

Automatic compact coil feed line for high-strength material with precision straightener, shear and microfeeder.



STAYING CONNECTED

Italian coil processing specialist, Saronni, tells *ISMR* how it is keeping connected to customers and new markets during the pandemic.

ISMR SAYS: *"The Italian coil processor sees promising opportunities in the e-mobility sector and has placed its focus on manufacturing lines to produce battery coolers for electric cars."*

BASED AT BORGO Ticino (Italy), a few kilometres from Malpensa International Airport in Milan, coil processing specialist Saronni celebrated its 70th anniversary in 2020. It manufactures press feeding, cut-to-length (CTL) lines and embossing lines (including punching, cutting and stacking). It manufactured its first compact feeding line (without loop) in 1963. Lines can be customised to customer requirements or retrofitted.

Its products include coil handling equipment; compact feeding lines; traditional feeding lines (with loop); cut-to-length lines; embossing lines; coil-to-coil lines; straighteners; levellers; combi-straighteners and levellers with automatic straightening roll cassette-change; high-speed servo-feeders; zig zag servo feeders; coil welding units and decoiling/straightening software.

Saronni has installed around 4000 press feeding lines worldwide and serves hundreds of customers in twenty countries, most of which are automotive and household appliance OEMs and Tier 1-2-3 companies.

An eye on e-mobility

The Italian coil processor sees promising opportunities in the e-mobility sector and has placed its focus on manufacturing lines to produce battery coolers for electric cars.

"We believe that e-mobility is already affecting the coil processing market with a heavy increment of electric motor production as well as the wide introduction of aluminium and light alloy components," Roberto Crespi, Saronni's sales and marketing director, told *ISMR*.

Coil processing specialist Saronni celebrated its 70th anniversary in 2020

"However, there are many challenges and opportunities for the sector especially in Europe," he added.

E-mobility is an abbreviation of electro-mobility and is a general term used to describe the principles and concepts of

utilising electric powered technologies (e.g. drivetrains). E-mobility moves away from existing carbon-emitting fossil fuels to using energy from electrical power sources (e.g. the National Grid) through external charging capability. Powering more of the cars we drive with clean electricity is essential to addressing both growing CO₂ emissions and air pollution. Unlike traditional vehicles, which usually only refuel at petrol stations, electric vehicles can be recharged at home, at work or 'on the go', including in shared locations such as forecourts, car parks or supermarkets.

Saronni manufactures lines that produce stators and rotors for electric motors.

"With our long experience and dedicated solutions in this field, in 2019 and 2020 we delivered more than 20 coil feed lines producing stators and rotors for electric motors. These lines have been delivered to Italy, France, Slovakia, Mexico and China," added Roberto Crespi. He sees great potential in this market for coil processors.

"Our factory at Borgo Ticino is a true eco plant, producing all its electrical energy needs through solar panel installations," confirmed

FOCUS ON COIL PROCESSING



Crespi. "Innovation is at the core of our business. We can customise machines and solutions, to our customers' specifications, and have developed new sales and service partnerships around the world to properly support our customers on-site."

A focus on R&D

Saronni invests 5% of its turnover every year into research and development (R&D). Innovation is a key focus for the company. For example, it cooperated with the Milan Polytechnic University on the design of new straightener models for high-strength materials.

A research and development team of 20 project technicians is dedicated to the mechanical, hydraulic and software design of all its machinery, which is then project managed and assembled inside its production department.

"This allows us to control the entire production process and to guarantee quality and efficiency to our customers,"

Saronni invests 5% of its turnover every year into research and development (R&D)

explained Roberto Crespi. "An open-minded attitude and 360° vision allow us to work in partnership with the world's most important automotive manufacturers and maintain a position of leadership in a crowded sector such as stamping and coil processing."

The Italian manufacturer launched a new Coil Weight Calculator web app, so that customers can calculate the weight of a coil. Crespi also cited recent successes with aluminium processing lines for customers.

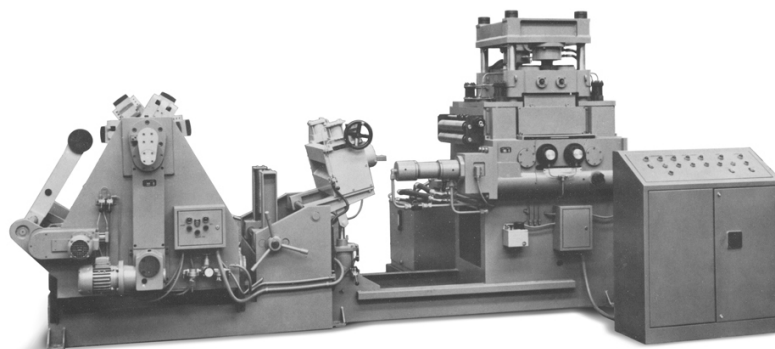
"For example, owing to our experience in coil processing and especially with aluminium, we won a tender recently for a turnkey cut-to-length (CTL) and stacking line for aluminium blanks to produce components for full electric cars," he told *ISMR*.

"System flexibility; high customisation levels; full service and after-sales service - all linked to price - are of prime importance for customers. It is important to understand these factors and be ready to offer the right package for customers at the right time," explained Crespi.

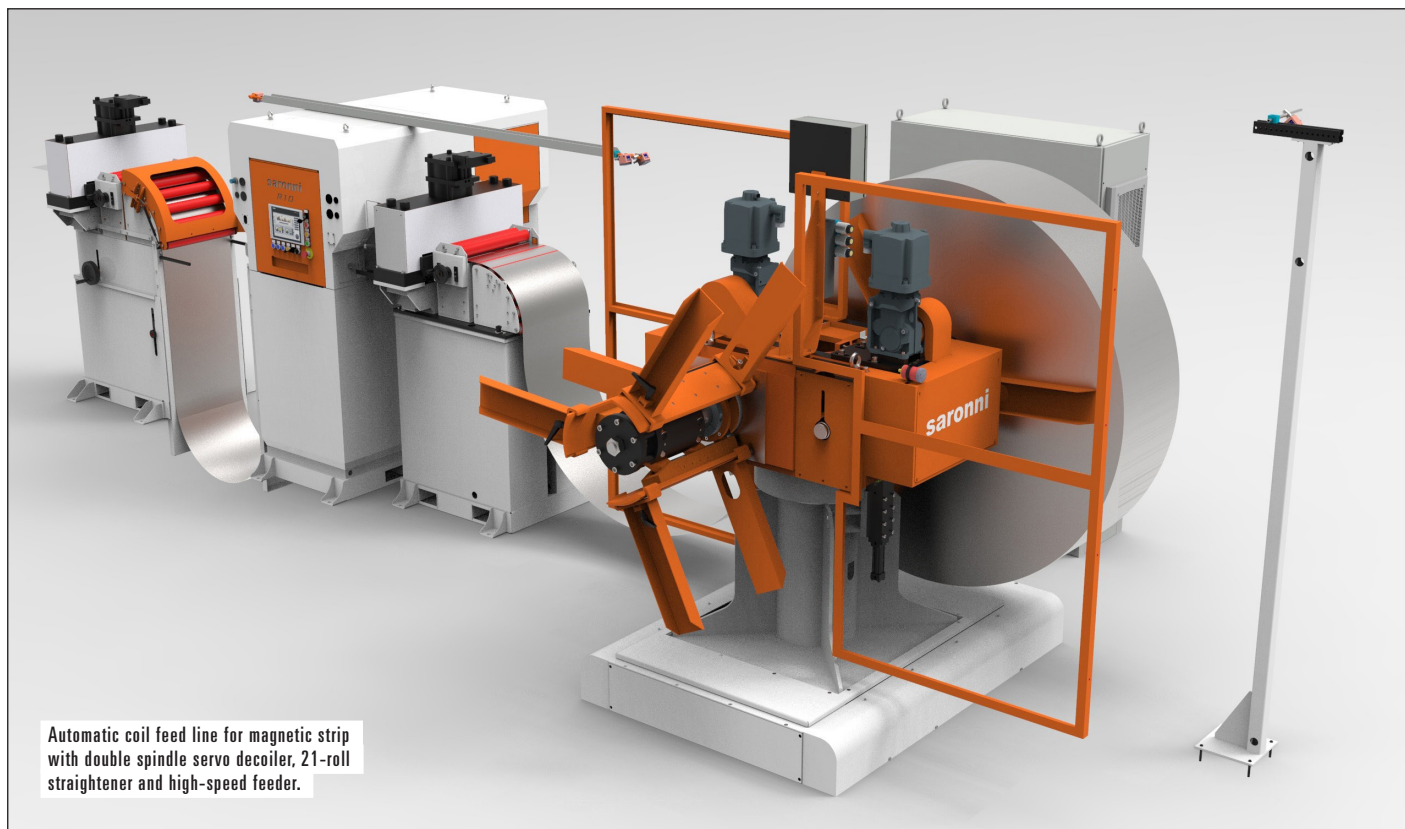
New orders for the company have also been won for coil feed lines with levellers to process thin and medium thickness high-strength materials. The levellers are equipped with new proprietary software (A.S.A.) that enables automatic straightening adjustment of the material.

"Our customers are looking for turnkey solutions with a 'general contractor' who is able to take care of all the technical and commercial aspects of a project. From a technical point of view, flexibility is crucial today for machines. Our focus is to be more attentive to customers' requirements so that we can anticipate their needs and provide customised solutions before our competitors," added Crespi.

Right: Saronni's first compact feeding line (without loop) was produced in 1963.



Roberto Crespi, Saronni's sales and marketing director.



Automatic coil feed line for magnetic strip with double spindle servo decoiler, 21-roll straightener and high-speed feeder.

"Safety and flexibility are of prime importance for our customers. Our machines comply with CE safety standards, but we also pay particular attention to operator safety in every phase of coil change and machine set-up, using the latest PLC, servo motor, detector and safety system technologies in our lines and working cycles. As an example of flexibility, we now produce a family of straighteners with interchangeable straightening cassette rolls to enable our customers to extend their range of processable strip thicknesses, on the same line, just by changing cassette rolls (e.g. strip thicknesses from 0.2 to 12mm)."

The impact of COVID-19

COVID-19 had an early and devastating impact on Italy, as the virus swept across the country and lockdown was enforced. Manufacturers were forced to close factories and operations, as well as change their 'modus operandi', as a result.

"The nature of our business requires

continuous meetings, both before and after machinery manufacture, with our customers so one of the most significant negative impacts of the COVID-19 outbreak, which affected our operations, was the inability to travel and personally visit our customers. To solve, at least partially, this issue, we equipped our media devices with new tools (cameras, screens, microphones etc.) so that we could conduct video conferences with customers, and each other. We also upgraded our website and increased our internet presence," Roberto Crespi told *ISMR*.

"Safety and flexibility are of prime importance for our customers"

"From a strategic point of view, we believe that full connectivity and a heightened web presence are key points for a modern and dynamic company. At the same time, we need to keep supplying full-service capabilities and state-of-the-art technical solutions to our customers," he continued.

The company is currently working on increasing current connectivity levels to all its machines worldwide so that remote assistance can be provided directly from its offices to customers and machines can be connected to its servers 'any time, anywhere'.

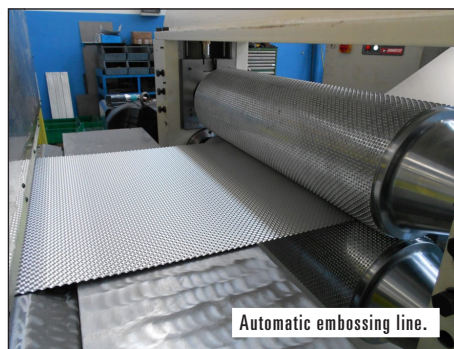
The pandemic has also highlighted the importance of training - an important step for customers using its feeding lines. For this reason, Saronni has already invested in

simulators and multimedia presentations, in a dedicated new area of its headquarters, for group courses or for individual training. Its team of technical instructors is also available for specific courses, at a customer's site, to train new operators or system engineers or to help expert operators to take full advantage of its lines for specific applications. Spare parts can be delivered within 24 hours in Europe and within 48 hours over the rest of the world.

It embraced the adoption of Industry 4.0 principles in its product design, partly spurred by Italy's tax incentive laws. Saronni offers remote diagnosis for troubleshooting any software issues in real-time. This system allows it to modify the program and, if necessary, make any special changes required by its customers, enabling it to offer proactive assistance to optimise the performance of the line.

However, Crespi believes that COVID-19 will continue to impact business beyond 2020.

"Unfortunately, my view of the business climate in 2021 is not completely positive because I believe that most of the manufacturers working in our field will be hit by consistent turnover reductions due to the lack of new orders at the moment. However, I am more positive regarding new projects which could become new orders in the second quarter of 2021," he told *ISMR*. ■



Automatic embossing line.

CONTACT
For further information,
see www.saronni.com