturing growth slopes down to 6 month low

export.



Manufacturing in India has been the most talked about the sector. In March 2019, the manufacturing activity in India slowed to a six-month low as the orders and output expanded at a weak pace.

A widely tracked Nikkei's Purchasing Managers' Index (PMI) showed a decline in the manufacturing activities to 52.6 in March from a 14-month high of 54.3 in February. The manufacturing sector in India lags behind with metrics for factory orders, production, exports and employment all moving slower. The growth still remains sustained on all fronts. It has been reported that in January this year, the industrial production grew just 1.5% while here in February, there was a mere 2.1% expansion in the manufacturing activity. Not only this, but car sales have also been severely affected in the last few

Despite all the lows, the operating conditions have continually improved since March. It is also noted that there is a soft increase for new orders, production and employment.

# **Upcoming Projects - North India**

# PUNJAB

Hero Cycles is setting up an industrial park in Punjab.

**Investment:** Rs. 200 crore.

Promoter: HFRO CYCLES LIMITED

Hero Nagar, G. T. Road, LUDHIANA-141003.

Phones: 161-2539448-52, 5026969

# **HIMACHAL PRADESH**

Livguard Batteries has raised manufacturing capacity of Manpura plant.

Investment: Rs. 139 crore **Promoter:** Livguard Batteries Plot No. 221, Phase-I, Udyog Vihar, Gurgaon 122016 Haryana, India

Phone: +91-124-4987 400

Email: marketing@livguard.com

# UTTAR PRADESH

Infosys plans to develop an IT park at Sector 85, Noida in Gautam Budh Nagar district of Uttar Pradesh.

Investment: Rs. 1,400 crore

Promoter: Infosys Technologies, Plot No. 44 & 97A, Electronics City, Hosur Road,

Bangalore 560 100

Phones: +91-80-28520261

# UTTAR PRADESH

Super Plastronics is setting up a factory in Noida.

**Promoter:** Super Plastronics B-30 & 31, Phase -2, Sector 81. Noida. Uttar Pradesh 201305

Phone: 097111 12288

# **Upcoming Projects - East India**

# ORISSA

Aditya Birla Fashion is setting up a garment manufacturing unit in Orissa.

Promoter: Aditya Birla Fashion and Retail Ltd., 7th Floor, Skyline Icon, 86/92, Off Chimmatpada, Village,, Andheri - Kurla Road, Mumbai, Maharashtra 400059

Phones: 086529 05000

# ORISSA

Star GSM Upakaran Peripherals plans to set up an electronic system design manufacturing unit at Electronic Manufacturing Cluster (EMC), Info Valley, Bhubaneswar.

Promoter: Star GSM Upakaran Peripherals, 10/759-760, MALVIYA NAGAR JAIPUR Jaipur, Rajasthan

# JHARKHAND

BPCL plans for POL storage project at Radhanagar village, Chas taluk, in Bokaro.

**Promoter:** Bharat Petroleum Corporation Limited, Kochi Refinery, Post Bag No. 2, Ambalamugal PO, Ernakulam 682 302, Kerala Tel: +91-484-2722061

# **Upcoming Projects - West India**

# RAJASTHAN

Y-Tec India plans to set up an auto parts in Alwar

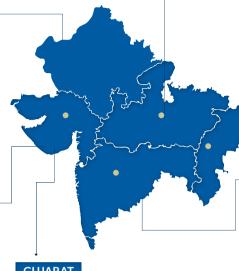
Promoter: Y-Tec India Pvt.Ltd. Sp2-104,105,106 Riico Industrial Area, Japanese Zone, Neemrana. Alwar, Rajasthan

# **GUJARAT**

Ami Lifesciences plans to set up a bulk drugs unit Karakhadi.

Promoter: Ami Lifesciences Pvt. Ltd. 40 Urmi Society, Prestige Plaza 2nd Floor, Akota, Vadodara-390020

Phones: 91-265-2323046 / 3052103



# **GUJARAT**

Construction of (280 ews1 + 512 ews2) dus flat type g+3 r.c.c frame structure buildings including on site development with all infrastructure services at Chorwad Under "Pradhan Mantri Awas Yojana" Dist: Junagadh.

Investment: Rs. 58.08 Crores Promoter: Nagar Palika Nigam

Nagar Palika Nigam, Nagar Palika, Chorvad

Phones: 02870 288647

# MADHYA PRADESH

Kriti Industries (I) plans to set up an extrusion pvc/ pe / polymer pipes for agri irrigation as per iem in Pithampur, Dhar

Promoter: Kriti Industries (I) Limited Unit-I. Chetak Chambers" 4th Floor 14 R.N.T. Marg, Indore - 45201 Madhya Pradesh, India

Phones: +91-731-270-4716 Email: info@kritiindia.com

# MAHARASHTRA

Godrej Properties (GPL) launches of Godrei Anandam, a premium residential project at Model Mills, Nagpur.

**Promoter:** Godrej Properties Model Mill Compound, Ganeshpeth Colony, Nagpur, Maharashtra 440018.

Phones: 099606 95829

# Upcoming Projects - South India

# TELANGANA

The Supreme Industries plans to set up an material handling products in Polepally, Mahbubnagar.

Promoter: The Supreme Industries Ltd 1161, 1162, 6th Floor, Solitaire Corporate Park, 167, Guru Hargovindji Marg.

Andheri- Ghatkopar Link Road, Chakala, Andheri (East), Mumbai-400093

Phones: +91-22-40430000, 30840000

# TAMIL NADU

Pennar Industries (PIL) plans to set up hydraulic cylinders at Periyapalayam in Chennai, Tamil Nadu.

**Promoter:** Pennar Industries. 1-10-75/1/1-6, 3rd Floor, Saptagiri Towers, S.P. Road, Begumpet, Hyderabad-500 016, Andhra Pradesh

Email: contact@pennarindia.com

# ANDHRA PRADESH

Pals Plush India plans for toys plant in Sri City in Andhra Pradesh.

Promoter: Pals Plush India Pvt. Ltd. 260 Alstonia Drive, Sector 33 SRI CITY SEZ, Chittoor. - 517 588, Andhra Pradesh, India.

Email: info@palsplush.com

# ANDHRA PRADESH

Chandu Cattle Feeds is implementing an ethanol unit in Kakuturu village, Venkatachalam mandal in Nellore

**Investment:** Rs. 5.62 Crores Promoter: Chandu Cattle Feeds.

Plot No. 31&30B, Sy.No.432/2 Part, APIIC Industrial

Park, Kakuturu Village,

Venkatachalam Mandal, Nellore.

Phones: 9849508777



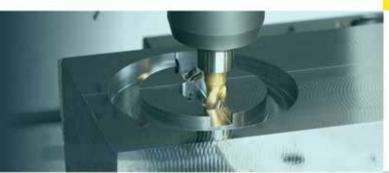


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# **BRAND ITALY** FOR INDIAN MANUFACTURING



The most remarkable year in the history of Italy! The Kingdom of Italy was officially established as an extension of the Kingdom of Sardinia under the dynasty of the Savoy Family. Before 1861, Italy was, in the words of the Austrian statesman Metternich, a "mere geographical expression."



INDUSTRIAL REVOLUTION

Industrial revolution has always remained a disputed topic in history. However, iron and steel industry gained popularity during this phase in Italy. Though Italy could not leverage the benefit of 1st industrial revolution full-fledged way, cereal crops, infrastructure development took major charge.







# INDUSTRIAL REVOLUTION

Italy was resourceful for the 2nd industrial revolution which was based on hydro-electric. Different companies in automobile sector flourished and Italy became a growing chapter in the industrial renaissance.



Soon after World War 2, Italy's industrial production increased by 8.2%. Foreign trade opened up and livelihood got enhanced.



# Today:

Today Italy is India's 5th largest trading partner in the EU. Both countries have so many things in common and enjoy a great bi-lateral relationship. There are many Italian companies in India having their direct operational facility. Also, there are more than 20,000 Italians residing in India.



# ITALY

According to historicists, Roman settlement dating back more than 2000 years can be found still in India. During World War 2, British army brought Italian prisoners to India. Diplomatic relationship between India and Italy flourished during 1948.



**HEADING FOR** A NEW ERA

Indo-Italian Bilateral

Trade Relation

India and Italy share a vibrant trade relationship. While Italian companies bring in excellence to India in the automotive, fashion, food processing, and machinery sector, Indian companies are equally making a mark in Italy in sectors such as steel and information technology. In this special edition of Brand Italy for Indian Manufacturing, we at The Indo-Italian Chamber of Commerce and Industry (IICCI) are proud to be associated as Technology Partner.

# **CLAUDIO MAFFIOLETTI**

Chief Executive Officer and Secretary General The Indo-Italian Chamber of Commerce and Industry





taly is the fifth largest manufacturing country worldwide and only second in Europe. With Industry 4.0 principles Italy is undergoing a radical upgradation of its manufacturing capabilities. India on the other hand is emerging fast as a super economic power with renewed focus on core industrial sectors and steady GDP growth.

The Indo-Italian Chamber of Commerce and Industry (IICCI) is dedicated to partnering with Italian and Indian companies to help them achieve greater heights and strengthen the bilateral trade relationship. Let us see at the challenges, opportunities and value addition that the two countries bring to each other.

# Skill Development

Indian government is upbeat on skill development in the country. Skill development can be at two levels: At the managerial level where managers and engineers have to understand the production chain and level of improvements, Industry 4.0 etc. At the operators level, India needs skilled workforce who is able to use and maintain advanced machines.

Indian companies have training teams and training modules. But there is need to build up skills on theoretical and practical levels where Italy has a great knowledge and share with the Indian counterparts training programmes and training centres. The programmes are directed at training the trainers, who can then transfer the knowledge among Indian workforce.

# Technology Transfer

Italian products and solutions are advanced as they use technologies which offer higher technological advantages. Behind every fine Italian product there is an extremely advanced manufacturing knowhow and history of generations of people who have refined the manufacturing processes in such a way that you get such highly advanced and stylish products.

Especially, in areas of manufacturing, there is distinguished skill set and knowhow which can be shared can be shared with Indian counterparts. But there can be a strategic exchange where the technology can be availed, monetarily as well as through positioning of Italian products and technologies and in respect of creation of a community which is sensitive and understand what Italy has to offer.

# India's Economic Growth

India has emerged as the fastest growing economy in the world. As per the current growth trajectory, India is expected to be one of the top three economic powers of the world in the next 10-15 years. The tremendous growth in India's purchasing power parity (PPP) and gross domestic product (GDP) over the past few years is reflective of the robust economic growth of the country.

With a focus around Ease of Doing Business and reforms in the FDI sector, the Government of India is committed to hit the 8% mark by 2021 and present India as the most coveted place of global investment.

# Opportunities for Italian companies in India

The recent FDI statistics from the Department of Industrial Policy and Promotion (DIPP) position Italy as the 17th largest foreign investor in India. There is



# **Demographically** the biggest Indian community in continental Europe is in Italy



a huge market and there is an increasing awareness of quality of products that Italy delivers.

In India, there is a granular growth spread across widely in villages, two and three tier cities where opportunities abound. Italian companies want to explore and support the capabilities of manufacturers to cater to those untapped markets. Italian companies can support agricultural sector from farm mechanization to food processing. They can help in engineering infrastructure and construction.

# What Italy offers

India offers fast growing market which is appealing to Italy. Likewise Italy is part of the European market, and could become a hub for Indian investors to operate in the European market. Demographically the biggest Indian community in continental Europe is in Italy.

# Challenges of Italian companies in India

There are methodical differences in the way Italian and Indian companies work. So, Italian companies have to understand that first. Secondly, time is a big factor in India to start business which is why Italian entrepreneurs are concerned about venturing into India. After sales service is another area of challenge for the Italian companies as compared to German, Japanese and Korean companies. So, there is need to understand the implications of looking at India either for new investment or commercial exchanges.

Demographically, there is also less number of Italian citizens in India as compared to citizens from other countries. In trade there is also another way to look at it. Italian companies do not have problem with appointing local CEOs as compared to companies from other countries that follow a practice of appointing people from those countries only. So, the paucity of Italian managers in India is a problem but also it indicates there is strategic approach of Italian companies to appoint local managers.

# Challenges of Indian Customers in Italy

Italian companies are extraordinary technology players. But Italian companies also tend to focus on specific segment instead of entire solutions while Indian customers look for entire range of solutions. So, Indian customers have to contact more than one Italian company for complete solutions if they look at Italy as a supplier. Companies from other countries offer entire chain production, with less flexibility and less customization

We are in talks with the Italian companies who work together elsewhere or in India in a scattered way. As an Indo-Italian association, it is our mandate to have a cluster-based approach, where we want to bring Italian companies together so that they can together offer entire solutions.

India and Italy share a beautiful bonding that cuts across areas of history, culture, diplomacy, and trade. Last year, India and Italy have completed 70 years of diplomatic ties. Within one year, India hosted two Italian Prime Ministers - the ex-Prime Minister Paolo Gentiloni in October 2017 and, more recently, Giuseppe Conte in October 2018. India's External Affairs Minister visited Italy in June 2018 and met the top Italian leadership, including Prime Minister Conte, to revitalise bilateral ties. Certainly, India-Italy relations are in a phase of great prosperity with a bright future ahead.

# THE RISE OF ITALY

# DESTINATION FOR MANUFACTURING

Italy is the second most important manufacturing country in Europe after Germany with an extraordinary know-how in strategic sectors such as machine tools, fashion, foodstuffs, automotive and oharmaceuticals.

23.6

Manufacturing accounts for 23.6 per cent of the GDP of Italy

\$63.2 bn

Italy continues to maintain the fifth highest manufacturing trade surplus in the world, amounting to approximately \$63.2 billion.

# Development of Italian Manufacturing

The most remarkable feature of Italian economic development after World War II was the spectacular increase in manufacturing and, in particular, manufacturing exports. The most significant contributory factors to this growth were the Marshall Plan (1948-51), a US sponsored program to regenerate the post-war economies of western Europe; the 1952 foundation of the European Coal and Steel Community (ECSC), later under the European Federation of Iron and Steel Industries; the start in 1958 of the EEC, which contributed to the liberalization of trade; and the abundance of manpower that fueled the growth of northern industrial concerns.

Steel transformed the Italian economy with a flourish. Despite the lack of mineral resources, the Italian government opted to join the ECSC at its inception, and Italian steel industry developed so rapidly that by 1980 it accounted for 21.5 percent of production in the EEC (which by then had nine members) and in Western Europe.

Moreover, Italy was second to West Germany among western European steel producers. Steel formed the backbone of the metallurgical and engineering industries

> known as metalmeccanica. These enjoyed their heyday between 1951 and 1975, when mechanical exports rose 20-fold and the workforce employed in the industries doubled. The number of people working in the automobile industry tripled, and metallurgical exports increased 25 times. The steel industry, which declined in the last decades of the century, went privatisation during 1992-97.

The main branches of metalmeccanical included arms manufacture, textile machinery, machine tools, automobiles and other transport vehicles, and domestic appliances. The automobile industry has been dominated by Fiat since the founding of the company in Turin in 1899. Milan and Brescia became the other main auto-making centres until Alfa Romeo opened its plant near Naples, leading to a decentralization of the industry. Automobile production





# MADEIN



# **COUNTRY** BRANDING **THAT STANDS FOR EMINENCE...**

Country of origin (COO) or 'Made in' labeled with products influences customers globally. Italy is one of the very few countries which have become a brand globally. 'Made in Italy' rightfully stands as an expression that stands for quality, originality, and performance quality, creativity and originality, characteristics that define Italy.

Italian products and goods are highly appreciated for their top quality. attention to details and innovative design.

Country of origin (COO) is a concept, within the country branding approach that has an important influence on the customer's perceptions and purchasing behaviours.

Customers, indeed, are influenced and "Made In" affects their purchasing behaviour as well as their perception about the country of origin. COO is a driver of consumer's behaviour where the country of manufacturing is very important for the consumer's choice.

Right from the fashion world famous Italian brands such as Valentino, Giorgio Armani, Dolce & Gabbana and Prada to the world of cars and motorbikes with names such as Ferrari and Ducati, to Italian designers and architects such as Giorgetto Giugiaro, Sergio Pininfarina and Massimiliano Fuksas are internationallyrecognized.

The concept 'Made in Italy' has been present and in used since 1980. This general concept has become a brand that the manufacturing sector is using to identify them and give their own products a stamp of value.



It is with this brand value created with years of brand building approach that Italy scored 70.77 points out of 100 on the 2018 Global Competitiveness Report published by the World Economic Forum.

Competitiveness Index in Italy averaged 15.43 Points from 2007 until 2018, reaching an all time high of 70.77 Points in 2018 and a record low of 4.30 Points in 2010.

The most recent 2018 edition of Global Competitiveness Report assesses 140 economies. The report is made up of 98 variables, from a combination of data from international organizations as well as from the World Economic Forum's Executive Opinion Survey.

# 1960

History suggests that country branding of Italy started on negative note. As a matter of fact. 'Made in Italy' was first introduced in the 1960s in the global arena after the German and French governments demanded that the Italian goods be marked 'Made in Italy' to help their own citizens easily identify these goods, many textiles and shoes, as not manufactured in their own country.

However, far from those days, today many 'Made in Italy' brands are appreciated and recognized worldwide for their innovative design and highquality.



ALESSANDRO MALAVOLTI President Feder Unacoma

The wide range of solutions proposed by the Italian agricultural machinery industry can cater to the needs of Indian agriculture. That's why several Companies from our sector look at India with a strong interest, both as a target for their exports and as a manufacturing hub. For our Federation itself India is a land of opportunities: the Eima



Agrimach exhibition we organize testifies our commitment to the improvement of cooperation between Italy and India.

took off in the 1950s and soared until the mid-1970s, when it began to stagnate. In the 1980s imports from Japan and an economic recession further dampened the industry, though new markets were opened in Eastern Europe at the end of the Cold War in the early 1990s. In 2011 Fiat acquired a majority stake in the American auto company Chrysler, and Fiat's involvement saw the car maker return to profitability for the first time in years. Today Italy has one of the highest numbers of cars per capita in the world.

Notable large firms notwithstanding, the manufacturing sector is characterized by the presence of small and medium-size industries, which are found mainly in northeastern and north-central Italy. This area, concentrated in industrial districts within Veneto, Emilia-Romagna, and Tuscany, is referred to as the "Third Italy," to distinguish it from the "First Italy," represented by the industrial triangle formed by the cities of Milan, Turin, and Genoa, and from the "second Italy," which includes the Mezzogiorno.

Each industrial district in the third Italy generally specializes in a particular area of light manufacturing, such as textiles or paper products, although more traditional manufacturing is also present. For instance, in Prato, Tuscany, the specialty is textile products; Sassuolo and Cento, both in Emilia-Romagna, engage in ceramic tile production and mechanical engineering, respectively; while Nogara, in Veneto, is known for wooden furniture.

Italy dominated the post-war domestic appliance market, which boomed until the first international oil crisis, in 1973, when small businesses were hard-hit by



# The Italian term "Industria 4.0" can be thought of a synonym for Advanced **Manufacturing**



the increase in energy prices. Olivetti and Zanussi were market leaders, and Italian-produced "white goods," such as refrigerators and washing machines, were much in demand. The textile industry has been important in Italy since the middle Ages, when Lombardy and Tuscany were leading centres for the wool and silk industry. Other important products now include artificial and synthetic fibre, cotton, and jute yarn. Textiles and leather goods were surpassed by the metallurgical sector in the 1960s, but they remain important components of manufacturing.

# **Future Manufacturing**

The Italian term "Industria 4.0" can be thought of a synonym for Advanced Manufacturing. When describing, "Industria 4.0" issues, Italian media and stakeholders are in fact focusing on a variety of advanced manufacturing technologies, including Internet of Things (IoT); additive manufacturing; cloud computing; robots and advanced machine tools; digital industry; cyber security and so on.

A recent survey found that over 64% of Italian metalworking and machinery companies are now actively applying at least one of the advanced manufacturing technologies mentioned above. A recent estimate by Accenture found that 82% of Italian entrepreneurs firmly believe that automation is key to the future of the Italian manufacturing sector. There are large discrepancies among highly advanced manufacturers and many who instead have not upgraded their technologies in a long time and are losing market share. Also, there is a need for Italian manufacturers of machine tools to increase the connectivity of such machines, namely by incorporating more sensors.

## Opportunities

The advanced manufacturing technologies with the best chances of success in Italy fall within the scope of the government of Italy's advanced manufacturing plan, known as "Piano Nazionale Impresa 4.0". This plan is the latest among those developed by large European manufacturing countries and is considered by many to be the most advanced and comprehensive. The plan consists of €13.5 billion in tax breaks for investments to be performed until end - year 2018, to reach €20.4 billion cumulated with additional resources that span the 2017 - 2020 timeframe. It aims at "triggering" private investments worth €23.9 billion in the above-mentioned timeframe. Its beneficiaries are Italian firms and foreign firms that have operations in Italy, regardless of sector and company type and size.



The major sectors of the Italian manufacturing industry the country is most specialized and a substantial foreign trade surplus is recorded, can be listed under the so-called.

- Food and wines:
- Fashion: including, in addition to apparel, leather goods, footwear, jewellery, eyewear, cosmetics and perfumery;
- Furniture and building materials: including, in addition to wood products and furniture, ornamental stones, tiles

and other ceramic products;

 Fabricated metal products and machinery, Ferrari cars, yachts, cruising ships and helicopters, plastic and rubber products: including all non-electronic mechanics, i.e. industrial machinery, mechanical equipment, plastic and rubber products as well all transport equipment and car parts except for finished cars,

where our trade balance shows a deficit: only Ferrari sports cars, a real "made in Italy" symbol, are includThere is an existing Italian law, since 2009, which states that only products totally made in Italy (planned, manufactured and packaged) are allowed to use the labels Made in Italy, 100% Made in Italy, 100% Italia, in every language, with or without the flag.





# ATC Systems

# CTA 50 HS

Tools exchanger with oval magazine



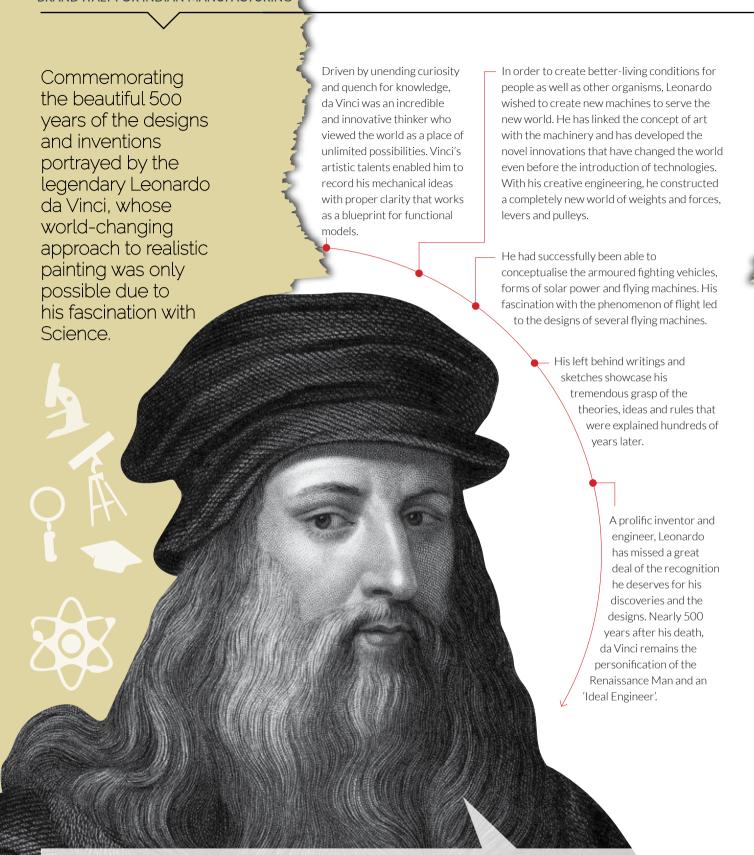
80 Tools

Made in Italy









# LEONARDO DA VINCI **500 YEARS OF DESIGN & INVENTION**

### Anemometer

Historians stipulate that it was Leonardo da Vinci's fascination with flight that inspired him to innovate the anemometer, an instrument for measuring the speed of wind. His hope was that, eventually, the device could be used to give people insight into the direction of the wind before attempting flight.

While da Vinci did not actually invent the device, he did make variations on the existing designed originated by Leon Batista in 1450 (da Vinci's design was probably made between 1483 and 1486) so that it was easier to measure wind force.

# Triple Barrel Canon

As a military engineer, one of Leonardo da Vinci's key beliefs was that mobility was crucial to victory on the battlefield. This idea is seen in many of his war inventions, from his mobile bridges and ladders to many of his weapon designs. A prime example is da Vinci's triple barrel canon invention.

# **Giant Crossbow**

One thing Leonardo da Vinci may have understood better than any of his contemporaries was the psychological effects of weapons in warfare. Da Vinci knew that the fear weapons could instill in enemies was just as important (if not more so) than the damage they could actually inflict.

This was one of the main ideas behind many of da Vinci's war inventions – among them, his giant crossbow. Designed for pure intimidation, da Vinci's crossbow was to measure 42 braccia (or 27 yards) across. The device would have six wheels (three on each side) for mobility, and the bow itself would be made of thin wood for flexibility.

### Armoured Car

The precursor to the modern tank, Leonardo da Vinci's armored car invention was capable of moving in any direction and was equipped with a large number of weapons. The most famous of da Vinci's war machines, the armored car was designed to intimidate and scatter an opposing army.

Da Vinci's vehicle has a number of light cannons arranged on a circular platform with wheels that allow for 360-degree range. The platform is covered by a large protective cover (much like a turtle's shell), reinforced with metal plates, which was to be slanted to better deflect enemy fire. There is a sighting turret on top to coordinate the firing of the canons and the steering of the vehicle.

# Flying Machine

Of Leonardo da Vinci's many areas of study, perhaps this Renaissance man's favorite was the area of aviation. Da Vinci seemed truly excited by the possibility of people soaring through the skies like birds.

One of da Vinci's most famous inventions, the flying machine (also known as the "ornithopter") ideally displays his powers of observation and imagination, as well as his enthusiasm for the potential of flight. The design for this invention

for the potential of flight. The design for this invention is clearly inspired by the flight of winged animals, which da Vinci hoped to replicate. In fact, in his notes, he mentions bats, kites and birds as sources of inspiration.

# Helicopter (Aerial Screw)

Though the first actual helicopter wasn't built until the 1940s, it is believed that Leonardo da Vinci's sketches from the late fifteenth century were the predecessor to the modern day flying machine. As with many of

da Vinci's ideas, he never actually built and tested it – but his notes and drawings mapped out exactly how the device would operate.

# Parachute

Though credit for the invention of the first practical parachute usually goes to Sebastien Lenormand in 1783, Leonardo da Vinci actually conceived the parachute idea a few hundred years earlier.

Da Vinci made a sketch of the invention with this accompanying description: "If a man have a tent made of linen of which the apertures (openings) have all been stopped up, and it be twelve braccia (about 23 feet) across and twelve in depth, he will be able to throw himself down from any great height without suffering any injury."

# 33-Barreled Organ

The way Leonardo da Vinci saw it, the problem with the canons of the time was that they took far too long to load. His solution to that problem was to build multi-barreled guns that could be loaded and fired simultaneously.

This idea forms the basis of war inventions like da Vinci's 33-barreled organ, which featured 33 small-caliber guns connected together. The canons were divided into three rows of 11 guns each, all connected to a single revolving platform. Attached to the sides of the platform were large wheels.



# ITALIAN MASTERS WHO CARVED A NICHE IN THE WORLD OF DISCOVERIES

A man of 'Waves'-Guglielmo Marconi

Born on April 25 1874, Guglielmo Marconi was an Italian engineer and inventor who successfully demonstrated the working of a long-distance the wireless telegraph and radio signal. He was the Nobel-prize winner, who in childhood was impressed by the works of Hertz, Maxwell and Lodge.

His experimentation began from his father's estate where he was successful in sending wireless signals over short distances, greater than a mile. He took his then machine to England which was received with full enthusiasm. Marconi applied for his first patent within a year after he successfully broadcasted his signals to 12 miles.

Determined to establish that wireless waves were not influenced by the curves of Earth, he transmitted his historic wireless signals across the Atlantic. Marconi continuously explored the various possibilities of the usage of radio waves beyond the spectrum of telecommunication.

His experimentation led in the discovery of the applications of the microwave in physical therapy.

Italy, a country famous for its appetizing cuisine, is not only a land of innovators but also the origin of top-notch inventors and discoverers who have completely changed the way of living lives for the people around the globe.

# The Real Silicon man-Federico Faggin

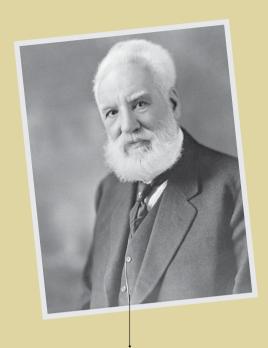
Federico Faggin is an Italian physicist, inventor and an entrepreneur who is widely known for designing the first ever commercial microprocessor. Through various start-ups founded and directed by him, Faggin has been responsible for a great number of state-of-the-art products and technologies.

He has co-designed and built an experimental transistorised electronic computer and also develops several process technologies for the fabrication of integrated circuits (MOS Silicon Gate Technology).

Faggin, in 1971, designed the world's first microprocessor, Intel 4004. In 1974, he started his first company, Zilog Inc. which was entirely dedicated to the emergent microprocessor and microcontroller market. He has also developed dozens of memory chips and other integrated circuits at several companies. In 1982 he founded and directed Cygnet Technologies, Inc. which introduced a pioneering personal communication product for voice, data, and electronic mail.

Faggin is currently the President of Federico and Elvia Faggin Foundation which is incorporated for the scientific study of consciousness. He has been an awardee of the 2009 National Medal of Technology and Innovation from the then President Mr. Barack Obama.





# An unheard story- Antonio Meucci

From opting out of full-time education due to financial conditions to inventing the telephone-like a device, Antonio Meucci has played various roles in his real life. Meucci was engaged in doing some part-time jobs so as to pay for his studies further. In all the jobs he was engaged in, he experimented with technology and invented devices and systems which helped in scientific advancement.

During his appointment as a stage technician at the 'Teatro della Pergola' theatre, he experimented with technology and invented a communicating device ranging from the control room to the stage. Later, being employed at a medical clinic, he invented a device to treat rheumatic patients.

Meucci's poverty hindered his inventions in a huge way and though he successfully invented many new devices, he could not patent these under his name.

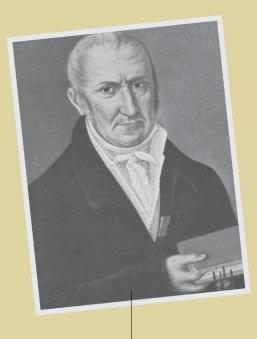
# The physician turned Mathematician- Gerolamo Cardano

Gerolamo Cardano was an Italian physician, mathematician, and astrologer who gave the first clinical description of typhus fever and whose book, Ars magna, is one of the cornerstones in the history of algebra. He received his medical degree in 1526 and in 1534 moved to Milan, where he became a lecturer in mathematics.

Cardano was the most outstanding mathematician of his time. In 1539 he published two books on arithmetic embodying his popular lectures, the more important being Practica arithmetic et mensurandi singularis ("Practice of Mathematics and Individual Measurements").

From 1562 he was a professor in Bologna, but in 1570 he was suddenly arrested on the accusation of heresy. After several months in jail, he was permitted to swear off privately but lost his position and the right to publish books.





# The man of 'charge'- Alessandro Volta

Being a professor of Physics at the Royal School of Como, his interest in Electricity led Alessandro Volta to improve the electrophorus, a device used to generate static electricity.

In an experiment in 1791 on the frog, Volta found that animal tissue was not needed to produce a current. Volta's battery, known as voltaic pile or column, consisted of altering disks of zinc and silver separated by paper or cloth soaked either in salt water or sodium hydroxide.

In 1801 in Paris, Volta gave a demonstration of his battery's generation of electric current before Napoleon, who made him a count and a senator of the kingdom of Lombardy. The Austrian emperor Francis I made him director of the philosophical faculty at the University of Padua in

The volt, a unit of the electromotive force that drives current, was named in his honour in 1881.

# ITALIAN CONTRIBUTION TO THE INDIAN INDUSTRIES

India and Italy share the legacy of being ancient civilizations. The Indus civilization started around 3300 BCE, while the Roman civilization was founded in 753 BCE. Both regions had trade relations that began at least as early as the 1st century CE. The document known as Muziris Papyris, which depicts how cargo was transported from Muziris, a south Indian port, to Alexandria, and the Indian cookware found in Alexandria and ports in the sea trade route are a few literary sources that are evidence of this connection. In those days, Italy exported wine and bronze utensils to India. In exchange, India exported spices and aromatic substances to Italy.

One of the first major Italian companies to invest in India was Fiat. Fiat India built an Indian version of the Fiat 1100 called the Premier Padmini, which went on to become the first widely available commercial car in India, Released in 1964, the Padmini overthrew the monopoly of the Hindustan Ambassador, which used to be manufactured by the now-defunct Hindustan Motors. It was the preferred commercial car of the public, until Maruti 800 entered the scene in 1983. Still. Fiat India continues to be the ninth largest car manufacturer in India.

There are many other Italian brands that have left their mark in the Indian industrial scene. Piaggio has a decent market share in India, and an array of vehicles to show, including motor-cycles and scooters. Vehicles offered by the company, such as the Piaggio Porter 700, have given to the small-scale farmers and traders of India, a vehicle suitable for "last-mile deliveries" and "intercity journeys". Piaggio Ape, an innovative three-wheeled light commercial vehicle named after the honey bee, revolutionised the small-scale logistics scene in the country. Ape has almost become a household name in India for all types of mini-trucks.

The Lambretta scooters, originally manufactured by the Italian company Innocenti, are worth a mention because they became the ultimate vehicle for the struggling Indian farmer to carry his produce to the markets during the period 1980-2000. The scooter made its entry into Indian scene as early as the time of independence and in 1972, an Indian public sector company named Scooters India Limited bought the brand from the Italian manufacturer company, Innocenti. When Scooters India Limited first began manufacturing and selling Lambrettas, they suffered enormous losses. However, they recovered marvellously, and went on to script one of the greatest success stories of the Indian industry. The company stopped the production of Lambretta scooters in 1997 but still powers its three-wheeler brand, Vikram, using Lambretta engines.







Bisleri - The success story of the Italian bottled drinking water company, Bisleri, in India is the result of another groundbreaking industrial idea, conceived and realized by visionaries. Dr. Rossi, the Italian owner of Bisleri (named after the doctor's mother) convinced the wealthy Parsi advocate, Khushroo Suntook of Mumbai to start the first ever bottled drinking water company in India in 1965. The idea of purchasing drinking water with money was unheard of in India, but the two pioneers banked their hopes on the quality of the drinking water, then largely poor, available in Mumbai. Khushroo later commented about the mindset of the people of India at that time in the following words, "At first, they said, 'Who's going to buy water for one rupee!' It was such a new concept. No one wanted to pay for water. But, slowly, the hotels started taking them." Today, the story of Bisleri has been recorded in the annals of history. During the initial years, when competition from other bottled drinking water brands was nil, the name Bisleri eventually grew to become a metonymy for bottled drinking water, and this trend has survived to this day.

Today, more than ever before, India is seen as a 'lucrative land for investment'. It is the third largest economy in terms of Power Purchasing Parity (PPP); by the end of 2018, it is also expected to move past the United Kingdom to become the fifth largest economy in terms of nominal Gross Domestic Product (GDP). What makes the Indian case unique is that unlike the other large economies which are mostly dependent on exports, India has a high pattern of domestic consumption, which accounts for almost 60% of its GDP, giving the country a tremendous boost in this category.

The Indian government has passed several reforms to attract investors from across the world, and particularly to increase the flow of Foreign Direct Investment (FDI) into the country. Over the next five years, the annual inflow of FDI is predicted to rise to US\$75 billion. In the financial year 2016-17, the FDI that India received amounted to US\$60.08 billion- an all-time record.

Italy is the fifth largest trading partner of India from the European Union, and ranks seventeenth amongst the largest investors in India. Trading figures may have dipped slightly as a result of the economic duress that Italy has been under since 2008, but the country's exports to India are still lucrative, particularly "special purpose machinery, machine tools, metallurgical products and engineering items".

Currently, there are 600 Italian companies in India, mostly concentrated in Delhi, and the western and south-western corridors of the country. There are 180 companies in Delhi National Capital Region and the North, 250 companies in Maharashtra and the West (especially in Mumbai and Pune), 100 companies in Karnataka (with a high concentration in Bangalore) and the South, 60 companies in Tamil Nadu (centring Chennai) and the Southeast, and 10 companies in West Bengal (mostly in Kolkata) and the Northeast.

Well over half of these companies belong to the industrial machinery, automotive. services, and infrastructure and construction technologies sectors. Other sectors with a strong presence include fashion and design, agro-food industry, furniture, engineering, and so on. Let us take a look at some of them.

# **SERVICES**

With 66 companies, the services sector is the third most widely presented in India; 63 of these are centred in the regions of Delhi, Maharashtra and Karnataka, including such firms as Agre Corporate Advisor, Lotus-Aero Enterprises, and Aesys Technologies India. The services sector includes business consulting, tourism and leisure, media and communications. The growing per capita income in India has resulted in higher domestic demand for travel, tourism, healthcare and telecommunications (India's per capita income has increased rapidly from US\$1,323.50 in 2011-12 to US\$1,750.74 in 2017-18. It is expected to reach around US\$6,000 by 2025). Additionally, growing tourism infrastructure and low-cost carriers have also contributed to the growth of this sector.

# INFRASTRUCTURE AND CONSTRUCTION TECHNOLOGIES

There are 61 companies which represent the infrastructure and construction technologies sector, mostly in Delhi and Maharashtra. This sector is highly active: among other things, it contributed to the introduction of high-speed

lines, and traffic decongestion, safety systems, electrification in the railway sector; it helped build 10,000 km of highway in 2017-18, and will build a further 50,000 km by 2022. It also plans Greenfield e-retrofitting for 90 Indian cities by 2023.

### **FASHION AND TEXTILES**

Italy has always ruled from the front in the world of fashion. Italians are well-known for their sense of style, and their fashion brands are among the most prestigious in the world. In their 2014 study about brand images of countries across different sectors, FutureBrand ranked Italy second in fashion, behind the USA.

In India, Italy has considerable presence in this field: there are 54 fashion and textile companies in India, with great scope for higher growth in the area of retail brands, apparel, fabric-processing set-ups for natural, synthetic and specialty textiles, and the manufacture of man-made fibre, filament, value added and specialty fabrics. The Indian textiles industry is booming: it is estimated at around US\$ 150 billion and is expected to reach US\$ 230

billion by 2020. Some of the firms in India are Damiani India, Marco Polo Tessitura, Crespi Milano Perfumeries, and Luxottica India Eye Wear.

### **FURNITURE AND MATERIALS**

Historically, Italy has been a leading country in furniture design, boasting of a variety of striking designs from Baroque and Rococo to cleaner, minimalist styles. The country is one of the biggest furniture exporters of Europe.

There are 43 Indo-Italian companies in India, with nearly half of them in Maharashtra. India is a high-potential area for Italy. Most of the furniture available in India is of poor quality with a limited lifespan. As a result, Indian consumers, even those who are price-sensitive, are drifting towards the promising quality and aesthetic appeal of Italian-designed furniture. India already exports furniture and materials worth US\$ 7.4 billion. The subsectors with particularly high demand are housing, doors and windows, wood and metal furniture and contract projects, among several others. Some of the companies in India are Poltrona Frau (casa Decor), Interplex Mazzucchelli, and Cefla



# POWER & EFFICIENCY

# INDIAN SUBSIDIARY OF MOTOVARIO SPA, ITALY













Quality & Innovation are fundamental Super MAC: assembly by components of helical and helical bevel gear reducers short delivery and ready stock of worm gear reducer, components & IE2 motors.



a TECO Group company

# **BANKING AND FINANCE**

This is one of the sectors with relatively minor Italian presence in India, with eight companies, seven of them being situated in western India. Still, the Indian scene provides many opportunities for greater involvement. The Indian banking sector is sufficiently capitalized and well-regulated. The financial and economic conditions in the country are among the best in the world. Credit, market and liquidity risk studies suggest that Indian banking is generally resilient, and has proved to be capable of weathering global crises. Bank credit in India has an annual rate of growth of 12.6%. As of 2018, Indian bank credit stands at US\$ 1.33 trillion. Moreover, the bank recapitalization plan by the Indian government is expected to push credit growth in the country to 15%. This, in turn, will help GPD grow by 7% in the financial year 2019. Some of the most prestigious Italian banks in India are



Indian market is driven by alot parameters in which affordability plays major role, this is a hurdle to invest into an Italian machine, that are reliable and superior in quality



# **S N Joshi** Managing Director Shree Ganesh CNC Microtech

Banca Popolare di Vicenza and Banca Monte dei Paschi di Siena SpA.

# A BRIGHT FUTURE AHEAD

The strong historical Italian connection with the Indian industry has prevailed into modern times. In 2018, India and Italy completed seventy years of modern diplomatic ties. India hosted two Italian Prime Ministers- Paolo Gentiloni in October 2017 and Giuseppe Conte in October 2018- in the space of a year. The Indian Minister for External Affairs visited Italy in June 2018 and met Prime Minister Conte to revitalize bilateral ties. Diplomatic relations between India and Italy are strong and prosperous, and this augurs well for the business ties between the two countries.

# IMPORTS INTO INDIAN MANUFACTURING SECTOR

Rank	Countries		2015	2016	2017	2018	% Growth 2017/ 2018
1	*:	CHINA	26.53	28.65	35.67	31.29	(-)12.28%
2	*	HONG KONG	1.03	1.01	1.23	6.92	459.18%
3		GERMANY	4.33	4.31	4.62	5.24	13.49%
4		UNITED STATES	4.09	4.74	5.03	4.87	(-)3.17%
5		SOUTH KOREA	4.02	3.52	4.32	4.33	0.33%
10		ITALY	1.56	1.53	1.65	1.75	5.89%
	TOTAL IMPORTS		60.84	62.57	73.26	81.10	10.7%
% Share of Italy		2.56%	2.44%	2.26%	2.16%		

(Values in Billion €) Ranking as per Calendar Year 2018

# WOOD MACHINERY IMPORTS TO INDIA

Rank	Countries	2015	2016	2017	2018	% Growth 2017/ 2018
1	CHINA	19.67	22.79	33.14	38.57	16.4%
2	GERMANY	6.66	8.17	11.72	10.02	(-)14.5%
3	ITALY	6.25	9.23	9.75	9.75	0.0%
4	TAIWAN	6.85	8.30	7.60	7.50	(-)1.21%
5	JAPAN	1.30	3.50	2.27	2.60	14.6%
	TOTAL IMPORTS		66.60	84.45	89.11	5.52%
	% Share of Italy	10.59%	13.87%	11.55%	10.94%	

(Values in Billion €)

Ranking as per Calendar Year 2018

# MOULDING THE OPPORTUNITIES IN INDIA WITH THE ITALIAN MACHINERY

At a time when major countries in the world are trying to align their policies in line with India's requirements. Italy shows its committment to translate this huge opportunity into a great success story for both the nations. The Italian Trade Commission is consistently striving to facilitate the innovation, technology and business interest to reach on to the Indian market acting as a bridge to channelize the resources required to meet the huge opportunities prevailing in modern India.

# Innovation is an opportunity

Innovation and Opportunity, the two words entice the interest of the whole world. Italy as a manufacturing destination stands as an epitome of the two Innovation and Opportunity.

Italian manufacturing sector has continuously been blending their craftsmanship with the new-age technology to fine-tune their products and services to match them up with the modern era of Industry 4.0.

Such an embrace of tradition with modern technology, encapsulated in each and every products and services we offer to the world, makes our 'Made in Italy' brand so unique and authentic. It enables us to clinch around 3% share of the global trade and more than 2% of the import into India in the manufacturing sector. The stable growth of bilateral trade between India and Italy clearly suggests that the 'Made in Italy' appeals the Indian population. India with the spectacular growth potential, increasing brand awareness and high disposable income offers a unique market for us to pursue.

# Italian Machinery:

In the recent past, Italian Trade Commission has dedicated its attention to promote Italian machinery in India. Some sectors of mechanical industry which include woodworking machines, ceramic processing machines, leather processing and tanning machines were given priority in our policy overture. Italian machines are known for its precision and amazing design. Italy is the the world's third largest exporter of machine tools as well. Italian machinery already represents over 40% of our exports to India.

Furthermore, Indian machine



Through our offices in New Delhi and Mumbai, we support the 'Made in Italy' brand to establish its roots in this land of opportunities. Simultaneously, we continue to support the Indian government's initiatives such as 'Make In India', 'Start-up India' etc. Italy is India's 6th largest trading partner in the European Union (EU). During the calendar year 2018 the total trade exchange between India and Italy reached €9.5 billion, posting an increase of 8.9% over the previous year. In this modern era of technology, the partnership based on innovation must not be overlooked.

tools sector offers various investment opportunities. Given the gap between demand and supply, there are investment opportunities in manufacturing. Guided by demand from key user segment - automobiles



# FRANCESCO PENSABENE

Italian Trade Commissioner Director, Trade Promotion Office of the Italian Embassy, Coordinator for India, Nepal, Bhutan, Sri Lanka, Maldives,

and consumer durables - the industry is looking at much more sophisticated technologies, where an Italian engagement can be a game changer.

### The Road Ahead

The high degree of opportunites present in India guarantees a favourable environment for Italian business interests. The world is coming to India for business and it is important for us to bring in new ideas and innovative products in order to be relevant in the upcoming future. The history of Italian business houses which always try to excel in the area of research, design and development is certainly a reinforcing element as well. In the light of the above, the Italian Trade Commission in collaboration with UCIMU-SISTEMI PER PRODURRE and Indian Machine Tool Manufacturers' Association (IMTMA) will organise the India-Italy Business Forum on Machine Tools in New Delhi on 16 October 2019. It is my strong belief that the shared values of Italy and India will drive the bilateral trade relations further with a great emphasis on technology.

# LEATHER TANNING MACHINERY IMPORTS TO INDIA

Rank	Countries		2015	2016	2017	2018	% Growth 2017/ 2018
1	*1	CHINA	25.59	22.46	24.82	27.00	8.78%
2		ITALY	34.88	27.72	23.49	24.19	2.98%
3		TAIWAN	18.35	11.79	8.7	10.58	21.58%
4	:•:	SOUTH KOREA	3.31	3.33	1.80	3.38	87.32%
5		GERMANY	1.57	2.16	1.68	1.89	12.67%
TOTAL IMPORTS		93.43	74.71	66.69	71.06	6.55%	
% Share of Italy		37.34%	37.11%	35.22%	34.04%		

(Values in Billion €)

Ranking as per Calendar Year 2018

# MACHINE TOOLS IMPORTS INTO INDIA

Rank	Countries	2015	2016	2017	2018	% Growth 2017/ 2018
1	GERMANY	29.76	12.75	19.49	28.92	48.3%
2	CHINA	9.38	11.55	13.40	21.89	63.3%
3	JAPAN	22.03	26.58	10.22	20.75	103%
4	SOUTH KOREA	6.62	1.95	4.16	12.19	193%
5	TAIWAN	6.46	4.59	4.97	8.57	72.3%
6	ITALY	7.44	6.23	4.32	7.73	79%
	TOTAL IMPORTS		87.77	75.95	124.5	63.9%
% Share of Italy		7.41%	7.1%	5.69%	6.21%	

(Values in Billion €)

Ranking as per Calendar Year 2018

# PRINTING MACHINERY IMPORTS INTO INDIA

Rank	Countries	2015	2016	2017	2018	% Growth 2017/ 2018
1	CHINA	441.69	409.14	427.65	388.19	(-)9.23%
2	SINGAPORE	32.70	28.35	38.05	152.22	300%
3	JAPAN	201.06	189.04	213.01	128.59	(-)39.6%
4	PHILIPPINES	44.56	40.64	66.07	76.98	16.5%
5	GERMANY	76.78	75.46	88.36	75.75	(-)14.2%
6	ITALY	30.34	37.86	50.39	59.97	19%
	TOTAL IMPORTS		1,086.76	1,229.12	1,307.52	6.38%
% Share of Italy		2.61%	3.48%	4.1%	4.59%	

(Values in Billion €)

Ranking as per Calendar Year 2018

# PLASTIC PROCESSING MACHINERY IMPORTS INTO INDIA

Rank	Countries		2015	2016	2017	2018	% Growth 2017/ 2018
1	*;	CHINA	145.09	235.61	233.55	241.78	3.52%
2		GERMANY	162.12	203.98	201.98	170.20	(-)15.73%
3	•	JAPAN	56.99	64.76	83.21	97.08	16.67%
4	-	TAIWAN	53.87	51.99	82.94	66.14	(-)20.25%
5		TALY	44.32	49.94	69.45	56.58	(-)18.54%
	TOTAL IMPORTS		665.03	790.65	867.87	870.15	0.26%
% Share of Italy		6.66%	6.32%	8%	6.5%		

(Values in Billion €)

Ranking as per Calendar Year 2018



# **CERAMIC MACHINERY IMPORTS TO INDIA**

Rank	Countries	2015	2016	2017	2018	% Growth 2017/ 2018
1	CHINA	76.19	75.96	72.77	90.31	24.1%
2	GERMANY	46.02	54.85	41.87	48.55	15.9%
3	ITALY	21.48	22.46	24.50	25.84	5.4%
4	UNITED STATES	46.46	14.62	18.07	14.71	(-)18.5%
5	JAPAN	9.33	8.76	7.60	14.07	85.1%
TOTAL IMPORTS		279.03	226.95	225.82	288.48	27.7%
% Share of Italy		7.7%	9.9%	10.85%	8.96%	

(Values in Billion €) Ranking as per Calendar Year 2018

# STONE & MARBLE MACHINERY IMPORTS TO INDIA

Rank	Countries	2015	2016	2017	2018	% Growth 2017/ 2018
1	CHINA	83.04	137.67	162.27	152.00	(-)6.33%
2	ITALY	29.93	29.66	42.96	52.26	21.65%
4	GERMANY	3.42	2.52	2.31	2.58	11.62%
3	ISRAEL	2.77	8.32	3.57	2.22	(-)37.86%
5	SPAIN	0.28	0.36	1.46	1.85	26.99%
	TOTAL IMPORTS		188.57	219.06	220.04	0.45%
	% Share of Italy	23.68%	15.73%	19.61%	23.75%	

(Values in Billion €) Ranking as per Calendar Year 2018

# INDIA: THE NEXT FRONTIER FOR BRAND ITALY

With the Make in India programme, India is aiming to become a hub for design and manufacturing. Considering that Italy is the second largest manufacturing country in Europe and one of the largest in the world, India is an attractive market for Italian companies. Pointing to the fact that India has a large population which gained independence only seventy years ago, India can be a new frontier for ANIMA CONFINDUSTRIA.

Established in 1914, the Federation of Italian Associations of Mechanical and Engineering Industries (ANIMA), a part of CONFINDUSTRIA, represents close to 30 associations, as well as 1,000 companies belonging to the mechanical sector, representing industries such as energy, oil and gas, logistics and handling, water, food, building, handling and logistics and so on. ANIMA safeguards the interests of these industries, promotes its member-companies in Italy and abroad, and provides them with technical and economic support. In 2017, these companies had 214,000 employees, generated €47.4 billion of production, and held a 60.8% share in exports.

In 2017, ANIMA exported technology worth €322 million to India. 16% more than the previous year. 2016 saw the beginning of greater co-operation between Italy and India, with ANIMA contributing to the organization of institutional events and company networking.

In March 2018, the exhibition of MCE Mostra Convegno Expocomfort was held. ANIMA



A market as the Indian one has great potentialities. The excellence of mechanics 'Made in Italy' is already very appreciated, but it will undoubtedly be largely required in emerging economy like India. If we think of the industrial dimensions that India represents for our export (worth nearly €900 million), we immediately understand what a great opportunity lies for our companies in India from now to 2030

CONFINDUSTRIA participated in the Indian Tech Forum organized by FCCI in September





# **Bruno Fierro** Vice President - ANIMA

2018, whose primary agenda included water technology, a field which has great scope for Italian involvement in India. On 3 December, 2018, the ANIMA Export Day was held in Milan, Italy, where Ms Gloria Gangte, the Vice-Ambassador for India, was among the guests of honour. Ten Indian companies worked on networking with their Italian counterparts.

Though India currently imports on a relatively small scale from Italy, with increasing appreciation for Italian products, imports will increase in the coming years.

The Indian market is perhaps the most promising in the world: it provides a wealth of opportunities, though not without challenges. The Indian government has planned reforms and programmes to modernize the country's economy and attract greater foreign direct investment (FDI).

60% of Indian GDP is created by services and 19% by the manufacturing industry; the rest comes from agriculture. According to reports, all three sectors are fast growing.

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## Bilateral Forum: Best way to promote Indo-Italian Partnership

India is one of the most promising markets for the Italian machine tools, robots and automation manufacturers. In fact, after a period of downturn, in the first nine months of 2018, India turned out to be the twelfth destination market for the Italian product offering of the sector, and the second one in Asia. The sector sales of Made in Italy reached an amount of 58 million euro. corresponding to 56.3% more compared with the same period of the previous year.

UCIMU-SISTEMI PER PRODURRE is the world ambassador of the most advanced Made in Italy technology, supporting and increasing the visibility of the companies of the sector in traditional and emerging markets.

UCIMU-SISTEMI PER PRODURRE is a private association established in 1945, just a few months after the end of the Second World War by ten entrepreneurs of the sector with the national political authorities and with the foreign partners all over the world.

Since then, with support of the UCIMU activities. Italian machine tool industry has been growing enormously, conquering a great reputation among end users industries of all countries.

Italian machine tools manufacturers have excellence, skills and technological solutions in many machine tools end users sectors. Italy and India can actively collaborate in aerospace. automotive, railways, etc as Italian companies are able to provide customized and high technological solutions.

With the increased



Our promotional action has been always very strong in India: I like to mention an important project carried out at the early 80s with the creation of a Technology Center equipped with the support of Italian Ministry of Foreign Affairs, with Italian machine tools to train Indian technicians and students. This action gave a great contribution to widespread the knowledge of Italian machine tool offer. For example, this year we have an important event planned with ITA-Agency in October to stress the concept of partnership between our industries and Indian companies.



UCIMU-SISTEMI PER PRODURRE

Massimo Carboniero President - UCIMU

digitalisation level and interconnection, the Italian production of the sector has added a really strategic strength point, as it is capable of providing users and customers in every part of the world with the best performances in terms of productivity and efficiency of industrial plants, higher safety of machines and processes, a more appropriate exploitation of resources in compliance with eco-sustainability, less incidence of problems connected with anomalies and machine downtime. "I think these technologies and new approaches represent the plus that could be useful for Indian users", Mr. Massimo Carboniero, President of UCIMU says highlighting the advantages Italy offers.

"As far as machine tools sector is concerned, flexibility, very high technological standards, marked product customization according to the specific needs of demand, after-sale assistance: these are the characteristics of the sector", he adds.

Promoting 'Brand Italy' in



#### the Indian market

In order to support the development of the Indian market by Italian companies in the machine tools, the two associations UCIMU-SISTEMI PER PRODURRE and AMAPLAST have opened - as part of their network project, called «Market Development Platform - Network Of Enterprises» - in March 2013, the Desk India, an operational workstation at the IICCI headquarter (Indo-Italian Chamber of Commerce and Industry) in Mumbai with the support of the Ministry of Economic Development.

As spin-off of the mentioned project, ITC (Italian Technology Center) was originally conceived by a group of Italian companies, with the aim of supporting the internationalisation of the companies within the area by establishing a constant market

presence.

In addition UCIMU-SISTEMI PER PRODURRE is committed to encouraging the Italian companies' participation to the most important international trade fairs held in India, starting from IMTEX.

"The Italian companies which took part in IMTEX 2019 were really satisfied of the leads they got during the event", Mr. Carboniero asserts.

Mr. Massimo Carboniero informs that UCIMU is also planning a bilateral machine tool Forum in New Delhi in the second part of the year, which will involve Government authorities, representatives of institutions, Indian and Italian enterprises of the sector, as well as Indian users. "Our aim is to promote the internationalization of Italian companies of the sector,

developing strong cooperation with local partners. This is because India is rich of skilled people and the local industry is characterised for very high technology standards and ITC knowledge."

Because of the boon Indian trade fairs offer, strong and numerous delegations of Italian companies always attend to Indian events. "We also consider very strategic the action of inviting selected industries from India to visit international exhibitions in Italy with ITA Agency; we always invite qualified Indian delegations to our fairs, BI-MU and LAMIERA where Indian guests will meet Italian exhibitors and their latest technological solutions with 4.0 content", Mr. Carboniero informs.

UCIMU is also going to organize the Milan edition of EMO, the world machine tool exhibition,

where a great number of exhibitors and visitors from India are expected.

#### Initiative for budding Indian engineers

An important initiative of UCIMU, co-organized with ITA-Agency, is IMTTA-Italian Machine Tool Technology Awards, a promotional programme within the project "Machine Italia", addressed to foreign students writing excellent thesis on a topic of relevance for the future of the machine tools sector. Students. together with their professors, are invited in Italy for one week to discover Italian manufacturing excellence through a path including training sessions and visits of companies. "We are asking to ITA-Agency to include again Indian students for IMTTA 2020, as we know the great skills of Indian engineers."



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## **AIMING BIG: AMAPLAST AND BRAND ITALY IN INDIA**

Established in 1960, AMAPLAST, a member of CONFINDUSTRIA, is a no-profit association which represents around 170 companies producing Plastics & Rubber processing machinery, moulds and ancillary equipments. For many years, to assist those membercompanies which have been exporting to India, AMAPLAST has been engaged in promotional activity in the Indian market; this activity has been organized with the co-operation of the sector Indian Associations (and support from the Italian Trade Agency) and included technical seminars, buvermissions and B2Bs.

To maintain its promotional activity, AMAPLAST will keep its Mumbai desk in operation. The Indian sector exhibitions are also being monitored, with minor shows being visited by the Machinery Desk manager. Additionally, the Italian Association has been regularly providing an Indian technical magazine with articles. Currently, almost twenty Italian plastics and rubber machinery companies have branches in India.

#### Size of Indian Plastic Market:

In India there are 30.000 plastics processing companies (with at least 4,2 million employees), almost 52% of them is specialized in extrusion. In addition, there are over 4.500 rubber processing companies (with 550.000 employees). A great quota of the Indian processors is still specialized in bulk products, with low technical contents. Therefore, there is wide room for them to improve their plants to comply with the growing requirements and quality standards of the different applications of plastics, from packaging to automotive to building.

#### Challenges:

The Indian market is quite tough for the Italian manufacturers. due to different reasons: culture,



Since 2013. AMAPLAST have embarked on a mission to promote their member companies in India, provide assistance to Italian companies to initiate and develop their business in the country, organize delegations, create opportunities for technology transfer and JV, develop a network with universities and research centres. and so on. Currently, almost twenty Italian plastics and rubber machinery companies have branches in India.

commercial approach, price level. Since many years, a few Italian companies have been exploiting a good cooperation with Indian providers (for basements, components, assembly etc.), which have helped each other

#### 1 AMAPLAST Alessandro Grassi

President - AMAPLAST

to offer the Indian processors Italian-designed high-technology machines at a price which is closer to their standards. Then, India is also a bridge towards other Asian countries. Another challenge is the wideness and the multi-cultural shape of the Indian market which makes it sometime difficult for designing promotional activities.

#### Road Ahead:

A focus on India highlights a strong recovery of sector exports to India surmounting some of these challenges. After a slight slowdown in 2017, figures referred to 2018 show a strong recovery with 25% increase up to a value exceeding 82 million euros in supplies, with Indian market ranked 12th among the main destinations.

AMAPLAST always looks for the cooperation of the Indian sector Associations - which have the pulse of their Members and industries. In the latest years the Indian plastics and rubber machinery manufacturing industry has been developing rather considerably offering local processors equipment which are more competitive from the point of view of the price, especially for standard production which do not require hi-tech plants.

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# PRICE QUALITY

#### TWO DIFFERING ECONOMIES

#### How Italian culture influences its industries

- In country branding, Italy is one of the strongest names in the world. To understand why the 'Made in Italy' tag carries so much value, it is important to take a peek into Italian culture.
- According to Hofstede, the culture of a country depends on six variables: power distance, time orientation, masculinity/femininity, individualism/collectivism, and uncertainty avoidance. If this model is applied to Italy, two of the dimensions which are representative of its culture are individualism and masculinity.
- Italian society is largely individualistic in nature. The institution of the family is highly respected, as can be seen from the fact that most businesses in Italy are family-owned.

■ The individualistic characteristic of Italy also makes it a 'masculine' country: that is, Italians respect and covet power, competition and success. In a country where the centre of focus is the individual, this is unsurprising. The way a 'masculine' society acts is by flaunting their strengths. This is the chief reason why the Italian people place such emphasis on aesthetic and functional quality over quantity. Italy has the largest number of products which are certified by PDO or GPI, which are certifications created by the European Union to protect and promote its products.





#### The Indian market

One of the primary challenges of Italian entrepreneurs in India is to fully understand the Indian market and adjust accordingly. The industrial scenarios in Italy and India are completely different.

seeking immediate value for money- or

unemployment and combat with poverty. The typical Indian has a high savings rate, a low consumption rate and diffidence for extravagant expenditure. As a consequence, there is a low demand for high quality products. This has led Indian industries to focus on the large scale production of budget-quality goods with a low shelf-life.

Among affluent Indian families, luxury is a means of class consciousness and flaunting wealth. However, even in their case, there is an inherent desire to look for bargains- they are hesitant to spend additional money on anything that has non-tangible value. The only potential buyers are the young, comingof-age Indians who have a fairly substantial income but limited family responsibilities. They love spending on themselves and are most likely to appreciate luxury brands, if only for 'name value' alone. Even so, this population is limited in number.

Consequently, the Indian market is mostly driven by price factors; this continues to present challenges for Italian brands, which are unaccustomed to such market conditions.



Bilateral trade between India and Italy have received an impetus in recent years, especially after the visit of the Italian Prime Minister to India in 2005, and the subsequent visit of the Indian Commerce and Industry Minister to Italy the following year. As of 2012-13, Italy is India's fifth-largest trading partner in the European Union, with exports to India amounting to more than US\$1.9 billion. In spite of this figure, the percentage share of India in Italian trade is only 1%, showing the potential of the Indian market. There are already around 400 companies in India, concentrated in the western and southern parts of the country.



#### 'Brand Italy'- quality over quantity

According to Marino & Nobile, "Certification and brand provide consumers with a set of indications regarding not only the product origin, but also the relevant production processes and other aspects, including safety, environmental and ethical aspects, all of which constitute thte core of the quality concept."

2014: reliability. It also found that among all criteria, 82% of Italian consumers were most concerned about the quality of their products. The 'perception of quality' as a concept is related to other concepts such as 'place of production' and 'cultural traditions', all of which hold an important place in Italian society. The assured quality of 'Made in Italy' goods is also the prime reason of Italian products overseas. This is why quality is one of the defining characteristics of Italian enterprises.

# **DESTINATION INCREDIBLE**

It is expected that India would grow exponentially every year and maintain its position as among the fastest-growing economies in the world. India, over the last two years, has had increased trade with Italy along with a growing number of Italian companies investing in India.

India and Italy have an unbreakable trade relationship with Italy being the fourth largest trade partner of India. The big Italian brands like Fiat, Ferrero have successfully established their operations in India which serves as a motivation for the Italian companies to look up to India as an investing country.

#### 1. Company formation in India

The legal entity structure for foreign companies is to establish a company with three Directors, two being foreign nationals from the parent company and one director being a local Indian citizen. There are two routes through which a foreign entity can commence its operation in India through FDI.

Any Italian company planning to start up its operation in India can either operate as an Indian entity or as a foreign entity with an office in India.

#### **Automatic**

Route: There is no need for the foreign investors to ask for any prior approval from the Reserve Bank of India and the Government.

Approval Route: Here, a foreign investor is required to acquire permission from the government and the concerned sectoral authorities.

> If the company decides to operate as an Indian entity, it can work as a Wholly Owned Subsidiary or in Limited Liability Partnership (LLP) - No tax imposed on the distribution of profits.

For Coordination and understanding a better picture of setting up an industry in India, you may contact:

#### Reserve Bank of India

Central Office Building, Shahid Bhagat Singh Marg Mumbai - 400 001 Tel: +91 22 2260 1000 www.rbi.org.in

#### Ministry of Corporate Affairs

A Wing, Shastri Bhawan, Rajendra Prasad Road New Delhi 110 001 www.mca.gov.in

Department for Promotion of Industry and Internal Trade Udyog Bhawan

New Delhi 110011 www.dipp.gov.in

Indo-Italian Chamber of Commerce and Industry (IICCI) Office No.501 - 5th Floor, 349 Business Point, Western Express Highway, Andheri (East), Mumbai 400069 Tel: +91 22 6772 8186 - 90 Email: iicci@indiaitaly.com www.indiaitaly.com



2. For operating as a foreign entity, the company can run as: Liaison Office (LO): representative office to explore and understand the business and investment sector.

Branch office (BO): Engages in a specified range of revenuegenerating activities.

Project office (PO): Opened in India to execute a project in India with a secured contract from the Indian company

The Italian company willing to start its business in India needs to follow the following steps:

**DIN**: Obtain the Director Identification Number (DIN) for proposed directors of the new company.

DSC: Get the Digital Signature Certificate (DSC) for proposed directors.



Fill in the proposed name of the company for approval to the Registrar of Companies. Acquire the Memorandum of Association and articles of association printed.

File the incorporation forms and documents online.

Obtain the Incorporation certificate.

Lastly, if required, request the certificate to commence operation.

3. Pay stamp duties online

#### 5. Laws for forming a company in India

Establishing a company in any part of the world is not a cake walk. There are certain laws that follow.

In India, the legislation structure is proper and just. It takes various laws in order to operate a company here in India.

The India Companies Act 2013. The act governs the incorporation management, restructuring and dissolution of companies.

The Foreign Exchange Management Act of 1999 which regulates the inflow and outflow of foreign exchange and investment.

Income Tax Act- Prescribes the tax treatment of dividend, capital gains, mergers etc.

The Indian Contracts Act lays down the general principles relating to the formation and enforceability of contracts.

#### 6. Post Incorporation Formalities

Indian Director can open a bank account for the company in India.

Once the bank account is created, the Company is required to make FDI reporting to the Reserve Bank of India.

Completion of the FDI reporting ensures the business is in line with all regulations in India and ready to operate.

#### 4. Challenges

A broad agreement on reforms is a plus point for expanding companies, and the well-

developed banking system and vital capital market highlight the maturity of its financial system. But doing business in India can still be a vexing endeavour, and having local help can really make the difference to the success of the venture.

#### Initiating business

The cost of initiating a business is prodigious and the procedures involved can also be intimidating without much knowledge.

#### **Registering Property**

Registering a property is a tedious job and can also incur substantial charges.

#### Trading across borders

Although India is open to international trade borders. the different lavers of bureaucracy make trading a challenge.

relations between India and Italy.

The GST implemented is one of the most complex with the second highest tax rate in the world.

#### Price sensitive country

India is a price-sensitive country. So, for the Italian companies to operate in India, they must be very sure about keeping the price according to the demands and the requirements of the Indian market.

Assistance to Entry in the Indian market: One cannot start a business just by setting up a firm and employing people. There is an utmost need to understand the basics, fundamentals of it. In India, the help is provided through different agencies.

THE INDO ITALIAN CHAMBER OF COMMERCE AND INDUSTRY (IICCI): Established in 1966, IICCI is a nonprofit organisation recognised by the Italian government. Its objective is to promote and enhance the trade and economic

It plays a vital role in the promotion of collaboration and exchange of proficiencies between the two countries.

ITALIAN TRADE PROMOTION AGENCY (ICE): The ICE realises the unique requirement of the companies and advises them on various options to reach their objectives.

ICE in India functions to foster the bilateral trade between India and Italy by providing the entrepreneurs and companies with the information and services on Italian innovations, companies and market.

## THE OPPORTUNITIES AND CHALLENGES THAT LIE AHEAD

#### Background

Economic and commercial relations between India and Italy have been growing steadily. There has been a major growth in trade relations between the two countries in recent years. During the 2015 financial year (FY), Italian companies invested US\$334.7 million into India. And cumulative Italian investment into India is set to reach US\$2 billion by 2020.

The India-Italy trade stood at \$10.5 billion in 2017-18, up from \$8.8 billion in the previous fiscal.

#### Italian companies in India

The number of Italian firms in India has grown from 330 in 2008 to 400, concentrated mainly in Maharashtra, Delhi, Tamil Nadu and Karnataka. Most of the companies belong to the textile and automobile sectors: according to an economic analysis by the Pantheon

Italy is the twenty-fifth largest trading partner and fourteenth largest investor in India. In spite of that, there is still immense potential for stronger trading ties.

group, 13% of the companies belong to textile and clothing, 8% to automobiles, 7% to electronics or economic associations, and 6% to logistics or corporate services.

Among these, 140 are major companies which include FIAT Auto, Heinz Italia, FIOIA, Italcementi, Necchi Compressori, Perfetti, Lavazza, Fata Hunter Engineering, ENI, SAI India, Isagro (Asia) Agrochemicals, SEA Deutzfahr Group, Finmeccanica SpA, Ferrero, Piaggio and Impreglio. Six Italian banks have branches in India.

#### Why is India such a land of opportunity?

#### Dynamic private sector

The country has a reassured private sector, which accounts for 75% of the country's GDP. which is steadily growing at 8% every year. It also has increasing foreign exchange reserves, a booming capital market and has seen a recent surge in exports. Among the BRIC countries, India is expected to achieve the highest rate of growth.

#### Large market potential

India is one of the largest and most diverse markets in the world. Its economy is growing rapidly, and so is the spending power of the average Indian consumer. More than 620 million people in India are under the age of 25, and nearly 67 million Indians have an average annual income of €28,000. India's large market is one of the largest factors for Italian investment in the country.

#### Availability of skilled labour

Over the next ten years, India is expected to have a larger workforce than China, and is expected to become a key destination for Knowledge Process Outsourcing



# CHALLENGE

During the 2015 financial year (FY), Italian companies invested US\$334.7 million into India. And cumulative Italian investment into India is set to reach US\$2 billion by 2020. The India-

Italy trade stood at \$10.5 billion in 2017-18, up from \$8.8 billion in the previous fiscal.



(KPO), Engineering Process Outsourcing (EPO) and Business Process Outsourcing. The country is emerging as an important research and development centre: over 100 Fortune 500 companies have bases in India. Italian companies are capitalizing on this advantage, which is most obvious in the case of STMicroelectronics, one of the world's best semi-conductor companies. STMicroelectronics entered India in 1987 and has since become of the leading semiconductor suppliers in the country. Its advanced research and development centre in Greater Noida, near Delhi, is the company's largest outside Europe.

#### Lower cost of production

Labour cost in India is cheap. Combined with its efficient workforce, the country offers a cost-effective manufacturing base. The Indian Ministry of Commerce and Industry has estimated that outsourced work to India can result in savings up to 60% for foreign companies. This factor has been steadily

utilized by MNCs including Italian companies.

#### Concomitant increase in demand for support services

Strong trading ties between Italy and India have brought about an increase in demand for support services, especially in the banking sector. Leading Italian banks including Banco Popolare di Verona e Novara and Banca Monte dei Paschi di Siena have established branches in India, and have virtually come to be perceived as providers for international business.

Italia Marittima, one of the oldest shipping companies in the world, has a branch office in India since the year 1949. It was the first foreign shipping company that was allowed to do so in the country. The company expects a sharp rise in growth over the next few years/

Alitalia, the leading Italian airline, has had a rapport with India since 1960, and recognizes the country as a prime location for business growth. The company expects an increased share in passenger operations in India in the near future.

#### Challenges

With the rapid growth of the Indian economy, the country has become an attractive destination for several other international companies. At the same time. Indian companies are also becoming more competitive. The vast cultural differences in the country and the mindset of the Indian consumer-which is still fundamentally different than that of the Italian- also present challenges for Italian companies. In order for these companies to maintain their sway in India, it is imperative that they provide flexibility and bandwidth to their local management. The involvement of local people in decision-making processes is important. Companies which are eyeing the Indian market must understand the Indian market well and adjust their goods to the needs and capacities of Indian consumers. Even for those companies which want to export to India, it is essential for them to make the local management a key component of their growth plans. M



SUPPORT SERVICES

Italia Marittima, one of the oldest shipping companies in the world, has a branch office in India

Alitalia, the leading Italian airline, has had a rapport with India **MARKET POTENTIAL** 

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million Indians have an average annual income of €28,000.





Textile and clothing

Automobiles

Electronics or economic associations Logistics or corporate services

Italian banks have branches in India

The number of Italian firms in India has grown from 330 to 400, concentrated mainly in Maharashtra, Delhi, Tamil Nadu and Karnataka



## "Indian Manufacturing should adopt Italian Technology through indigenous method"

#### Q. Why Udyog4.0?

A. In this era of Artificial Intelligence & Machine Learning, most of the Indian industries are still struggling with following industry 3.0. There is a big gap in understanding the differences in industry 3.0 and industry 4.0. A man abundant country, where humans are emotionally involved with machine and manufacturing, the controlling factors become semi-automated. The nonsystem oriented operation results in not able to achieve the complete efficiency of latest machine technologies, which is finally termed as the failure of automation. This is where, Udyog4.0 evolves.

#### Can you tell us how developed economies evolved in manufacturing over the years?

Industry3.0 enabled the means of communication from machine to machine reducing human intervention like the data of CNC programing transferred through wired networking. Most of the advanced manufacturing countries were humans were expensive, adapted this manufacturing during the end of nineteenth century. Over the years, they were able to create new infrastructure, a lot of database, which enabled them to improve the manufacturing process. They were able to calculate the losses in the manufacturing process in terms of revenue, where it was realized time was the most

Addressing cost pressure, lack of manpower and faster delivery the advanced manufacturing economies started developing advanced automated machines and systems for on-time manufacturing. Over a period of time, they were successful in eliminating human intervention and dependency, and realized the precision quality achieved consistently. With IIoT, machines were connected, many AI tools were

introduced which led to man less factories.

#### Where India stands on modern manufacturing?

When you travel into an industrial estate it's very common to see a board displayed looking for "CNC Operators are required"! It's a general question to be asked why a CNC Machine needs an operator. It's a Computer

based Speroni SpA, who are the of advanced manufacturing Maker, he talks about Global

Numerically Controlled Machine. Going back the era of 1980's where most of the machines were manual milling & M1TR machines where the machines were driven by skilled operators. Later when the CNC Machine came to India the operator from milling machine were shifted to CNC Machine. They took the same philosophy of manufacturing into CNC machines as well. If you check with most of the Engineering institutions in India, there mechanical workshop still be using old conventional machines for practicing. There is a misconception that, implementing automation is to remove manpower. When replacement or up gradation of latest machines in the shop floor, we tend to calculate immediate savings of using manpower against automated system, and tend to settle for outdated technologies. On the contrary manpower can be used as a good support system by upgrading skills and adapt new technologies which can improve productivity and profitability. This was adapted by our neighboring country, China who are the world leaders in manufacturing todav.

#### What are the ways forward?

On the era of Industry 4.0, we are still struggling to get the real benefit of implementing industry 3.0 in our factories. We at Indian industry has to find a solution where the advantages of latest manufacturing technologies can complement the advantage of huge employable manpower. This is where Udyog4.0 becomes relevant. It is necessary to adopt efficient manufacturing systems which can improve the productivity, but also suits our manufacturing culture. Udyog4.0 will be designed to form a collaborative approach to provide complete solution to the manufacturing process. Udgyog4.0 needs to be built on Trust, Collaboration, Network and Value Innovation.

Udyog4.0 brings all stake holders in a manufacturing process to give a single window solution

expensive commodity, which

and development of efficient

pushed in further research

technologies.

## HIGH QUALITY FOR YOUR MACHINERY







#### MGM brake motor main features

- TEFC 3-ph asynchronous brake motor (0.09kW-130kW)
- · AC 3-ph brake (no rectifier) or DC brake on request
- Oversized brake disc for higher brake torque, longer life and reduced maintenance
- Fine and easy brake torque adjustment (as standard)
- · Very quick brake reaction time
- Frequent START/STOP cycle applications
- · Manual brake release (as standard)
- . Hexagonal hole on non drive end of the shaft for manual rotation.
- Single speed or two speeds motors
- · All motors designed for inverter duty

#### **VARVEL** production lines

- RS-RT worm gearboxes: 28 to 150 mm centres.
   One stage worm, helical/worm and double worm.
- RD helical gearboxes: 50 to 2300 Nm. Two and three stages.
- RN parallel shaft gearboxes: 180 to 3300 Nm. Two and three stages.
- RO-RV bevel/helical gearboxes: 180 to 3300 Nm, Three stages.
- RG precision planetary gearboxes: 10 to 230 Nm. One and two stages.
- VR dry friction speed variators: IEC63 to IEC90
   1 to 5 stepless speed range, 300 to 1500 rpm.
- VS planetary speed variators: IEC71 to IEC112
   1 to 5 stepless speed range, 200 to 1000 rpm.



A new generation of electric motors and gearboxes for power transmission quality from the alliance of two dynamic italian companies.

For those who want quality.

#### MGM-VARVEL Power Transmission Pvt Ltd

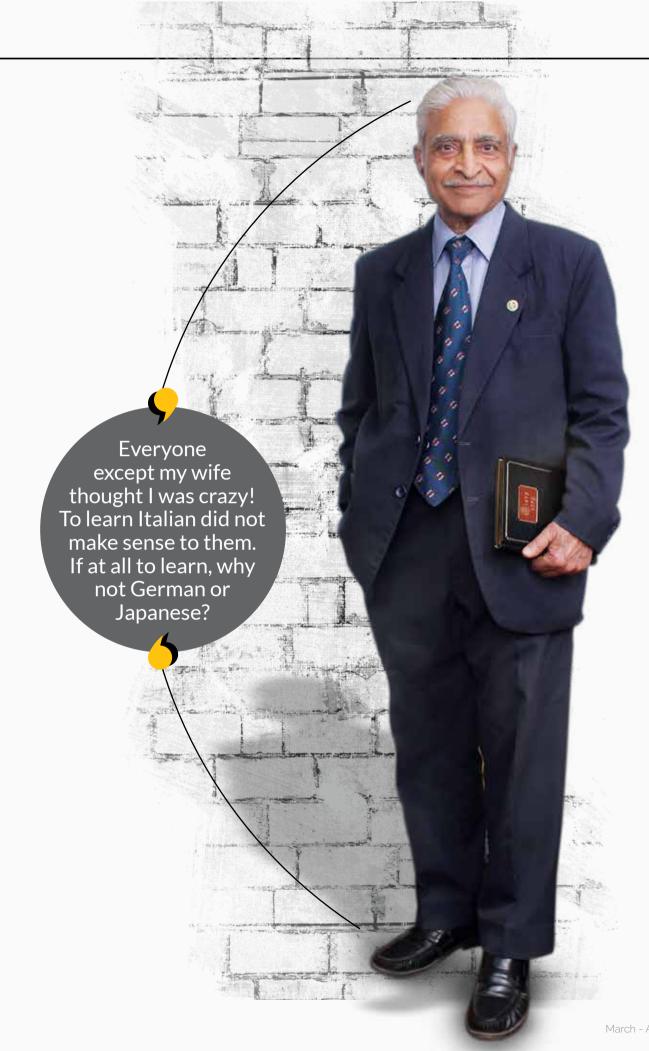
Ware House No. G3 and G4 • Ground Floor • Indus Valley's Logistic Park • Unit 3 • Mel Ayanambakkam • Vellala Street Chennai - 600 095 • Tamii Nadu, INDIA • Phone: +91 44 64627008 • info@mgmvarvelindia.com • www.mgmvarvelindia.com



# SURENDRA

Mr. Surendra Kumar is the founder of Precision International, an organsiation that represents Italian companies in India and brings Italian excellence in technology to the Indian machine tool manufacturers. But the identities that actually sum up him are a first generation entrepreneur who farsighted vast opportunities, a linguist who channelized his learning to streamline communication in business ties, and a leader who facilitated the beginning of a new era in Indo-Italian relations.

BY ARNAR MONDAL





Receiving the Medals from Hon. Massimo D'Alema - Deputy Prime-Minister and Foreign Minister of Italy on Oct. 10, 2007. Hon. D'Alema was Prime Minister of Italy a few years prior to that

At the launch of his career as an entrepreneur, Surendra Kumar wrote an article: "The Power of Being a Nobody". When you are a nobody, you have certain powers, powers that you lose when you become somebody! You have all the freedom, and all the guts, to experiment, to make silly mistakes, to commit grave errors, but without worry, since nobody notices you and nobody bothers at that time. He actually experienced it, and enjoyed it!

Graduating in Mechanical Engineering from the University of Roorkee (now IIT) at the age of just twenty one, he landed up his first job with leading Indian bearing manufacture where he gained the experience of working with a variety of international machines. But it was his next job with another bearing company that paved the path for his later exploits. In his own words, it "was the Golden era which introduced me to Italy." It was in 1973 that his organization sent him on his first visit to Italy for technical training with some of the factories of leading machine-tool manufacturers.

More than mere technical knowledge, the experience was an eye-opener for him as it unraveled to him that there existed high-quality products, suitable for India both technically and economically. He realized "only that we had stayed away from the same since catalogs of those products (machinetools, and accessories) were not printed in English but in the Italian language. At that moment I wondered if there would be some technical person in India with knowledge of the Italian language to build a bridge across the Italian technology and the Indian customer, not knowing that I was carving my own destiny."

He ruminates how he was mesmerized by the level of friendliness and sincerity of the people wherever he traveled in Italy, be it the city of Bologna or the city of Torino - the hub of the Italian automotive industry. "There was no racism at all. Everybody was helpful", he says.

It was in 1978 that he moved to New Delhi with a change of job, into an entirely different field, as the General Manager of a Multi-National Group's factory that had no connection with Italy.

However, Italy had left a lasting impression on his mind so much so that he did not want to let those die down for history and strived for continuity of his experiences in any which way.

The opportunity to make a connect came through an advertisement by the Italian Cultural Institute announcing the next evening course of one-year in the Italian language in which he got enrolled.

"Everyone except my wife thought I was crazy! To learn Italian did not make sense to them. If at all to learn, why not German or Japanese?" he recounts.

Persistence paid off as at the end of the year, he not only topped the course but won an Italian Government scholarship for a higher language course in Italy, at the Italian University for Foreigners, at Perugia in Central Italy.

"I also took the opportunity to travel across Italy, and to visit all those factories which I had visited five years ago for the technical training. My friends



there were delighted that I was speaking to them in Italian" he recollects.

Impressed by his linguistic ability his friends made a proposal to him to represent Italian industries which were not represented in India until then due to lack of communicator.

During his first visit to the city of Bologna in 1973, he had an experience of the sort. "Though nobody in the factory spoke English, we managed it with gestures. Once a week, an interpreter used to come to sort out the issues discussed in the meetings" he says.

He took a decision in this direction after returning to India. He continued to work for his present employers of that time, as a regard for the lien they had maintained for his job while he had been away to Italy.

#### But the foundation had been laid!

He ventured with Precision International with the purpose of presenting in India a basket of technologies from different countries. including those from Japan, Germany, and Italy. But soon he took a step back that actually stood him ahead of other existing suppliers and representatives in India in the long run.

"I came to the conclusion that offering the equipment from countries the language of which I did not know would be unsupportive for our Indian customer," he says.

With this thought he relied on his instinct and finally zeroed in on Italy, a country the language of which he was quite proficient in communicating.

A deep thought followed this decision from deciding the logo ' $\pi$ ' of Precision International as the symbol (pronounced as 'PI') reminded him of 'Prodotti Italiani' to naming company e-mail addresses after 'Leonardo', the great Italian

inventor-artist.

Much as meticulous he was in forming a right image for his organization he was also in bringing the yet untapped Italian excellence in technology and systems to the Indian market. Within the first five years, he staged a 'David and the Goliath' story.

"We took head-on the more famous and more visible German and American brands and were able to make customers



his organization sent him on his first visit to Italy for technical training with some of the factories of leading manufacturers

in the Small, Medium, and Large-Scale industry of India. Most of our customers had never bought anything from Italy before that. We created a tripartite link, between the Italian manufacturer - ourselves - and our customer in India. The supplies were always directly from the manufacturer to the end-user. We had found our 'niche' area", is how he assays his gigantic success.

Another decision he took, in the

beginning, was never to use the English language in communicating with the Italian companies. "Our phone-calls, telexes (fax and e-mail did not exist in those years), and written letters had to be in Italian. This was the only way to practise and to maintain a professional knowledge of the Italian language", he says.

On his return to India after having studied in Italy, he enrolled himself further with the Italian Cultural Centre to complete an Italian language diploma in the next 2 years and his wife too ioined him.

His introduction to UCIMU happened in the most interesting way at the IMTEX Fair at Mumbai in the year 1980. "We had attempted to participate with our token presence through another Indian exhibitor, with catalogs only and no products to display. While going around the fair I came across the stand of UCIMU - Italian Machine Tool Manufacturers Association. The UCIMU stand was manned by Ing. Stefano Bianchi - Director of Marketing. I greeted him in Italian and he was pleasantly surprised. Learning that our organization was at its beginning, and offered products only from Italy, he invited me to join himself at his stand and look for potential customers there. At the last BiMU Fair, in the Indo-Italian business-meeting I was invited by UCIMU to give a talk", he recollects.

"In return, we gave outstanding support to UCIMU. Our references had built up in India. In the next 3 years, 1981 to 1983, UCIMU together with ICE launched a series of technical conferences in India. It required visiting four cities in India in each round, selecting between New Delhi-Mumbai-Pune-Bangalore-Hyderabad-Chennai each time. UCIMU gave the assignment to us to send out invitations on their behalf to the Indian industry, expecting



the participation by about 100 persons at each venue. To their delight, the number of participants exceeded 120 at most places. Our mutual admiration went up as a result of that."

His acumen was further strengthened as in 1983 he was selected as one of the entrepreneurs for a course on International-Marketing, conducted at ICE, Rome (Italian Institute for Foreign Trade) under the aegis of ITC -UNCTAD-GATT (Geneva), sponsored by the Italian Ministry for Foreign Trade from the Asian region.

An alumnus of ICE and a Member of its Alumni-Association ASSOCORCE. Mr. Surendra feels proud of his link and says, "It gave me valuable insight and knowledge for presenting the Italian industry in India."

In the same year, he was invited by the then Italian Ambassador for discussing scope of improving the Italian visibility in India. He shared his suggestion to establish an Indo Italian Chamber and establishing a direct-dial service between India and Italy, thus paving the way for a milestone in the bilateral relationship between Italy and India.

A series of meetings followed and finally, the Indo-Italian Chamber of Commerce and Industry was born in February 1984 at New Delhi in the presence of the Italian Minister of Foreign Trade - Hon. Nicola Capria.

Simultaneously, the Chamber already existing at Mumbai - Italian Chamber of Commerce changed its name to Indo-Italian Chamber of Commerce and Industry (IICCI). He became a Board-Member for the Northern Region and in the year 2002, he became the Chairman (Northern Region).

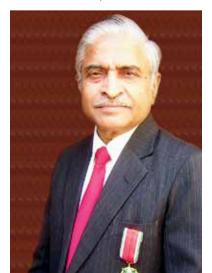
Precisely his extraordinary role in bringing closer the industries of





His extraordinary role in bringing closer the industries of India and Italy got recognized as he was awarded the Title of 'Cavaliere' (Knighthood) and Medals on behalf of the Italian President in the year 2007.





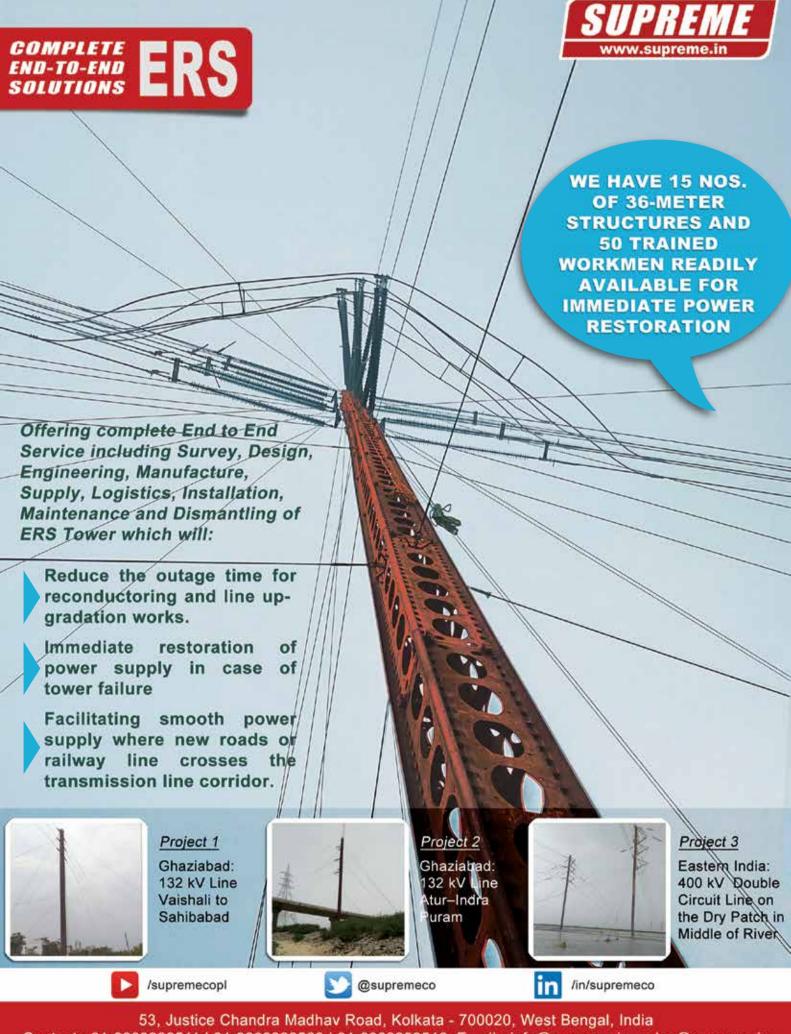
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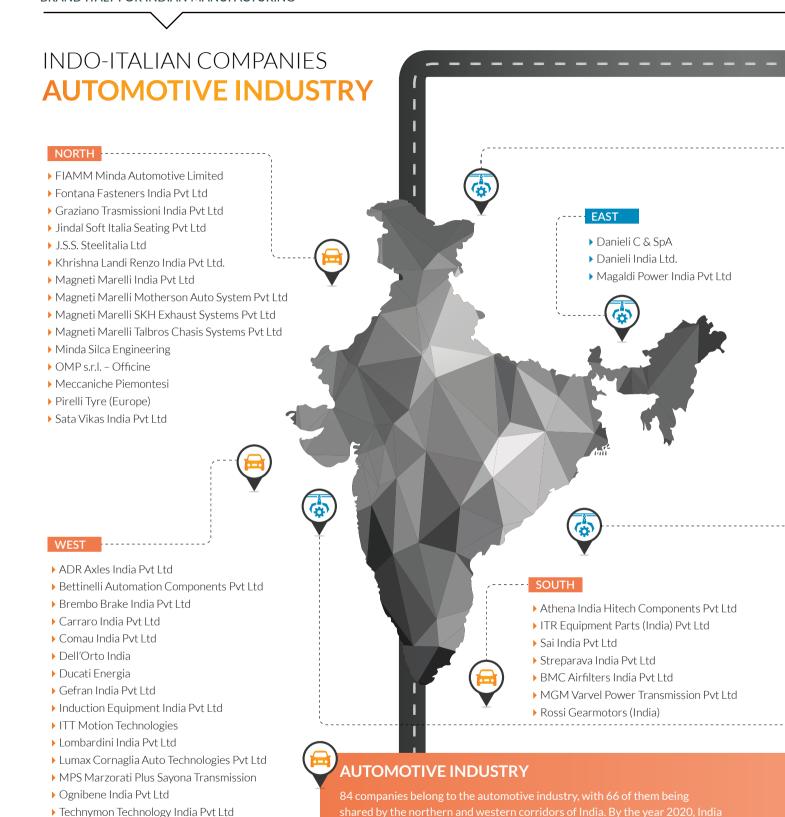
Hardly, he waits to bestow the honour on his fellow community. "This honour I dedicate to our engineering community. We are not in the class of politicians, sportsmen, artists, or film-stars. So, it is very rare for engineers to get honoured to the level of Knighthood. It is so precious!" he proudly exhorts.

Much as he was mesmerized by Italy the country he fell in love, he has always been so by the continuous support and hard work of the love of his life, his wife, and he says, "I must pay a gratitude to my wife whom I had requested to head Precision International as its Sole-Proprietor when it was created, since I myself was still serving my previous employers. Till this day, she has attended the office regularly and has managed its administration. I hold here the position of the CEO."

Mr. Surendra Kumar holds a special position in the bilateral relationship between India and Italy as he precisely played the role of a catalyst for a new era between the two countries.

You can reach Mr. Kumar at precinter@gmail.com





\*Mapping of Italian companies in India

- IICCI & PwC: Why INDIA



#### INDO-ITALIAN COMPANIES **GENERAL ENGINEERING**



#### GENERAL ENGINEERING

The most popular sector in India is the industrial machinery sector. There are 133 Italian companies in India belonging to this sector, mostly concentrated in the western state of Maharashtra. The sector includes machinery for processing wood and plastic, textile and leather, components and tools, ceramics, and so on. There is even larger scope for the Italians to expand in this field as there is a high demand for design and engineering for highprecision, high-speed, five-axis machines in advanced technologies for finishing, simulation software, milling, machinery for the semi-conductor industry, et al. Among the companies are Borghi Brush Machinery Dream Plast India, Arioli Textiles Machinery, Ariol India & APAC, WAM India, BBM Heavy Machinery and ATB Riva Calzoni India, to name a few.

#### NORTH

- ▶ OMB Saleri Valves India Pvt Ltd
- ▶ Euro Bearings India Pvt Ltd
- Danieli & Co. Officine
- ▶ Meccaniche S.p.A
- Marposs India Pvt Ltd

- ▶ Raci Spacers India Private Ltd.
- ▶ SESA India Pvt Ltd
- ▶ Tenaris Global Services Far East Pvt Ltd
- Camozzi India Pvt I td
- ▶ ER Meccanica Veneta Pvt Ltd
- ▶ Finproject India Pvt Ltd
- Nicotra India Pvt
- PAMA India (P) I td.
- Valvitalia India Pvt I td

#### SOUTH

- ▶ Chiorino India Franstek
- ▶ Comer Industries India Pvt Ltd
- Marzoli Textile Machinery Manufacturers Pvt I td
- ▶ OLI Vibrators India Pvt Ltd
- ▶ Boldrocchi India Pvt Ltd
- ▶ Bonfiglioli Transmissions Pvt Ltd
- ▶ G&C Valves India

- Private Limited
- ▶ Sicgilsol India Ltd.
- ▶ Walvoil Fluid Power India Pvt Ltd
- Meccanotecnica Umbra India Pvt I td.
- Ansaldo Sts India Pvt Ltd
- ▶ Artimpianti India Pvt ltd
- ▶ Breton India Services Pvt Ltd
- Costa Levigatrici S.p.A

- ▶ FOM Aluminium Machines Pvt I td
- Multiple Special Steel Pvt Ltd
- ▶ Salvagnini Machinery India Pvt Ltd
- ▶ Biesse Manufacturing
- Co Pvt Ltd
- ▶ Bierrebi Cutting

#### WEST

- ▶ Borghi Brush Machinery
- Dream Plast India Pvt I td.
- Macchi India
- Nordmeccanica India Pvt Ltd
- ▶ Prima Power India Pvt Ltd
- Piovan India Ltd.
- ▶ Racold Thermo Ltd (Ariston)
- ▶ Rossini India Printing Rollers Pvt. Ltd
- ▶ Sica Plastic Machinery Pvt Ltd
- ▶ SICME Italia Impianti India Pvt Ltd
- O.L.C.I. Engineering India Pvt Ltd
- ▶ BBM Heavy Machinery Pvt. Ltd

- ▶ Danieli Centro Combustion India Pvt Ltd
- ▶ Marcegaglia India
- Marvelous Machinist Pvt Ltd
- Mecc Alte India Pvt Ltd
- ▶ Tenova Hypertherm Pvt Ltd
- ▶ Tenova India Pvt Ltd
- ▶ Tenova Multiform Pvt Ltd
- ▶ Valbruna Stainles
- Arol India & APAC Pvt Ltd
- ▶ Bonetti Waaree Pvt Ltd
- ▶ Brevini India Pvt I td
- ▶ Dalmec India Pvt Ltd

- Demartini Hitkari Fine Products Pvt Ltd
- Frascold India Pvt I td.
- ▶ Galvi Engineering Pvt Ltd
- ▶ Gemels Valves Pvt Ltd
- Losma India Pvt Ltd
- ▶ Saet SpA
- ▶ S.E.L.I Tunneling Pvt Ltd
- Speroni India Pvt Ltd
- ▶ Termomeccanica Pompe
- ▶ WAM India Pvt Ltd

## **TECNO SYSTEM**

## SERVING INDUSTRIES WITH DIVERSIFIED ELECTRONIC **ASSEMBLY SOLUTIONS**



Your Partner in Electronics

Tecno Systems SpA stands as the trusted Italian brand for industrial design as well as manufacturing services for electronic assemblies and complete products for OEMs in a wide range of sectors.

Italy's Tecno System is renowned manufacturer, Supplier, Solution and Service Provider of Electronic Products Such As Circuit Boards, Power Supply PCB Assembly, Electronic Circuit PCB Assembly & Multilayer PCB Assembly.

Tecno System offers solutions that cover the entire life cycle of an electronic product from design through the production phase, certification, electronic manufacturing and electronics integration into sub-assemblies or finished products, to after-sales services in compliance with the specific requirements and regulations of a particular industry.

Incorporated in 1990 by Mr. Tiziano Ianni, Tecno System has been developing and manufacturing electronics products for a very wide range of industries including Automotive, Railways, Aerospace and Defense.

#### **Business Areas**

Tecno System's major focus areas include EMS (electronics manufacturing services), AMS (after market services) and ODM (original design manufacturing). The firm's major customers are OEM leaders, whether in a niche market or a mass market.

The company has developed significant know-how in industries such as automotive, automation, power management and lighting,



TIZIANO IANNI

FOUNDER & PRESIDENT Tecno System SpA

While I equate current growth phase of India to the growth that China had in the 90s India is heavily dependent on imports as far as electronics is concerned. With rapidly growing domestic market and with the abundance of natural and human resource, the market should create entire manufacturing ecosystem



and also in the niche markets characterised by high levels of technology, such as railways, avionics, defence, metrology and broadcasting.

#### 'Make in India' Influence

Like many international companies, Tecno System grabbed on the opportunity to explore Indian market after the launch of the 'Make in India' initiative.

In 2015, Tecno Systems SpA opened its Indian subsidiary Tecno System India Electronics Pvt. Ltd. The manufacturing unit was strategically placed in Bengaluru to serve an existing client, locally.

Tecno System feels 'Make in India' is great call for global players to scale up manufacturing in India and in the process create a healthy supply chain within the industry.

#### India Journey

With a view to serve Indian market better Tecno Systems India Electronics Pvt Ltd, the Indian plant of Tecno System was opened at Bengaluru, which is strategically situated to serve the Asia-Pacific region.

For Tecno Sytem SpA which was started in 1990, its facility in Bengaluru, India is the third after the second facility which was set up in Tunisia in 2010.





#### **Established**

- Founded by: Mr. Tiziano lanni
- City & Address: Mercenasco (Turin), Italy
- Manufacturing Facilities: Electronic Manufacturing (Printed Circuit Board Assembly, testing & Box Build)

global network India, Italy & Tunisia

customers served in India within last 2 years of operation

major products and innovations. Electronic Control Units/Vehicle Management Units, DC/ DC converters, High Power Battery chargers, Power converters

110,000

Installed capacity of components per hour

Aerospace AS 9100 Rev.D certified

KEY CONTACT Hariharan Katharajan, Managing Director Hariharan.katharajan@tsie.in

Starting with one client in India, Tecno Systems India Electronics Pvt. Ltd. manages 32 clients today.

#### Focus on Diversification and Quality

For Tecno System, industry and product diversification with quality assurance are its strength.

Diversification has allowed the company to acquire extensive know-how, creating added value for its customer owing to the ability to exchange technologies, skills and processes across different industries.

The company also has a long-standing reputation for its quality, which is evident from its increasing turnover in niche markets like railways, defence and aerospace.

#### Manufacturing Strategy

The Company follows a strategy to remain in high quality electronics manufacturing with a special focus on segments like automotive, railways, telecom, industrial, medical, railways, defence and aerospace for low to high volumes.

Since manufacturing in Europe incurs higher cost of production, all the European OEMs (Original Equipment Manufacturers) are looking to manufacture in geographies of Eastern Europe/North Africa/South America/



#### HARIHARAN KATHARAJAN

MANAGING DIRECTOR Tecno Systems India Electronics Pvt Ltd

**Electronic contract** manufacturing have 2 sets of people: one with very sophisticated process & quality control mechanisms catering to high business volumes & others entertain all sorts of business volumes but lack the process & quality controls. We are an alternate for both, entertaining even smaller business volumes and at the same time offer stringent process & quality control.



South East Asia.

So, India is particularly interesting as it has a huge domestic market and at the same time will help the group amass the potential of this paradigm shift amongst the OEMs.

#### **Expansion Plans**

Tecno System is likely to expand its presence in the defence and aerospace industry. Its target is for this sector to account for 10 per cent of its annual turnover.

Tecno System also plans to be aggressive in positioning itself with the railways and the automotive sector to tap the huge local and export markets. With a rising number of requests for manufacturing services, the company plans to scale up its workforce to match its evolving needs.

Currently in India, the company has an installed capacity of about 110,000 components per hour. "The capacity would be doubled in FY 19-20 and this would be quadrupled in the next five years," affirms Mr. Katharaian.

"Any OEM (Original Equipment Manufacturer) has this business cycle: Design - Manufacture - Sell. Currently we help them only with the Manufacturing. In the upcoming years we would like to offer them Design services as well." he adds. 1

## SALVAGNINI GROUP

## PIONEERING INNOVATIONS FOR PROCESSING SHEET METAL OVER 50 YEARS

## salvagnini

The world leader in panel-bending technology and Salvagnini Maschinenbau, located in Ennsdorf, Austria, is the largest panel-building factory in the world.

#### Fifty years of innovation

Salvagnini is an Italian company that designs, builds and sells flexible systems and machines for processing sheet metal. Founded by Guido Salvagnini in the year 1963 in Milan, Italy, the company has been known for its positive, innovative approach and development and use of pioneering technology, which is reflected in superior, ground-breaking solutions.

#### **Business** areas

Equipped with a large, versatile range of highperformance machinery and systems and rich experience in manufacturing and designing, Salvagnini is able to offer its customers optimized and customized solutions. which prepare them for dynamic market conditions. Salvagnini provides assistance in various application sectors to companies of all sizes. The company is a world leader in panel-bending technology and Salvagnini Maschinenbau, located in Ennsdorf, Austria, is the largest panel-building factory in the

#### Inventive efficacy- Industry 4.0 technology

The company has developed its products on the lines of flexible automation and process efficiency, which are capable of producing a wide variety of pieces in sequence seamlessly,



RIDDISH JALNAPURKAR COUNTRY SALES MANAGER

> Italian companies have been established as growth accelerator for the Indian markets. The companies bring in knowledge, possibilities, and opportunities for the Indian markets to flourish in their respective fields.

thanks to a set-up in masked time and devices which reduce WIP, diminishing the need for human intervention.

The 4.0 revolution came as a natural evolution to Salvagnini, which, in producing the first Automatic Job Shop (AJS) for lights-out production, created one of the first outputs of what came to be known as Industry 4.0, a benchmark for all industries to aspire to reach. Today, the term AJS implies a set of Salvagnini which are designed for intelligent interaction between customers' ERP and machines.

#### "Social industry"

Salvagnini now offers what is being referred to as the "social industry", that is, autonomous solutions which are easy to programme and use, are automated and interconnected, and communicate intrinsically with each other and their surrounding environments. This provides for a more linear process that results in more efficient piece-production. The "social industry" is a follow-on from the 1980s which promises to transcend the boundaries of Industry 4.0.

The concept combines social/digital and industrial dimensions to produce a combination of adaptive, effective and automatic processes which, among other





## 1963

#### **Established**

- Founded by: Guido Salvagini
- City & Address: Milan, Italy
- Manufacturing Facilities: Designs, builds and sells flexible systems and machines for processing sheet metal.

Manufacturing plants group comprises

operational sites specializing in sales and customer support

square production area an extensive and dedicated network of agents and service centres.

installations (including 3,500 panel benders)

Riddish Jalnapurkar, Country Manager riddhish.jalnapurkar@salvagninigroup.co riddhish.jalnapurkar@salvagninigroup.com

things, are balanced, environment and userfriendly, reduce production time and minimize consumption.

#### Arriving in India

Salvagnini began operating in India as Salvagnini Machinery India Private Limited since 2010. The company has a registered office in Bangalore, and some presence in Delhi, Ahmedabad, Pune and Chennai, where it is actively engaged in sales and service functions of its products.

Riddish Jalnapurkar, the Country Manager of Sales for the Salvagnini Group in India, states that the historically price-sensitive Indian market offers many challenges for foreign companies like the one he represents, which need to work patiently and diligently if they are to gain a stronghold in the country.

Jalnapurkar, who has worked with both Indian and Italian firms, continues, "... The work culture, product design, quality, performance, and sales are completely different for both the countries. What pertains to one does not do to the other." Convincing potential buyers about the benefits of their premium products and justifying the steep price can be challenging and tedious, he adds.

However, where Salvagnini as an Italian company stands apart from other European companies is while many European companies are moving productions to China for price competitiveness, compromising quality sometimes, Salvagnini group has broken the notion and delivered both price competitiveness and quality at the same time.

#### Future in India

Jalnapurkar assured of Salvagnini Group's chances for expansion in India. His optimism is well-founded. If figures are any sign of indication, the Salvagnini Group is growing fast in India. It began its operations in the country with only 11 machines; now it has

Jalnapurkar is excited about the brand he represents, and wishes to introduce their pioneering technology to Indian entrepreneurs to help them grow their enterprises worldwide.



## **MOTOVARIO**

## PROPELLING INDUSTRIES WITH ADVANCED GEAR SOLUTIONS



Motovario provides technologically advanced solutions in the field of transmission components, and is well-placed to serve its customers worldwide.

Motovario SpA is an Italian company which manufactures mechanical speed variators, helical and helical bevel gear reducers, shaft mounted, worm gear reducers, electric motors and motoinverters. The company was founded in 1965 by Giancarlo Raguzzoni in the town of Formigine, in the industrial district of Modena. Since then, Motovario has thrived into one of the biggest manufacturers of gear units not only in Italy, but also in Europe.

#### Vision

Motovario aims to promote its brand and products at an international level with determination and transparency, while constantly striving to offer innovative solutions for satisfying and anticipating the demands of the market.

#### High standards

Motovario provides technologically advanced solutions in the field of transmission components worldwide. Synonymous with innovation, quality and service, the company is well-placed to serve its customers. Their range of geared motors includes extremely versatile units which are used in a large number of applications. Available with a two-year warranty, these motors have been designed for limited servicing, to meet a wide range of working conditions, and to provide high



#### PARTHA PRATIM SEN

MANAGING DIRECTOR Motovario India

**Italian companies** are simultaneously improving their own opportunities in urban centres, where they operate. As investment into India's growth continues, Italian companies will view India as a strategic manufacturing hubproviding competitive rates and direct access to growing markets



performance and reliability.

Motovario's production system has been quality-certified under standard UNI EN ISO 9001:2015- an international recognition of the quality system of the company as a whole. This is a testimony to its commitment to constantly improve its products and services. The company has also obtained certifications under UNI EN ISO 14001:2015 and OHSAS 18001:2007, which implies that it is continuously improving environmental performance, and provides its workers with safe working conditions.

#### Motovario in India

To meet growing demands, in 2011, Motovario set up a subsidiary named Motovario Gears Solutions India Pvt Ltd in Kolkata, India. The following year, this was converted into an assembling centre (To distribute products and support service, Motavario have a network of 100 dealers who work in tandem with their subsidiaries and assembly centres located worldwide).

#### Challenges

Mr Partha Pratim Sen, Managing Director of Motovario India, explains that like many other foreign enterprises in India, the company initially had issues with pricing and fluctuations in currency exchange value. It also





## 1965

#### **Established**

- Founded by: Giancarlo Raguzzoni
- City & Address: Formigine, Industrial district of Modena
- Manufacturing Facilities: Gear units

numerical control machines

subsidiaries

assembly centers

approx. employees work in branch all over the world

£186 MN

Motovario SPA was acquired by TECO Electric & Machinery Co in 2015

Dealers

Partha Pratim Sen, Managing Director parthapratim.sen@motovario-group.in

had to deal with logistics issues of availability. However, with competitive pricing for their products with ex-stock delivery of the helical range, Motovario was soon able to place a firm foot in the Indian market.

Even so, one of the main reasons for converting the subsidiary into a component assembly plant was the price sensitivity of the market. By sourcing components indigenously, the company could cut down on the additional costs resulting from import duties. The other reason for the conversion was to improve flexibility of delivery and maintain the optimal level of smaller components.

#### The Indian potential

However, the company has good reason to be optimistic. In 2011, Motovario sold 940 units worth ₹48 lakh; in 2014, it sold 19,750 units worth ₹15 crore. In the current year, it aims to sell 35,000 units worth ₹35 crore, and targets an annual turnover of ₹50 crore by 2021.

Motovario has also catalyzed greater Italian investment in India. Ever since the company sold its first products in the Indian market, word-of-mouth has led to a high opinion of Italian gearboxes among customers, making India an attractive market for similar companies.

#### The future in India

In two years, Motovario India plans to start

a fully fledged manufacturing unit from the proposed component assembling centre, which would not only cater to the Indian market, but also to foreign markets across the

Mr Sen thinks that India has competent manufacturing capabilities, and is a growing domestic consumer market. "By investing in India's planned growth," he says, "Italian companies are simultaneously improving their own opportunities in urban centres, where they operate. As investment into India's growth continues, Italian companies will view India as a strategic manufacturing hubproviding competitive rates and direct access to growing markets," he signs off.

H Series Worm Series S Series **B** Series









## **CFT RIZZARDI**

## A GAME CHANGER IN THE FIELD OF TOOL CHANGERS



CFT RIZZARDI works closely with its customers to make efficient, reliable products, in order to build strong buyer-relationships and customer-satisfaction.

#### An experiment becomes an enterprise

Today, tool changers are a vital component for modern NC machine tools, as they allow machines to function without manual operation.

The cam exchanger is a tool changer with a movement that is synchronized mechanically: it clamps, extracts, exchanges and inserts tools in the spindle and the magazine, all at the same

In 1987, a small firm was set up in the Italian commune of Rivalta di Torino. Its founder, Rizzardi Renzo, intended to use the establishment to study and implement new applications for camhandling systems. Soon, the firm began to develop cam-driven products such as translators, elevators and manipulators on a large scale, primarily for the use of automotive production lines.

As business grew, the firm began to devote more time to designing and developing tool changers and pallet exchanger systems for machine tools; often they worked in collaboration with the designers of the machines themselves.



RIZZARDI RENZO FOUNDER & CEO

We believe that bridging the gap between the traditionally cost-centric India and value-loving Italy will be mutually beneficial. Indian machine tool builders must aim not only for better quality in itself, but for the manufacture of high production machines on a large scale. This change will be initially costly, but in the long run, the quality of the machines would lead to higher sales.



#### CFT Rizzardi SRL- Maker of premium tool changers

This firm, originally known as Colombo Filipetti Torino SRL, is now an important developer and manufacturer of tool changers, with a large market for machine tool manufacturers; it has modern and efficient facility spread over 1,300 square metres (850 square metres for production facilities and 450 square metres for offices). In 2013, the company was renamed CFT Rizzardi SRL, following changes in corporate structure.

From the design to the after sale service, CFT Rizzardi products are mainly intended for the industrial sectors where handling speed, smoothness and precision are the main priorities. A perfect mix of tradition and innovation, "craft" intelligence and hi-tech engineering characterize the history of this company in constant evolution.

Today, the mission of CFT Rizzardi is to deliver fast, smooth-motioned, precise cam-driven devices for automation. The company's philosophy is to work in close co-operation with its customers to make efficient, reliable products, in order to build strong buyer-relationships and customersatisfaction. Through constant research and





## 1987

#### **Established**

- Founded by: Rizzardi Renzo
- City & Address: Italy Rivalta di Torino (TO) - Via Massimo D'Antona 65
- Key Markets: Machine tools manufacturers

## 1300 MQ

modern and efficient Manufacturing facility

global sales network covering Europe, Asia and America

ıso 9001

**SINCE 2004** 

quick supply of spare parts for CFT Rizzardi tool changers

## PRODUCT LINES

Tool Changers, Pallet Changers and Roto Elevators and Linear Handling Systems

KEY CONTACT Surendra Kumar, Precision International precinter@gmail.com

technical innovation, CFT Rizzardi has been acknowledged as a highly active, competitive brand in the market.

The current product range of CFT Rizzardi consists mainly of components for the machine tool industry and, to a lesser extent, of cam-handling systems for automation. The company is known for having invented Chainless Technology, with which it provides unique customized solutions.

#### CFT Rizzardi SRL in India

CFT Rizzardi is represented in India by Precision International, located in New Delhi. Mr Surendra Kumar is the manager for CFT Rizzardi in India.

#### Difficulties of the Indian market

CFT Rizzardi does not expect high dividends from the Indian market at the moment. considering the price sensitiveness of the Indian customers.

However, Rizzardi Renzo, the CEO of CFT Rizzardi, believes that manufacturers in Asia, including India, are gradually using better technology and stepping up the quality of their machine tools, which will naturally lead to a rise in selling prices. This could



augur well for Rizzardi's company, as the Indian manufacturers would then be more inclined to spend more to get advanced tool changers.

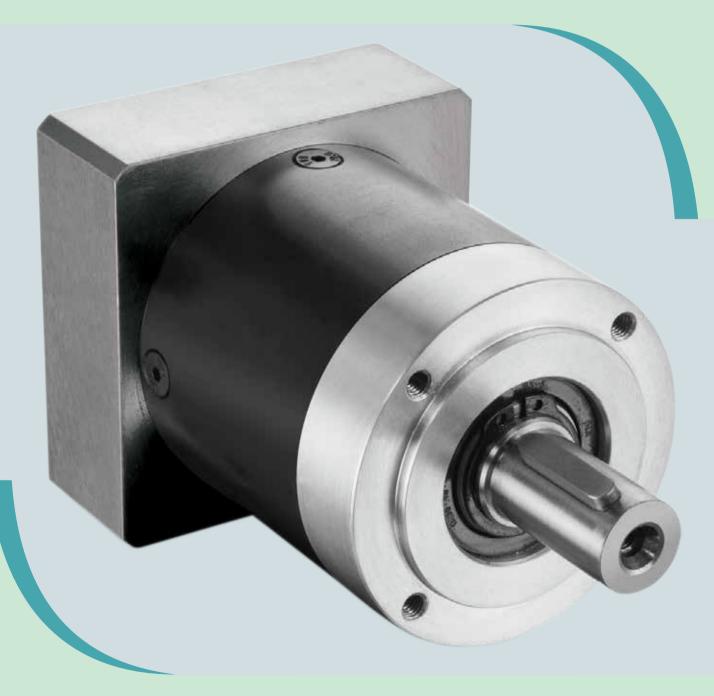
#### CFT Rizzardi's future in India

Rizzardi is assured that his company can go a long way in improving the manufacturing scenario in India. It is essential, he says, to

increase awareness of Indian manufacturers, about the quality that CFT Rizzardi has to offer, and to convince them that by using their products, they can produce machine tools which will be better and more reliable, since compared to their competitors, CFT Rizzardi can offer greater versatility and availability for customized applications.



(A German Company, ISO Certified,)



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**EPPINGER TOOLING ASIA PVT. LTD.,** 

## WIDE RANGE OF HIGH PRECISION GEARS & GEAR BOXES WITH CUTTING EDGE TECHNOLOGY



PE - Planetary Gear Boxes



PF - Planetary Gear Boxes



PT - Planetary Gear Boxes



PR - Planetary Gear Boxes



PBE - Bevel Planetary Gear Boxes



CT - Cycloid Gear Boxes



CF - Cycloid Gear Boxes



CQ - Cycloid Gear Boxes



CR - Cycloid Gear Boxes



BT - Bevel Gear Boxes



BT - Bevel Gear Boxes with Motor Flange



Customized Special Gear Boxes



Gear Boxes with Circulation Lubrication



HT - Hypoid Gear Boxes



SHT - Hypoid Helical Gear Boxes



Customized Gear Development

## CUSTOM BUILT / NON STANDARD GEARS, GEAR COMPONENTS AND GEAR ASSEMBLIES

## **SPERONI**

## REVOLUTIONIZING TOOL MEASUREMENT AND PRESETTING SOLUTIONS



Speroni has created benchmark for innovation. precision, longevity and value in the international field of measurement, presetting and tool management.

Italy as a nation has been characterized as a land of individualist inventors since ages. Not far behind are the Italian companies which have drawn inspiration from the rich history of invention and have created pioneering inventions in their fields.

Established in 1963, Speroni is an Italian family owned company that designs and manufactures highly reliable products of exceptional quality with expertise in advanced technologies in turning, milling, grinding and special processing.

The manufacturing process is fully handled by Speroni at its headquarters, a 20,000 square meter facility just a few kilometers south of Milan, in the heart of the Italian industrial area.

#### Inspiration from History

Speroni has always been "forced" to innovate; its early days of subcontracting were characterized by daily challenges posed by machine tool manufacturers that wanted new solutions. Never series but always something new, something different, something better this culture kept true in the years.

Speroni was the first in the world to make a universal spindle with universal clamping system. Shop Floor CMMs are another example, Integrated Tool Management



ANDREA SPERONI CHIEF EXECUTIVE OFFICER Speroni SpA

Keeping true to the Italian innovators, we consider ourselves a company of innovators. When I look back, history is a great source for strength and inspiration for the future, always. The world pushes us to invent and innovate; when this is not enough, we look back at history and in it we find additional strength and stimulus to keep on improving every day



solutions (what we today call Industry 4.0) was designed and introduced in the late 1970's as well as the very first fully Integrated Tool Presetting & Shrink-Fit system, etc.

#### Journey in India

The journey in India started way back in the year 2003 through a representative from India to help Speroni go through the Indian market and understand the culture and needs in India. Speroni's decision to choose Indian market over China was effected by view that India was seemingly making much more progress in the way of advancements in many fields. More than 70% of market is dominated by Small and Medium scale industries.

India was a great place for Speroni to learn more from the diverse nature of businesses. With more than 15 years of association with India, Speroni has learnt many ways to bridge the gap with other nations as well.

The complexity of the Indian market is what attracted Speroni to invest and install factory units here and thus was born Speroni India Pvt. Ltd. in 2004. On providing equal service throughout the nation, Andrea Speroni, CEO, Speroni, says, "We have the goal of providing the same service and support to everyone; it is indeed a challenging task, owing to the diverse





## 1963

#### **Established**

- Founded by: Dante Speroni
- City & Address: Frazione Sostegno, 27010 Spessa (PV) - Italy
- Products: Tool Presetter, Tool Inspection and Tool Management

12,500

employees across the globe

subsidiaries

installations in India within four years

Turnover invested in R&D

Women Workforce

Worldwide presence in 63 countries

square meter manufacturing facility

## Ravindra Moolya, Director ravi@speronispa.com

marketers and culture across the nation."

However, he adds, "Despite the gaps that may exist in any market, quality is always the core belief and path to follow. The first time I visited larger Indian corporations in 2004, I was surprised to see, in a lot of companies, an active use of the latest tech equipment, just as witnessed in Italy, USA, Japan or Germany."

His visit to India, in the year 2004, made him realize that Speroni needed to promise quality and the profit would resolve by itself. Generating great values and beliefs across the business front was key to many Indian manufacturers.

Andrea Speroni opines that India used to have cheap labor and every country has been through the phase of labour unions and workers doing mundane jobs at factories. But today, the scenario has changed. Just as the western countries, India is also evolving. The education in India is aligned with the western world and the country is generating quality engineers, doctors and professionals.

Speroni wants to adapt to running with the market and believe technology and automation are growing processes which need time to evolve in a country as diverse and huge as



**RAVINDRA MOOLYA** DIRECTOR Speroni India

Speroni is going to be the first company in the world to innovate smart tool setter. The Indian companies are having ever-growing needs to not only satisfy the needs of local customers but are looking ahead to expanding globally and become global players. Our mission is to make machining intervention free



India. With technology meeting with the skilled workers and employees, Indian companies are evolving towards automated processing.

#### **Indian Prospect**

Speroni has seen a lot of changes in dealing with their Indian clients, specifically in terms of a major improvement in the quantity level requests coming from India. "The companies are now inclined and pay more attention to technology and its involvement as a factor of growth.", he says.

"The increase in requests is interestingly in line with the request from other countries such as Italy, USA and Germany. There are definitely some shades of culture that differ, but otherwise the number of orders coming from across the nation has seen a rise", Andrea says.

On managing Indian market, he adds, "I try to run things and manage from Italy with the help of my eminent team in India. We are trying our best to serve better to such a growing country with lots of growing opportunities. With the help of people like Ravi Moolya, General Manager at Speroni India, who comes with great experience in handling the manufacturing sector, things are less complex now."

## LUBRITALIA

## THE RELIABLE LUBRICATION PARTNER FOR INTEGRATED STEEL PLANTS



Lubritalia is a major player in the lubricant world thanks to its cutting-edge technology and its on-site research, leading to tailor made formulations allowing cost effective solutions in terms of quality and price.



**MARCO MUSOLINO** CHIEF EXECUTIVE OFFICER Lubritalia SpA

The spirit of innovation that has always Lubritalia, combined with the great attention to quality of the finished product, leading the company to constant search for technological solutions increasingly effective and economically advantage for the customer



Lubritalia SpA is one of the leading providers of oil and lubricants for the steel industry, combining attention to quality and painstaking research for technological solutions to provide effective and economically viable products for customers.

Lubritalia is mainly engaged in products for integrated steel mills but its experience spans on many different industrial sectors.

For what concerns steel mills its production ranges from: hot rolling, pickling, cold rolling, protection.

Customized formulations for the metalworking industry: machining with chip removal, sheet metal pressing, wire drawing and extrusion, tube forming, hydraulic fluids.

Non-ferrous industry - Aluminium industry: Rolling, pressing machining; Copper industry: rolling, extrusion and machining.

Glass industry - grinding, cutting, molten glass shearing.

Lubritalia was the brainchild of the engineer Benito Musolino, who established it in 1980 as an oil and lubricant manufacturing enterprise in 1980. The company is headquartered in



PIIERGIORGIO RUGGIERI KEY SALES ACCOUNT MANAGER Lubritalia SpA

My approach is: detailed study of the process, outlining possible margins of improvement and its more critical aspects. Once defined, my team will design specific lab tests to mimic the required performance level. And provide a customer fit solution. We call it the Zero Risk trial approach







#### **Established**

- Founded by: Eng. Benito Musolino
- City & Address: Z.I. Marco Dei Lupini 74019 Palagiano Ital
- Key Markets: Integrated Steel mills. MW industry, Glass industry, Non ferrous metals manufacturing industry.

laboratory with cutting-edge technology

distributed brands

per year Global Turnoer

specialized product verticals lubricants for steel, aluminum and metal working

special fluids and consumables

Ravikumar Bhandaru, Director Commercial brk@wafpl.com

Palagiano, a city and comune in southeast Italy, strategically located next to Italy's biggest steel plant, former ILVA, now Arcelor Mittal.

Today, Lubritalia's main customers include integrated steel mills, major companies belonging to the MW industry, glass industry and the non-ferrous metal manufacturing industry.

It is a key partner of Gazpromneft, Gulf. The company has an annual turnover of € 20 million per year. Lubritalia has several branches all around the world.

Lubritalia has UNI EN ISO 9001:2008 quality certification, holds certificates for environmental management, management system for security and certificate of excellence.

Lubritalia has been lauded for its contribution in Research and Development. The company has a laboratory with cutting-edge technology spread over 500 square metres.

The lab is subdivided in various sectors: Quality control (raw material, finished and intermediates), tribology area, climatic cells area. And an area devoted to fine chemistry.



SANTOSH CHAKRABORTY

MANAGING DIRECTOR **WAF INDIA** 

For the last one year, we have distributed Lubritalia speciality chemicals to several steel manufacturers in India and Bangladesh. The feedback has been very encouraging and the customers have satisfied with the Quality, Cost and Delivery times. WAF, in the same philosophy as Lubritalia, has its strength in its technical staff, providing technical support, a key to **Customer Satisfaction** 



where new finished products come to light.

Lubritalia SpA has established into an exclusive collaboration with Pune based Witmans Advanced Fluids Private Limited (WAF). With strong ethical business standards. WAF as a brand is home to highly-adaptive and innovative solutions in the field of lubricants, industrial paints, water treatments and cutting tools.

With the technical association of these two leading manufacturing group, Indian industry can get the benefit of indigenous manufactured products with the Italian quality. Lubritalia products are well accepted by global steel manufacturing giants, for hot rolling, tickling, cold rolling and finishing. Similarly there is a huge market potential for lubricants for aluminium, copper and glass industry in India, where Lubritalia will be expanding their product portfolio starting their local manufacturing with WAF.

Lubritalia is represented in the Indian market by Witmans Advanced Fluids Private Limited, located in Pune, specializing in metal working fluids, cutting tools, industrial paints, and complex water treatment.

## INTERPUMP GROUP

## DELIVERING WORLD'S LEADING PUMPS AND HYDRAULICS SOLUTIONS



The Interpump Group is the world's prodigious manufacturer of high- pressure pumps and a global player in the hydraulic market. The group has been listed on Milan stock exchange

Italy based Interpump group has carved its own position as a globally preferred company in the field of high pressure pumps and hydraulics over four decades. The Interpump group manufactures world's leading high pressure pumps including Pratissoli, Hammelmann, General Pumps which are widely used in the innovative applications in this sector.

Founded by Fulvio Montipo in the year 1977 Interpump group has become the world's largest manufacturer of professional highpressure piston pumps, one of the main groups operating on international markets in the hydraulic sector and water jetting sector. In the water sector, it deals with high-pressure pumps, where high performances and product innovations enhance the possibilities for applications. Oil sector constitutes about 60% of the total turnover of the company and is the other major consumer sector of its broad spectrum of products ranging from gear pumps, power take-offs to cylinders, valves, hoses and pipes.

Headquartered at Sant'llario d'Enza, Reggio, Italy, the company has widespread network of 80 companies globally with presence in the most dominant parts of Italy, US, Brazil, Germany, India and China and manufacturing facilities across all the geographic territories. The company has a strong workforce of over



**GIRISH GARUD** MANAGING DIRECTOR Interpump Hydraulics India

With the ongoing performance, we believe that in the coming years, IPH India would be a prominent player in the Indian truck hydraulics sector which would add in becoming a major manufacturing base for IPH global operations.



5600 employees all over the world that are the driving force for the group.

#### Pumping business in India

Interpump group's Indian journey started in the year 2006 as a trading company. Starting as a PTO and Pump manufacturing company, Interpump group has now expanded into hydraulic cylinder manufacturing and in various other hydraulic products.

Inter Pump Hydraulic India now boasts of an exclusive unit with a dedicated team and state of the art technology for machining, assembly and testing of PTO, pumps and hydraulic cylinders for mobile hydraulic applications in two locations in India - Hosur (Tamil Nadu) and Rudrapur (Uttaranchal) respectively.

Currently, the group is operating as Interpump Hydraulics India Limited in Hosur, Walvoil Fluid Power Private Limited in Bangalore and Inoxpa in Pune. The four plants in India deal with the manufacturing of the products and also as selling units.

Globally the group has an estimated turnover of 1.3 billion Euros and in India the business generates around Rs. 900 crores.

#### Challenges and growth

In the olden days, the construction sector was mainly labour oriented. Understanding the





#### **Established**

- Founded by: Fulvio Montipo
- City & Address: Sant'llario d'Enza, Reggio, Italy
- Key Markets: Jetting sector. Construction & Mining, Metal Cutting, Tipping Applications.

multiple manufacturing locations in six countries

employees across the globe

sectors served: Water jetting sector and Hydraulic sector

companies worldwide € 1.3BN

Global Turnover

square meter manufacturing facility in India

**KEY CONTACT** Girish Garud, Country Co-ordinator girish@interpumphydraulicsindia.com

need for mechanisation and automisation, in this sector, Interpump group introduced modern technologies and state of the art products, revolutionising the approach in this

Interpump Group in India has been a witness to different challenges. Their first major challenge was acceptance of modern technology products and secondly addressing the price sensitive market of India. The group constantly educated and enhanced the knowledge of the Indian customers, to make them understand the advantages of its state of the art products. and also went on investing every year, to manufacture all these products in India. In this way, they could address the price sensitivity of the Indian market.

#### Making in India

Interpump Group believes in the philosophy of having Indian companies, manufacturing in India mainly for Indian market.

Girish Garud, Country Coordinator of Interpump Group And Businesses - India & Managing Director - Interpump Hydraulics India, opines, "Interpump Group not only provides its customers with its technologically advanced products compared to the other Indian manufacturers, but it also keeps the cost at par with them. The whole idea for producing





Interpump group is world leading suppliers for all Pumps, Valves and Power Take-offs for Tippers and Backhoe Loaders

in India is, to give the Indian customers a European technology with an Indian price."

#### **Expansion Plans**

The Interpump Group firmly believes in the India growth story and are on the front to

expand its operations and presence in this part of the world. The Group has various plans to expand its manufacturing facilities by building new plants going forward, and also by acquiring companies supporting the core business of the group. M

# **COLOMBO FILIPPETTI**

# LEADING CAMS AND CAMS MECHANISMS FOR INDUSTRIAL **AUTOMATION**



Starting from the 90's COFIL have had the focus on the expansion on all the worldwide markets" with highly increased production capacity

Colombo Filippetti SPA is one of the leading European companies in the field of design and production of cams and cam mechanisms for industrial automation, with a sales network spanning the whole globe, including Germany, France, Spain, the UK, Turkey, India, and the USA. The company is headquartered in the commune of Casirate d'Adda, 30 kilometres east of Milan, Italy.

Colombo Filipetti has come a long way since the 1950s, when it was established. In the 70s, it underwent a process of standardization, allowing it to gain access to a complete catalogue of mechanisms for the latest needs of automation. In the 90s, the company put to use its experience by sharing its technical knowledge with customers, adopting a co-engineering approach. In 2000, Colombo Filipetti became the first Italian SME to install the ERP-SAP management system with APO finite capacity scheduler.

The company treats human resources as one its most significant strengths. According to Stefano Colombo, general director of Colombo Filippetti, "The



STEFANO COLOMBO **DIRECTOR GENERAL** 

For some years in Colombo Filippetti we have a new management team, covering both the commercial and the productive and technological parts. We count a lot on their energies and capacities, both for market expansions and for product developments.



people who work with us are one of the most important success factor, they are men and women passionate about their work." For many, Colombo Filippetti is their first employer. These newcomers undergo specialized training that the company has specifically developed for its employees. The company also gives due importance to quality management. Stefano says, "For some years in Colombo Filippetti we have a new management team, covering both the commercial and the productive and technological parts. We count a lot on their energies and capacities, both for market expansions and for product developments." The company has 135 employees, with 21 hires in the last three years.

The Industry 4.0 makeover gave a great impetus to the company, says Stefano, as it involved production plants on a large scale, lead to a sharp rise in demand for products from Colombo Filipetti. "Even there we are operating and making very important investments," he says," as well as on the processing technologies of our products." The company had a turnover of € 19 million in 2017, and Stefano expects this figure to rise, as he expects





# 1950

#### **Established**

- Founded by: Marcello Colombo
- City & Address: Via Gioacchino Rossini, 26 - 24040 - Casirate d'Adda (BG)
- Key Products: wide range of cam driven index drives

# $12.000\,\mathrm{SQM}$

manufacturing facility

years of experience in cam design and manufacturing

145

employees worldwide

# COUNTRIES

assitance and sales network

the CAM and the machines

entry into Indian market

KEY CONTACT Surendra Kumar, Precision International precinter@gmail.com



growth not only in the market in Europe, but also in the USA, India and China.

The promotion of Colombo Filippetti in India started about 25 years ago. The potential customers were those in making Machine-Tools (like Honing Machines); S.P.M.s (Special-Purpose Machines for machining or welding or for assembly); and Packaging Machines. Today, its name is synonymous with automation, and its presence is marked in the fields of auto-components manufacture; robotized-welding; portable-compressor manufacture; ball-pen assembly; ceramic-tile making; and packaging automation (incl. the pharma.-sector).

If its past in India had the main support of Gehring India, its presence has the support of Sansera India which company started a fullfledged profit-centre to produce machines equipped with Colombo Filippetti Indexing Tables. Cutomerat Pune include TAL, and Bajaj Auto. M











# Is Italy amplifying the manufacturing prowess in India?

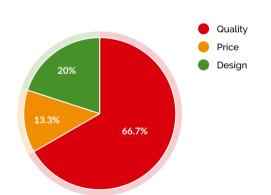
Italy- a destination for supreme design! But, in India, how many manufacturers really know about the quality and precision the country brings in its offer particularly for Machinery manufacturing? Italy is investing a lot in India with many companies setting up its plants here. Both countries with rich cultural identities, if joined hands, can bring overwhelming results.

Italy is the birthplace of many leading brands ranging in different

industry sectors. India's one of the leading manufacturing magazines. Machine Maker, in collaboration with IICCI as a Knowledge Partner has come up with an industrial survey on Brand Italy in Indian Manufacturing to showcase the Italian manufacturing prowess and strengthen the Indo Italian business community in India.

This survey is conducted to know the review, expectations with respect to manufacturing developments in India, Italian contribution, distinguishing features of Italian manufacturing and the likeliness of Indian manufacturers towards Italy. Research Methodology: We have collected information and data through email survey and telephonic interviews. We have further compiled the data and statistics, presented it with graphical representations and the information furnished here is purely individual viewpoints of people interviewed.

#### If you had to choose an Italian machinery product, what would be your consideration points?



The design of Italian Machinery is unique and famous for its swiftness, easy to use and user friendly attribute.

**SHASHIDHAR** MUNIGANTI

Director, Videsh Consultz



#### Research Methodology

We have gathered information through Q & A from 150 respondents from different industries across the country. The figures are approximate and initiatives have been taken to keep the data and the Questionnaire

in actual to give it a pleasant and ethical read. The responses are completely based on individual understanding on Smart Factory. The magazine or any of its staff is no way responsible for the viewpoints.

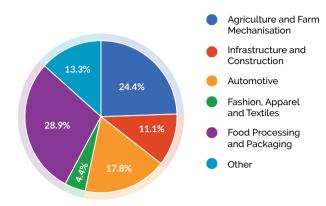


Research Analyst Malvika Dass



Research Guide Hiya Chakrabarti

#### Thinking of Italian machinery, which of the following sector will first come to your mind?



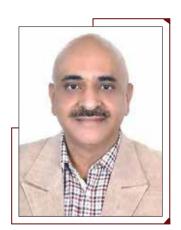
As I am dealing in Wood processing machines, the first thing comes to my mind is Woodworking as Italy is having much to offer in Wood working Machineries.

PRAHALLADA K N



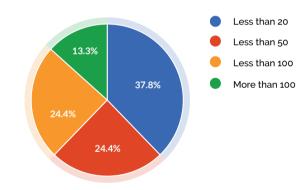
Chief Program Officer, Biesse India

#### How many European Companies you work with for Manufacturing Solutions?

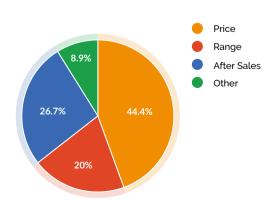


I work with European Companies because of its quality of products, precision and technology advancement.

H N VENKATESH Managing Director, Markets India Infrastructure Ltd.



#### In your opinion, which are the factors that limit the attractiveness of Italian machinery in India?



In India, price is one common factor effecting the decision of purchase. Italian machineries, if available in optimized price, will be more in demand.

SANDHYA RAGHUNANDAN Director, Red Graniti Q and B India Pvt. Ltd.

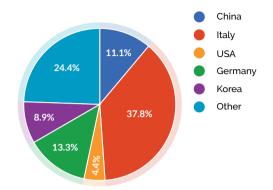


#### If you'd consider to invest outside of India, which manufacturing destination would you choose? Why?

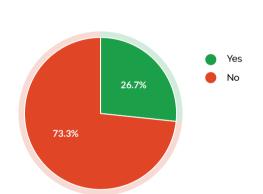


China is having a great potential and it is one of the emerging markets in the world. It can be a great investment destinations for future manufacturing.

K P JAYAPRAKASHAN Director, Dolar Engg Industries Pvt Ltd



#### Do you feel Industry Associations are impacting the Indian Manufacturing growth?



Industry Associations are channels and partners of growth story of manufacturing, be it of any country. I feel, Italian associations are doing their best for supporting investments in India.

**DINESH C** NAMBIAR Managing Director, Repute Engineers Pvt. Ltd.



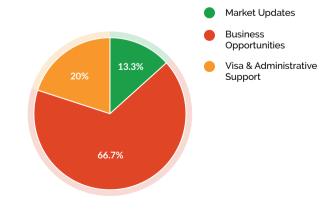
#### What kind of services and/or support would like to get from IICCI?



Industry Associations are channels and partners of growth story of manufacturing, be it of any country. I feel, Italian associations are doing their best for supporting investments in India.

#### SADANAND PATIL

Vice President - Business Development, Yeshshree Press Comps Pvt. Ltd.



The information furnished here is purely individual viewpoints of people interviewed and does not necessarily reflect the opinions, beliefs and the viewpoints of Machine Maker.

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### **HYDAX INDIA**

## **INNOVATES BURRGON ELECTRO CHEMICAL DEBURRING** MACHINE

Sufficing and encouraging the Make in India initiative, Hydax Hydraulics has created a revolution in electrochemical deburring by designing the Burrgon model that is designed and developed entirely in India.

During the earlier times, the process of deburring was labour dependent, timeconsuming and also tiring. There stood a dire need to come up with an innovation that could restraint from all the tiring and labour dependent work. What else can be better than an innovation that has been designed and manufactured entirely in India? An innovation that opens the doors for the growth and development of the economy.

Bangalore based Hydax Hydraulics Private Limited, whose emphasis right from its onset, laid on developing the products that would be indigenously designed, technologically superior and commercially viable, innovates the Burrgon model deburring machine that is designed and developed entirely in India.

Serving the hydraulic industry since the last 40 years faithfully, Hydax has designed and manufactured products that are at par and even better than others available in the world market. It caters to a broad spectrum of customers with the products that can be easily assembled at the utmost competitive prices.

Hydax was formerly formed and head by D.B Mukherjee, a technocrat who possessed the expertise of 40 years. Continuing the legacy and the brand name further, stepped up Meetali Murkhejee, daughter of D.B Mukherjee who juggling with her professional life and personal commitments never dropped a single ball.

Benefits of Burrgon Electro Chemical **Deburring Machine:** 

While using this deburring model, one can completely be assured of its high precision and quality result. Hydax has created some beautiful and innovative designs that cater to the needs of a humongous range of components in terms of the size of the components.

#### Automation is feasible.

The tremendous burr removal speed enables to achieve a greater throughput in a smaller time period.

As the present day electrolyte can work well with all metals, it serves to various applications in different industries like in aerospace, automotive, machine tools etc.

Highly efficient process and the change of

electrolyte required only once during an

Uninterrupted process due to the sizable tank capacity.

#### Making in India, developing India

Sufficing and encouraging the Make in India initiative. Hvdax Hvdraulics has created a revolution in electrochemical deburring by designing the Burrgon model that is designed and developed entirely in India. This indigenous technology facilitates localization in deburring and also deburring of intricate regions of components. It has now become possible to deburr several components simultaneously, due to which the volume of deburring is high.

For each component, once a fixture is designed, it becomes a lifelong investment. As separate fixtures can be created for different components, the variety of components that can be treated in this model is endless. This process is applicable for a wide range of components including pressed, machined, cast, geared, cold-forged, and hot-forged components. A point worth note is that this process is in need of only two consumables, namely, electricity and electrolyte. In the industry, different components have different lengths of burr. This model can remove very tiny amounts of the burr to considerably long burr.

Meetali Mukherjee, Director of Hydax Hydraulics remarks that the advantages of the Deburring machine is topped by a 60-70 per cent cost benefit. The Burrgon model of Hydax has become a lifetime investment in a wide range of industries. It is proved to greatly benefit the industry by application of latest and sophisticated technology.

Carrying the motto of 'Ambition tempered with empathy', the company has had a good fortune of well-developed ethos in itself by Mrs. Mukherjee. She avers that in Hydax, they have tried to maintain the basic ideal work environment and also being positively productive and conductive in work.

#### Make in India- An aid for higher production

The make in India initiative calls for facilitating investment, fostering innovation and enhancing skill development.



#### **SPECIFICATIONS**

Material of Construction: Stainless Steel

Size (LxWxH): 1229x840x1229 mm

Tank Capacity: 200 liters

Type of part for deburring: Gear

Maximum diameter of gear: 200 mm

Cycle time: 40mm diamter = 2 minutes, 100mm diameter = 4 minutes, 200

Diameter = 8 minutes

Deburring area: Gear Teeth

Rotary axis: For large diameters above 40mm

Maximum burr height: 4 mm

Flow control: Electronically

Rotary axis control: Electronically

Power Connection: 3 phase, 5 KW

The Burrgon model of Hydax has become a lifetime investment in a wide range of industries. It is proved to greatly benefit the industry by application of latest and sophisticated technology.





India is an extremely price sensitive country. Manufacturing a product in India is helpful in lowering the cost of production and many other costs. This lowered production cost would eventually lead to less market cost. The lowered market price entices the customers and the demand for the product increases and so does the production.

Hence, the 'Make in India' is an initiative that has been helpful to Hydax for its increased production and higher demand.

#### The Growth plan

Hydax being ventured into the fields of machine building and robotics constantly works on newer products to add to the range of hydraulic accessories and partnering with OEMs for customised development.

The company in the near future would continue to be a platform for new ideas and innovations with an emphasis on viable and profitable development.

Meetali Mukherjee quotes, "Managing any manufacturing unit is a challenge. But we at Hydax are constantly upgrading our products keeping pace with the rapidly changing industry to meet the demands of the customers."

Meetali Mukherjee



# KOMET® GROUP INNOVATES CUTTING TOOLS USING RENISHAW METAL 3D PRINTING TECHNOLOGY

KOMET® GROUP is using Renishaw metal additive manufacturing technology to produce new ranges of innovative cutting tools. As well as allowing special cutters to be produced more quickly, the use of additive manufacturing enables more complex shapes to be generated, both for the external shape of the tooling and for the internal cooling channels.

KOMET GROUP is a global technology leader in the fields of high-precision drilling, reaming, milling, threading and process monitoring.

In addition to developing, manufacturing and distributing high-quality premium products, the company uses its years of technical know-how to analyse customers' production processes, right down to the smallest detail, and then develop tailored solutions to help them achieve greater efficiency for all stages of their machining.



Dr. Durst has been working with Renishaw for the last year, "because its offer has convinced us from a technical as well as an application point of view." This transfer of knowledge and knowhow is inherent throughout Renishaw's new and growing network of Additive Manufacturing Solutions Centres. Before buying the machine outright, customers can lease the latest Renishaw equipment at a Solutions Centre and work independently on their projects. Renishaw staff are always available to provide advice on



# 100 YEARS

Germany's KOMET GROUP is one of the world's leading suppliers of precision cutting tools and has supplied innovation to the machining industry for almost 100 years.

1.500

The Group, which has its headquarters in Besigheim, currently employs more than 1.500 people, including its subsidiaries, and is represented in around 50 countries.

the use of the machines. In this way, potential customers can familiarise themselves with additive manufacturing technology, with expert help on hand, and discover how it might meet their specific requirements, without the need for a large up-front investment.

"We are aiming for a win-win situation," explained Ralph Mayer, the manager responsible for additive manufacturing services at Renishaw GmbH. "With our support, the customer shortens their learning curve and reduces the number of potential mistakes to a minimum. We only raise the question of purchasing a system when the customer is clear that it will provide added value for them. At the same time, we gather valuable information about the needs of the industry, which we can use to develop our machines and technology further."

"Parts produced with additive manufacturing can reach an up to 99.9 percent consistent structure, just like rolled or cast metal components," explained Mr. Mayer. "However, the correct strategy must be applied for every component. Our strength lies in our skill in analysing the technical challenges of our customers' components and working with our customers to find the most effective solution."

Renishaw's metal additive manufacturing system uses laser powder bed fusion technology in an inert argon atmosphere. An extremely thin bed of metal powder is laid down and areas that will form the component are melted using a high-performance ytterbium fibre laser and then solidified on cooling. This process is repeated with layers of metal powder, typically between 20 and 60 µm thick, until the part is finished. The thinner the layers, the better the accuracy and surface quality of the finished part.

#### Results

The first of the projects handled jointly between Komet and Renishaw was the development of a new range of PCD (Poly-Crystalline Diamond) screw-in milling cutters. The main bodies of the cutters are manufactured on a Renishaw metal additive manufacturing system, with multiple bodies produced during each cycle of the machine, and then fitted with PCD blades and screwed onto their tool holders.

#### Challenge

With such a strong focus on innovation and continuous development, it was perhaps inevitable that KOMET GROUP staff would come up with some tooling designs that were too expensive, or even impossible, to make with conventional manufacturing methods.

As a result, Dr. Reinhard Durst, Research and Development Manager for hard metal tools at KOMET GROUP, has been investigating the potential of additive manufacturing for tooling production and the equipment available on the market for several years.



The use of the Renishaw technology to manufacture the tools allows geometries to be produced that would be almost impossible by conventional means. "Thanks to the additive process we have been able to place many more PCD blades on each tool," explained Dr. Durst.

"We have changed the arrangement of the blades and achieved a substantially greater axis angle. Compared to conventional milled tools, we have greatly shortened the grooves. These changes mean that the tool is a lot more productive for the user." For example, with a 32 mm screw-in head, the number of grooves and blades has been increased from six to ten, achieving a feed rate that can be up to 50% higher.

In addition, the ability to optimise the paths of the coolant channels ensures that each cutting edge is supplied precisely with coolant through a separate channel, while the external design of the bodies helps to ensure that chips are removed reliably from the face of the tool.

AM also offers the potential to reduce component weight since material can be used only where it is necessary for the optimum

functionality in the component. It also outperforms conventional production methods in terms of delivery time for any special or experimental tools needed by Komet's customers.

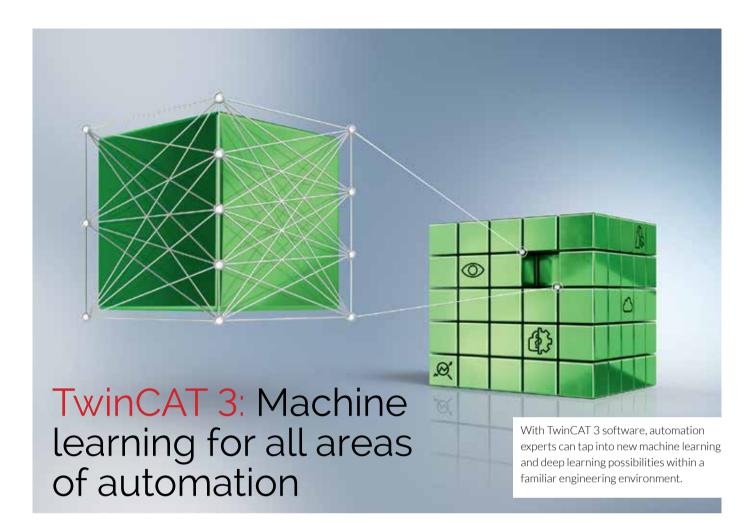
"The ability to freely design the internal and external tool geometry alone means that excluding this additive process from our future plans would be inconceivable," predicted Dr. Durst. "It gives us the ability to increase tool performance and productivity to such a great extent that it creates considerable added value for our customers."

Dr. Durst considers the decision to work in partnership with Renishaw to be fully justified. "It is not easy for a company that is new to metal additive manufacturing technology to work out the best laser parameters on its own." he claimed. "Renishaw has contributed a wealth of knowledge to help us find the parameters that are needed to produce a good tool. The new design freedom from additive manufacturing technology and the cooperation with Renishaw is helping us to develop even more innovative tool solutions."

#### SAMINA KHALID

This case story is contributed by Samina Khalid of Renishaw India. She is an experienced strategic marketing communications manager with a track record of brand architecture and building, event management, content development, PR & media management, digital marketing, corporate designing & visual aesthetics, product launches and customer contact strategies across traditional media and online. Strong marketing professional, earned a gold medal in MBA focused in international business.





Ether CATP combines ultra-fast communication and power supplyin a single cable. With EtherCAT P, Beckhoff is expanding its EtherCAT technology which has become an established global standard. The solution combines ultra-fast EtherCAT communication with 24 V power for the system and peripherals – and optionally with additional power supply capabilities. This means that One Cable Automation (OCA) can now be implemented on the field level, enabling the plug-and-play connection of machines and other equipment ranging from 24 V sensors to 600 V drivers without the need for control cabinets.

Seamlessly integrated, open and real-time machine learning for control systems

Beckhoff now offers a machine learning (ML) solution that is seamlessly integrated into TwinCAT 3 software. Building on established standards, TwinCAT 3 Machine Learning brings to ML applications the advantages of system openness familiar from PC-based control. In addition, the TwinCAT solution supports machine learning in real-time, allowing it to handle even demanding tasks like motion control. These capabilities provide machine builders and manufacturers with an optimum foundation to enhance machine performance, e.g. through prescriptive

maintenance, process self-optimisation and autonomous detection of process anomalies.

The fundamental concept of machine learning is to no longer follow the classic engineering route of designing solutions for specific tasks and then turning these solutions into algorithms, but to learn the desired algorithms from exemplary process data instead. With this alternative approach, powerful ML models can be trained and then used to deliver superior or better-performing solutions. In automation technology, this opens up new possibilities and optimisation potential in many areas, including predictive maintenance and process control, anomaly

detection, collaborative robotics, automated quality control and machine optimisation.

The models to be learned are trained in an ML framework, such as MATLAB® or TensorFlow, and then imported into the TwinCAT runtime via the Open Neural Network Exchange Format (ONNX), a standardised data exchange format used to describe trained models. The TwinCAT runtime incorporates the following new functions for this purpose:

- the TwinCAT 3 Machine Learning Inference Engine for classic ML algorithms, such as support vector machine (SVM) and principal component analysis (PCA)
- the TwinCAT 3 Neural Network Inference Engine for deep learning and neural networks, such as multilayer perceptrons (MLPs) and convolutional neural networks (CNNs)

#### Model results are directly executable in real-time

Inference, i.e. the execution of a trained ML model, can be performed directly in real-time with a TwinCAT TcCOM object. With smaller networks, system response times of less than

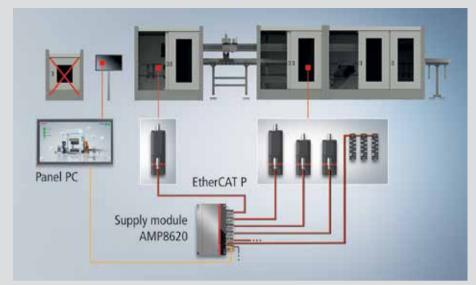
#### AMP8620: IP 65 supply module expands the AMP8000 distributed Servo Drive system

#### Drive technology without control cabinets through consistent decentralization

The AMP8000 distributed Servo Drive system provides ideal support for the implementation of modular machine concepts. With the new AMP8620 supply module in a high protection rating, the entire system can now be relocated directly to the machine, i.e. through consistent decentralization, drive technology can be implemented entirely without control cabinets. That means maximum possible savings on material, space, costs and assembly work.

While previously with the coupling modules, the requirements for connecting distributed AMP8000 drives to the control cabinet were already reduced to just one cable, they can now be completely eliminated when the AMP8620 supply module is used. Eliminating the need for a control cabinet further reduces the floor space and cabling requirements for the entire machine. The air conditioning resources, which would otherwise be necessary for control cabinet cooling, can also be eliminated.

The AMP8620 module is directly connected



to the mains supply. It contains all circuitry components required for that purpose, such as mains filters, rectifiers and charging circuits for the integrated DC link capacitors. The supply module enables optional connection of additional distribution modules or distributed AMP8000 Servo Drives. It is equipped with two EtherCAT P outputs, through which either EtherCAT P modules can be supplied or else additional supply

modules can be connected that may be required for system expansion. The safe 24 V power supply unit integrated in the supply module ensures that the logic power supply does not exceed the permissible level. The DC link capacitors integrated in the supply module store the regenerative energy of the entire system and then make it available again for acceleration processes. This ensures bestpossible utilisation of the energy supplied.

www.beckhoff.co.in/amp8620

100 µs corresponding to a TwinCAT cycle time of 50 µs are supported. Models can be called via PLC, C/C++ TcCOM interfaces or a cyclical task.

Through seamless integration with the control technology, the multi-core support provided by TwinCAT 3 is also available for machine learning applications. This means, for instance, that different task contexts can access a particular TwinCAT 3 Inference Engine without restricting each other. All the fieldbus interfaces and data available in TwinCAT can be fully accessed as well. This allows ML solutions to use immense amounts of data, for example, for complex sensor data fusion (data merging), and it also means that real-time interfaces to actuators are available to enable. among other things, optimal control.

www.beckhoff.co.in/machine-learning

#### **AJEY PHATAK**

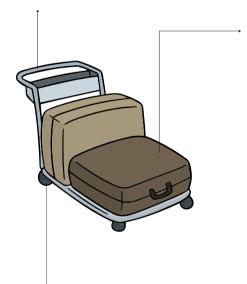
The author Ajey Phatak is Head of Marketing and Business Development with Beckhoff Automation Private Limited. Post Graduate in Applied Electronics from Pune University & Management Graduate, Mr. Phatak has 32 Years in field of Technology Product Marketing & Technology Concept Selling, International Sales in the field of Electrical Motor Protection. Power T & D, Industrial Electronics & Automation in India & ASEAN-South East Asian region. Significant contribution since 2007 in successfully establishing BECKHOFF brand in India. During formative academic years he volunteered with social organizations like Jnana Prabodhini, Pune and others.

🛅 www.linkedin.com/in/ajey-phatak-932a3614



# **VENTURE PHILIP SAMUEL**

What you find in Indian airports and most of the foreign airports can definitely be improved. In India the quality is poor due to bad design and manufacturing quality. In airports abroad, quality is ok but the designs are cumbersome and uses a lot of material, making them expensive to manufacture.



I have come across a very fine design, elegant to look at, light weight and using very little material. It is strong and able to carry many boxes. This can easily be fabricated in India by people who do pipe fabrication. The cost of manufacture will be low and the quality high. I have many photographs which will be sufficient to make detailed engineering drawings.

This is a good opportunity for existing fabricators of steel materials. A team of bright marketing people can join with a small scale fabricator and make this project a success. Buyers would be airports and railway stations in India and all over the world.



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# Manoj antra

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'Enjoy Every Moment' was a wish that came to me that got me thinking about how we usually tend to ignore enjoying every moment. If we think of it as a reward, we would value it. The more we value anything, the more we give importance to it and take it more seriously, thereby relishing it.

It is all about perception. A soldier in the Army or a sportsman value every moment and utilizes the best of what it offers, since he knows that ignorance can cost him a lot - in one case, it could cost him his life, and in other cases, it could cost him a career. They seldom have time to correct their mistakes, so taking additional care and remaining vigilant is their way of life. This also imparts them the attitude of enjoying every moment, and you would see them utilizing every moment more productively than the common men. If we all, who are not in the Army or Sports, personify them and start resonating their outlook, I am sure we could notice the happiness lying in every moment. We could unfold the power of every moment.

There are instances in our life when sorrow empowers over happiness. It is the human tendency to embrace negativity faster than positivity, owing to the way we all have our upbringing - we tend to look for mistakes and error rather than applauding success and strengths. This also leads to

discontent and discouragement take a front seat. Even if it does embrace us, we should learn to detach ourselves swiftly not allowing our thought to sustain it for long, and instead focus on the positive factor of every moment or activity.

Once we develop this habit of appreciation and gratitude, we would realise that the joy of positivity is far higher than the grief of negativity. That would keep us going and relishing every moment. This also, in turn, makes us a good human being and enables us to serve others and derive happiness. Ultimately, it transforms the surrounding around us and creates an aura of goodness leading to cheerfulness.

Often focusing on the right words and perceiving things with the right attitude, enables us to see the positive side of life. This is a very important aspect of our daily routine that needs to be exercised. It becomes a wonderful recharging medium for us, energizing our performance, thereby letting us reap the fruits of success. The more we preach this methodology and inspire others to follow this routine, the more satisfaction we derive has been of assistance to others. The entire community around us is then a better place to live.











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