With 5.8 million tons of steel processed yearly, a turnover of more than 5.2 billion euros (2018), 6,500 employees, 24 steel plants, 60 sales offices and 15,000 customers, Marcegaglia is the largest independent player worldwide in steel transformation. The company covers the entire downstream and distribution steel value chain. It has achieved this unique strategic position thanks to a range of products that varies from carbon to stainless steel, from long to flat products, from commodity to specialty. The strategic positioning of the group is expressed through 72 international manufacturing standards for stainless and carbon steels and 136 internal specifications, including tailor-made to customers, which guarantee Marcegaglia’s strong market penetration.

Contents provided by Marcegaglia

**World’s first producer of stainless welded tubes**

Marcegaglia Specialties, a company owned by Marcegaglia group, manufactures stainless steel for the production of tubes, flat products and cold-drawn bars, processing over 700,000 tons of steel per year (including stainless steel products and cold-drawn bars), with a turnover of more than 1.35 million euros. Over the years Marcegaglia Specialties has gained a leading position in the production of stainless steel welded tubes. The manufacturing process is carried out within six manufacturing plants worldwide, in Italy, Russia, Turkey and Brazil, guaranteeing a consistent level of quality for its products and services. In Italy Marcegaglia Forlì, the world’s largest stainless steel tube manufacturing unit, hosts 33 tube mills and operates according to certifications including ISO 9001, ISO/TS 16949 (automotive sector) and ISO 3834-2 (special for welding process) for quality systems, ISO 14001 for environmental, and ISO 18001 for safety. It also has product...
of stainless steel flat products: austenitic and ferritic coils, strips and sheets, with excellent quality levels for both surface appearance and mechanical characteristics. This has led to approvals in important sectors such as automotive and chemical/petrochemicals. Stainless steel flat products are processed at the Gazoldo degli Ippoliti (Mantua) production plant - where Marcegaglia’s headquarters is based - processing 2D/2B cold rolled coil and strip with 0.8mm to 5.0mm thickness, 1D hot rolled coil and strip with 2.0mm to 6.0mm thickness, 1D hot rolled and 2D/2B cold rolled sheet 1,000/1,250/1,500mm wide.

Leader in innovation
The most important international process and product certifications obtained demonstrate the commitment of Marcegaglia Specialties R&D team in all sectors. Thanks to its status as a leading producer of stainless steel welded tubes Marcegaglia Specialties has also played a key role in the promotion and the drafting of the EN 10357 European marks such as DVGW for water and gas pipes in the energy sector, TÜV-PED and TÜV AD2000 W2/W10 for pressure equipment, compliance with EC 1935/2004 by TIFQ and EHEDG certified for food and chemical industry.

The fabrication process is carried out according to two main manufacturing standards: EN 10088-4 for structural, building and construction applications with CE marking and EN 10028-7 for all pressure purpose applications, certified TÜV AD 2000-W2-W10 for pressure equipment. The company has implemented the production of ferritic and duplex tubes, extending its range of application sectors: automotive, chemical/petrochemicals, heat exchangers, construction and carpentry.

Wide range of stainless flat products
Marcegaglia Specialties is also an important player in the production of stainless steel flat products such as austenitic and ferritic coils, strips and sheets.
standard. This new specific standard relates to austenitic, austenitic-ferritic and ferritic longitudinally welded stainless steel tubes for the food and chemical industries. Other key quality certifications obtained in the last two years were related to production of highly technical profiles such as welded tubes for naval applications (RINA approval for tubes according to EN 10217), food and dairy applications (TIFQ and EHEDG approval) and drinking water applications (DVGW 541 approval). The Quality System is certified according to ISO 9001/15 and IATF16949. Welding procedures are certified according to ISO3834-2.

Stainless steel solutions for consumers
Marcegaglia Specialties has always paid the maximum attention to customer service: speed and efficiency are its key points. In order to further improve the service offered, new investments have been made in IT systems. This includes the creation of an online platform that allows the customer to check the availability of products and proceed directly with the selection of the material of interest, ordering it automatically. Marcegaglia has also set up logistics hubs, served by train, ship or truck, in order to be present globally with the entire range of its products, optimize flows and provide an accurate, flexible and just-in-time service.

Perfect partner for OEM sector
In the OEM sector Marcegaglia Specialties focuses its production on standard austenitic and stabilized ferritic steels. It has added new dedicated technologies and services, and enriched its stainless steel product offering with a range of coils and sheets with 1D and 2D/2B finishes. The company has also developed a specific know-how in automotive stainless steel flat and welded tubes for exhaust systems (manifold, front and center pipes, flexible joints, catalytic shells, mufflers, tail pipes) and for hydroforming applications, as well as custom-designed box sections.
The company guarantee of consistent levels of quality for all products and services across its six manufacturing plants worldwide.

The impact of 4.0 will change not only processes, but also people, starting from managers. Digitalization imposes on the leaders of companies a cultural leap in the awareness of what the use of data can entail in the positive evolution of their business. Marcegaglia, within a strategy of consistent recent investments in technology in its supply chain, can be defined as a “fully-fledged industry 4.0”, continuing on the path of a connected factory, through the adoption of a unified network for company and plants. It is capable of enabling the re-engineering of processes in the perspective of the Internet of Things, towards to a totally digitalized supply chain.

for bus frames and other structural applications in the commercial vehicle industry. Marcegaglia has developed tailor made solutions for the automotive market by improving the formability and drawability of flat stabilized ferritics through a special surface treatment combined with an almost transient-free annealing process. Marcegaglia R&D is testing, in cooperation with a worldwide premium brand, special products for hydroforming to achieve enhanced mechanical properties for the design of complex shapes. At the same time this will increase the lifecycle of customer’s tools. A special focus on the truck market segment has led to the development of laser welded large diameters pipes with very tight tolerances and high performance.

Thanks to this specific know-how, the group is today a leading supplier to automotive OEMs.

**The future is now**
Marcegaglia Specialties is already prepared for the future with new investments in terms of digitalization and automation. The challenges of Industry 4.0 are driving people and companies, blurring the real world with the technological world, incorporating automation, data exchange and manufacturing technologies.

Digital technology within the company leads to the efficiency of physical assets and production, quality, maintenance and logistics processes, the integration of processes (at supply chain, production, marketing and sales levels) and the evolution of organizational models and corporate culture.

**Table 2. Marcegaglia Specialties production range**

- Welded tubes (HF and LASER): from 8mm to 273mm diameter, from 0.8mm to 5mm thickness. various profiles.
- Hot rolled coils (1D finish) have a thickness range between 2.00 and 6.00 mm.
- Cold rolled coils (2B finish) have a thickness range between 0.8 and 4.00 mm. Both of them have a width up to 1,500 mm.
- Hot rolled (1D finish) and cold rolled (2B finish) sheets’ widths are between 1000x2000 and 1,500x6,000 mm for standards packages, while non-standard packaging is developed according to customer request. The hot rolled sheets thickness is between 3.0 and 6.00 mm, while cold rolled sheets thickness is between 0.8 and 4.00 mm.
- Hot rolled (1D finish) and cold rolled (2B finish) strips’ widths are between 35 and 1,500 mm.