Italian textile machinery exports to main countries - million Euro
(1st quarter 2015) Source: ACIMIT

Italian textile machinery exports by categories
(1st quarter 2015)

In Italy, there are approximately 300 companies who produce textile machines and related accessories, with a total of about 12,000 employees. In 2014 the value of Italian production was Euro 2.3 billion, with exports worth Euro 1.9 billion.

At a world level Italy is one of the main suppliers of textile machinery together with Germany, Japan, China and Switzerland. Italian market share on the world exports of textile machinery is about 11%.

The wide range of Italian textile machinery manufacturers satisfy the needs of all the potential customers. Exports represent 84% of total sales, exported to about 130 destination Countries. This process of internationalization, together with the objectives for innovation in the sector, allowed Italian companies to consolidate and further improve the leading position held by the Italian textile machinery industry all over the world.

First quarter of 2015

In the first quarter of 2015 Italian exports of textile machines is divided as follows: Asia (42%), followed by Europe (41%), Latin America (7%), North America (5%) and Africa (5%).

In the first quarter of 2015 the biggest contribution to the Italian exports of textile machinery came from China, for a value of Euro 58 million. China is followed by Turkey (Euro 47 million), Bangladesh (Euro 31 million) and India (Euro 25 million).

The supply of Italian machinery covers all the classic sectors into which one can divide textile machines. In the first quarter of 2015 Italian sales abroad are divided among these main sectors: 22% spinning machines, 8% weaving machines, 14% knitting machines, 29% dyeing, finishing and printing machines, 24% accessories and 3% other machines.

Second quarter of 2015

Orders of textile machinery for the second quarter of 2015 confirm the positive trend already under way during the first three months of the year. Raffaella Carabelli, President of ACIMIT said: ‘Increased orders on the domestic market are an unexpected but welcome development: a good omen for ITMA 2015 on overseas, we are very optimistic on Iran.’

For the second quarter of 2015, orders of Italian textile machinery, as compiled by ACIMIT, the Association of Italian Textile Machinery Manufacturers, recorded a 15%
increase over the same period of last year. The value of the orders index for this period amounts to 99.4 points.

Orders have made a definitive move in foreign markets (+21% over the same quarter for 2014), marking a fourth consecutive period of growth. Italy remains under observation, but is showing sure signs of a recovery. Indeed, domestic orders have risen 7% compared to the second quarter of 2014.

As for foreign markets, official data from ISTAT confirm a recovery for the first four months of the year in various textile machinery importing countries. India, for one, has resumed its growth trend (+6% over the first quarter of 2014), and there’s been a surprising rise in exports to Bangladesh (+187%), with EU markets also appearing to show good form. ‘We are waiting for a recovery from China, where investments in machinery are still low compared to a year ago,’ observes Carabelli. ‘But ACIMIT has mainly been targeting the market in Iran.’

‘For years,’ ACIMIT sources explain, ‘Iran was a benchmark for Italy’s textile machinery industry. International sanctions have effectively halted the flow of machinery exports towards Iran, penalizing many Italian manufacturers. The recent agreement on the nuclear issue opens up a window for a recovery in investments in textile technology by Iran’s textile sector, after years in which the process of industry modernisation has been slowed by a regime of sanctions.’ The negative trend for Italian exports was stopped in 2014. Sales of Italian textile machinery grew 170% compared to 2013, amounting to 14 million euros.

**Some of the Italian companies are profiled hereunder with their products:**

The **ARIOLI** plant is located in the Como area, one of the most important textile districts in the world, where Arioli has been producing machinery for fabric finishing for more than 60 years.

Arioli VAPO2008 represents the state of the art in textile steaming processes.

The steam injection system, as well as the configuration of the ventilation, is the heart of the technology. This system ensures a controlled differential steam distribution in the various fabric treatment zones, maintaining a constant temperature in the overall reaction chamber.

In this way, it is possible to concentrate a high quantity of steam up to 70% of the total, where it is mostly needed, i.e. just after the fabric enters into the steamer, where the first fixation phase takes place.

Thanks to this system, it is possible to maximise the action of the chemicals in the printing paste, where action is determined by the presence of water (hydroscopic, hydrotropic, imbibing, swelling agents etc).

Coming from a successful history of design and manufacture of machines for non-conventional finishing since 1957, **BIANCALANI** has always led this market area by looking into the future, constantly seeking new, efficient and sustainable solutions to deliver added value textile products. With machines able to produce high-performance guaranteed results, BICIALANI is providing original and efficient solutions for the perfect finishing for any constructions, in a wide range of consumptions, for any application. Their valuable experience in textile finishing and the unique AIRO expertise are at customers’ service, and the whole BICIALANI staff-from sales force to technological experts, to designers and after-sales engineers- is focused on providing the utmost customer satisfaction.

**BIANCO** operating since over 40 years in the sector of textile machinery for finishing, has long since undertaken its virtuous way aimed at following the principles of a sustainable development with full respect for the environment and for natural resources.

Bianco ‘Evotech’ Tensionless is high cutting precision, speed and fabric relaxation for a unique and extremely ‘eco-friendly’ slitting line.

Two machine in one - Thanks to its modular structure, Bianco Evotec offers a double application, working both as rape opener and as slitting line.

Ultimate control - the Luxury version - complete with hydraulic platform and fully synchronised rope squeezer and AP04-untwister - allows fabric unwinding by reducing the elongation in the opening phase: all that being completely steered by electronics and software – entirely designed and manufactured by Bianco - able to exactly control the whole process.

Cutting speed - The slitting basket sensors are entirely developed by Bianco - utilises a double couple of high power consumption thanks to the new LED-technology. These innovative detectors let Bianco Evotech be the quickest slitter on the market.

Relaxation - once that the cutting is complete, the fabric is taken onto...
conveyor belt, where fibres shrink naturally, thanks to their complete relaxation. This operation leads to a reduction of fabric elongation by speeding up the following processes as well as to a considerable time and consumption saving.

Ecological washing system. Bianco Evotech is equipped with TNK washing tank for the removal of enzymatic residuals. This washing process exploits the principle of full water recirculation with consequent reduction of water consumption thanks to its accurate pressure and level control, too.

**DURST** is the world's leading supplier of digital inkjet printer systems for industrial applications. High productivity, printing quality, reliability and flexibility are the unique features of Durst inkjet technological across all industries. With its inkjet technology, Durst provides a solution to all textile finishers for today's shifting demands and changing customer requirements. Its digital high-performance printers present a real alternative to the traditional screen printing process. They facilities an economically efficient and ecologically sound production of anything between one and thousands of running meters, on-demand, in high printing quality and reproducible anytime.

The Kappa 180 is a genuine alternative to flat-bed screen printing. It has a printing speed of up to 580 sqm/hour (300 running meters) and an outstanding printing quality. It is the new flagship of the textile printing sector. The Kappa 180 was developed on the basis of Durst’s proprietary Quadro printhead technology at the Durst Development Center in Kufstein, Austria, to meet the specific requirements of the textile industry with 'QuadroZ'. Specialised high-grade inks (Kappa Inks) for textile printing were developed in the Durst Research Center in Leinz, Austria, to print on different textile fibres with absolutely environmentally friendly, water-based dispersion, reactive and acid inks using the QuadroZ Arrays.

The Kappa 180 is an economical and ecological innovation, since it reduces water and power consumption compared with conventional methods while at the same time offering total flexibility to customers.

There are no limits with the Kappa 180 as far as design and colours are concerned. Every changeover is direct and immediate - set-up times and screen-making are now a thing of the past. The Kappa 180 has fully automatic feeding-in and guiding facilities for textiles with a maximum printing width of 195 cm and a printing blanket with an integrated washing system. The Durst Quadro Array has been modified for textile printing and is now capable of printing on textiles with a specially hardened, fray-resistant nozzle plate with a drop size of 7/14/21 picoliters.

**CIBITEX**, a company located in Solbiate Olana, in the industrial area placed in the north of Milan, manufactures complete finishing lines for the treatment of woven and open-width knitted fabric and new machines for digital finishing. Cibitex adopted such techniques which help the reduction of CO2 emissions and water consumption.

Designed to operate in combination with low and mid-productivity textile inkjet printers running with acid and reactive inks, easySTEAM is in the forefront of the textile printing industry, thanks to its long standing experience in textile pretreatment and finishing plants. Cibitex has designed easySTEAM according to the steaming requirements of professional users in the clothes, lines and highly efficient, easySTEAM does not work under pressure and its stands out for its ease-of-use and easy integration within existing workflows, even if operated by inexperienced employees. When installed at digital printing plants and service shops, easySTEAM uses the steam produced by its own steam generator, powers by the electrical system.

**SASPE** is a company dealing in the finishing textile machines sector highly specialised in the 'nonwoven and fabric surface treatment', the main production are focused on: Raising to increase the pile on textile fabric. Sueding to change the visual and touch effect on surface. Shearing for cleaning the material and reduce the pile. Fringing end of scarf and fringes. Embossing for pattern design on tapes. Cutting for cold, hot and ultrasonic cutting use. Dosing for silicon dispensing on tape. Crimping for the metallic terminals of the shoe ribbons. Molding for thermoforming.

**FADIS** was founded in 1960 with the purpose of manufacturing textile machines such as rewinders, soft winders, assembly winders, hank to cone winders, reeling machines, spooling machines and intermingling machines, which are meant to process all types of yarns such as cotton, wool, silk, artificial fibres, synthetic fibres, mixed fibres, intermingled yarns, fancy yarns.

Fadis has invested in its production process by installing a photovoltaic system that achieves complete energy independence through renewable energy.
and allows a reduction of CO2 emissions in the atmosphere equal to 11.6 tons per year.

In fact, the Sincro Sprint is a new spooling machine with a very compact structure that allows a 33% increased container loading. This has been obtained thanks to the use of a more modern structural building concept, with new and lighter materials.

The KWh/kg required, in comparison with the previous Spoolex model, has decreased from 0,29 to 0,15, this means less than 50% of energy consumption required for per kg produced. This savings is not only economically convenient but it is also a protection for our environment with a CO2 eq./produced yarn release value of 0,0657 compared with a 0,1.

4M PLANTS Srl is specialised in design and manufacturing compact spinning plants for production of PP multi-filament yarn for textile, even medium and high tenacity. More than 20 years of direct experience in extrusion and spinning yarn gave them the knowledge to design and manufacture effective plants to meet customer needs. They adopt advanced spinning technology in order to obtain best production performance coupled with reduced energy consumption. 4M Plants also build ATY- Air Textured Yarn machine and is in position to help customer in revamping PP and PET spinning lines.

COLOUR SERVICE was founded in 1987 and it is the worldwide leader in the production of automatic dosing systems for textile industry. It was the first company to introduce the automatic weighing system for powder dyestuff and consequently this innovation went on to change the approach of the textile world towards automation.

This is the reason why Colour Service designs its own system, with serious attention to precision and reliability, increasing productivity and improving the reproducibility of the recipe. The automation leads to the elimination of waste and to a reduction of industrial waste of products/water.

MCS SpA is the leader of a group of companies in the textile machinery industry, starting their activity at the beginning of the 60 years. MCS group includes:
- Termoelettronica-manufacturer of industrial automation systems (automatic dosing) and control systems.
- Europizzi-dye-house, printing-house, finishing and producer of chemical auxiliaries for the textile industry and other application fields. Daily production at Europizzi is 30 tons of knits and 50,000 meters of woven fabrics.

Dynamica represents the latest result of Research & Development of a dyeing machine with an extremely low environmental and energy impact.

The results obtainable today, thanks to a series of technical developments now available on the machine, makes Dynamica one of the machines with the lowest energy consumptions on the market today, which one can sum up as follows considering a 100% cotton knitted article, dark shade dyed:
- water consumption per kg fabric 26.5 litres
- steam consumption per kg fabric 1.97 KG
- energy consumption per kg fabric 0.14 kWh

These excellent results together with MCS contact attention into the manufacturing process of the machines brought down ‘carbon footprint’, therefore the amount of carbon dioxide emitted in the atmosphere, is only 1.34 kg CO₂ Eq/material processed.

BOMBI MECCANICA was established in 1964. Production is concentrated in the nonwoven sector: Thermobonding oven for virgin, recycled or natural fibre for under felts, noise insulation, automotive, filling. Perforated drum oven for heat setting or drying. Hot calender for felts, used in geotextile, wipes technical textiles, filters. Guillotine cutters, Automatic pad stacker. Double belt press for rigid boards in automotive, Foam machine and applicators.

Since 1983, CORINO Macchine has worked to find the solution for every problem arising from fabric handling and moving in the processing sector. The wide production ranges from accessories to complete automatic lines and includes complementary equipment, rope openers, slitters dewatering systems, weft straighteners and digital printing service.

A green vision of the machines, starting from their design, always addressed to produce simple, compact, low energy consumption and zero water discharge equipment. It follows that the concept of 'green label' is inherent in its nature.
Over the two CORINO lines which have already achieved the green label in the past (ST4-Tubular Aquaflow and Super Slit Line), in 2015 one more machine has got this target: Normatex ‘Super N’ (pin wheels weftstraightener). This machine is suitable, with a simple but very efficient mechanical system, to remove the weft distortions of the woven fabrics and so, to increase a lot their quality. The sustainability of the Normatex ‘SUPER N’ comes from several aspects:

A patented solution, that combines the highest performances among the machines of its category with an user-friendly and versatile use.

ROLLMAC is one of the leading companies wherever finishing and coating is concerned. Its production includes from single machines to complete plants for direct and transfer coating. Their production program includes coating equipment, roller coaters, foam generators either for small and large productions.

Ot-Las top Italian brand of CUTLITE PENTA Srl, is specialised in the design and production of CO2 laser galvanometer systems for all production requirements, from cutting and piercing to engraving and decorating.

Their laser systems offer concrete solutions to specific needs in all industrial and artistic areas while being highly optimised for specific applications. Ot-Las lasers are used for the decoration of leather, ceramic, textiles, wallpaper and many other materials.

Their experience in the sector of laser marking and laser cutting systems constantly reinforces. Their position in the international marketplace by meeting the ongoing challenges of highly competitive companies. The products development aims for productivity, flexibility and operational simplicity that allow customers to better express their creativity pointing to new market share.

REGGIANI Group, including Reggiani Machine, Mwzzera, Jaeggli, MTS, RPR, provides worldwide complete solutions to the market focused on the development of sustainable processes. Thanks to the high quality and performances of machines and the excellent service to customers.

Reggiani Group is the leading manufacturer of printing machines and pre-post treatment machines (washing systems, bleaching, Indigo, dyeing). An overall answer to the whole yarn-fabric process, starting from the yarn treatment processes to the fabric printing and finishing. The Group designs and manufactures in Italy, sells and services all over the world high quality machines. Group counts on a world-wide network of local agents, after sales service centers in important markets allow the Group to guarantee efficient and effective support to the customer just in time.

ReNOIR is the digital printing machine developed from a vision facing the future which is able to process any kind of substrate and ensure the highest standards of productivity, reliability and quality. ReNOIR is a very adaptable and flexible machine and thanks to water based inks and low consumption, it is the most eco-friendly printing process available in the market.

Besides guaranteeing a printing speed of more than 600 square meters/hour with a quality of up to 2400 dpi, today RENOIR works with the least amount of ink: the average consumption amounts to less than 5 grams per square meter.

Thanks to the integrated ink recovery system, Reggiani machine can reuse the colour normally lost during the purging procedure, saving up to 90%. The new generation belt cleaning system, embedded in the machine, allows water recycling while avoiding the use of soaps or detergent. Thanks to the new belt drying system, through cold air blade, it is now possible to save a large amount of energy. Sinamics - the latest generation inverter from Siemens guarantees a large reduction in energy bills.

Established in 1893, NOSEDA is worldwide recognised for innovation and product performance. Noseda offers a complete line of machines for continuous pre treatment for yarn, fabrics and knits dying.

The well known AcquaZero line assures the lowest liquor ratio with the highest level of flexibility and efficiency.

AcquaZero yarn dyeing machine featured with HPF-HS Plus and SCR allow to process different types of yarns and bobbins at a very minimum (up to 1:3). Loading between 10 and 100% of the nominal capacity can be managed in a very narrow range of liquor Ratio variation.
AcquaZero Fabric beam dyeing machines sets new standards in dyeing woven and knitted fabric with a great load flexibility at the lowest liquor ratio. The AcquaZerojet dyeing machine type MF, SR and the latest reel less SP model allow higher flexibility and up to 50% water saving.

Noseda has a complete line of tailor-made machines with the aim of guaranteeing absolutely reliable results, and it is composed of: yarn dyeing & dryers; laboratory sampling or small production, fabric dyeing on beam, jets or flows, solvent free preparation line for elastic fabrics, acrylic tow continuous dyeing, and several engineering programs.

FERRARO Spa, founded in 1952, is officially recoganised as the leading manufacturer and marketer of finishing machines for knitted fabrics.

Appreciated for the high quality of its products, for the effective after-sales service and for the high degree of flexibility in meeting the needs of customers all over the world, welcomes with enthusiasm the new challenges for the design of machines ever more efficient but at the same time with the lowest environmental impact.

Since 2006, Ferraro has focused their attention in developing a SANFOR unit mainly designed for sensitive knitted fabrics. After few years, Ferraro leads the worldwide market due to its particular patented design that allows to manage the most delicate and light pure viscose drawing its attention on energy saving, production improvement and maintenance reduction costs.

In order to prolong the service life of the rubber blanket, it has to be cooled on the inside and outside. It requires approx. 4 m³/hr (220 cm working width). New Ferraro inbuilt cooling and recycling system has drastically reduced the amount of water required to only the amount necessary as fabric pick up.

CANALAIR Service Srl, specialised in engineering, manufacturing, assembling and start-up of air treatment plants to treat process and environmental air, filtering and microfiltering systems, dust suction plants, automatic recovery of production waste, soundproofing cabins for all nonwoven divisions. Direct filtering, air treatment systems, turn-key and customised solutions in hygienic field for producers of baby diapers, sanitary lady napkins and pantylines, adult incontinence, underpads and wet wipe; turn-key solutions for spooling and end-line suction.

From 2002 ELLI ROBURSTEELI has produced and sold under its own brand name 'Monna Lisa' the digital inkjet printers currently used by 90% of fabric printers in the Como textile district. The fabric printing industry of Como, renowned all over the world, is the leading supplier of printed fabrics for Haute Couture, an excellence 'Made Italy'.

The continuous evaluation of the 'Monna Lisa' printers combines higher productivity with a continuous reduction of energy consumption and of the consequent environmental impact.

The adoption of new technological tools and the continuous collaboration with their customers, has enabled them to increase the performance of the new inkjet printers 'Monna Lisa' without increasing their energy consumption.

Increasing printing speed involves a consequent speed increase at the ancillary stages, such as fabric drying and machine carpet washing and drying.

The use of innovative systems has enabled them to limit the consumption of electricity and water needed for these processes.

The increase in electricity consumption has been limited, while water consumption has remained unchanged.

Since 1911, SAVIO is specialised in the yarn-finishing segment, being the leading supplier of winding, twisting and rotor spinning machines, with manufacturing plants spanning over Italy, China, India and Czech Republic.

Present in more than 60 countries through a sales network of local agents, Savio R&D department has been committed since last 30 years in sustainable development projects: energy saving and recovery, noise reduction, pollution reduction, water consumption reduction, electromagnetic emissions reduction. Savio resolutely avoids using in its machinery dangerous products and harmful materials like asbestos, lead, acid.

After introducing an environmentally friendly continuous waterless sourcing plant, LAFER has made another 'green' development to be added to its range of surface finishing machines that includes Sueding, Compacting and Raising & Shearing.

The machine is very user-friendly thanks to the controls and automations that are integrated and controlled by industrial computers.

The process is from dry to dry. 95% of the ammonia is recovered, while 5% is safely neutralised.

No water used for processing fabric. Ammonia modifies the reticular structure of the cellulose.

Stretch performance is enhanced because ammonia is not aggressive and the process allows the fabric to relax and shrink naturally in width.

A structure strongly oriented to customer needs and continuous technological innovation makes LONATI a leader in the field of circular knitting machines for hosiery.

One of their flagship machine is the man-children single cylinder Goal GL616F machine.

A machine that revolutionised the way of making men’s socks. Toe linking is performed entirely by a separate device. The advantages for the users are saving in labour, space and the possibility of having a superior quality sock finishing.
resistance and comfort compared to socks made using conventional systems. Single-cylinder, one feed machine for the production of socks and pantyhose with the possibility of multicolour patterns, with reciprocated heel. Electronic programming of the full knitting cycle, article and knitting adjustment.

Production characteristics:
- Single or double welt
- Socks in plain fabric, standard or sandwich terry
- 6 colours on the same course plus 3 ground colours for a total combination of 21 colours within the sock
- 3D-effect socks, 180° reversed toe, right and left socks, 2-colours heel and toe.

In last few years, Lonati has already made reduction in energy consumption in their machines by using high performance devices.

**MECATEX**, advanced technology for nonwovens builds machines for the nonwoven industry, from fibre preparation to web forming, thermo-bonding, cutting, winding and packaging

- Machines for the opening, weighing, blending and feeding of fibres to web-forming units
- Airlay cards
- Vertical lappers—as standalone or together with other web-forming units—in order to diversify and increase the line productivity
- Various kinds of ban ovens - Heat bonding units : hot and cold calenders-embossing units
- A wide range of cutting units including NON-STOP cross-cutting
- Various winding units
- Complete fibre ball production lines.

The **SANTONI** company was founded in 1919 as the first Italian manufacturer of sock machines. In 1988 Santoni became part of the extended Lonati Group family. Today Santoni builds machines for various clothing sectors such as underwear, sportswear, beachwear, outerwear and medical wear making the Santoni name synonymous with the world of Seamless, and thus becoming the universal leader in the manufacturing of fully electronic knitting machines for seamless clothing. Santoni firmly believes that reducing the environmental impact of its own products is economically beneficial for the future that lies ahead.

The SM8-TOP2V model is the latest addition to the Santoni knitting machine collection, soon to become the company’s new flagship series.

The range of the SM8-TOP2V single knit Seamless clothing includes underwear, lingerie, outerwear, swimwear, sportswear, sanitary products as well as optional terry garments. A fully-electronic, 8-fed single jersey circular knitting machine with 2 needle-by-needle selection points and 8 moveable yarnfingers per stitch feed. Diameters range from 11” to 22” in gauges from E16 to E40 with a speed factor of 1700. Main knitting features include - single or double welt by means of transfer jacks in various selections with knitted, floated or laid-in elastic. 3-way knitting on 8 feeds, 2-way knitting with 1 coloured ground yarn, extra-clear patterns, laid-in.

**MARIO CROSTA** is active since 1925 in producing raising, shearing and brushing machines.

Mario Crosta Engineering division has also long experience in the design and production of textile coating, laminating machines and complete lines.

Thanks to the continuous efforts of their R&D department and to the cooperation with existing customers, they can supply versatile, operator’s friendly machines with state of the art technology, capable to meet any requirements in coating and laminating processes. The manufacturing program includes: hotmelt lines, flame lamination lines, powder scattering and knife coating, for customers mainly involved with automotive industries, sportswear, technical garments, upholstery and shoe industries.

The latest release of LISA 4 brush sueding machine adopts the same concepts of low energy consumption of all machines of Mario Crosta.

The DC BUS power system, not only prolongs the life to all the dedicated electronics, but substantially reduces their energy consumption.

A careful study on the type of material used for the brushes brought Mario Crosta to produce a machine which treats the fabric ‘gently but firmly’, increasing the production speed, but always with a view to the consumption reduction.

This choice has also increased significantly the uniformity of the process, with surprising results in terms of quality and repeatability of the effect.

The great attention to the aerodynamics of the machine has furthermore achieved a high cleaning fabric output, without being necessary to increase the suction power. The result is a fabric that will care you, without damaging the environment.

Since fifty years **SALMOIRAGHI** specialises in automatic handling systems for manufacturing plants, making the process safe and efficient, thus guaranteeing optimised product tracking and total quality.

The **DOFFER** is the Salmoiraghi system for bobbin pick-up from any winder type, and bobbin transfer to overhead or ground transport vehicles for subsequent automated handling.

The machine consists of the following main groups:
- Vertical rotary column
- Upper travel carriage
- Vertically moving mandrel group equipped with winder approach mechanism and bobbin pusher.

The machine is controlled by a PLC, which supplies the positioning and speed target values to a multi-axis motor controller, featuring kinetic energy recovery and intelligent torque and power management for energy saving.

The machine does not use pneumatic circuits, thus minimising noise emissions and environmental impact. It is equipped with advanced obstacle-detection sensors to guarantee operator safety.