



www.insteel-piw.com

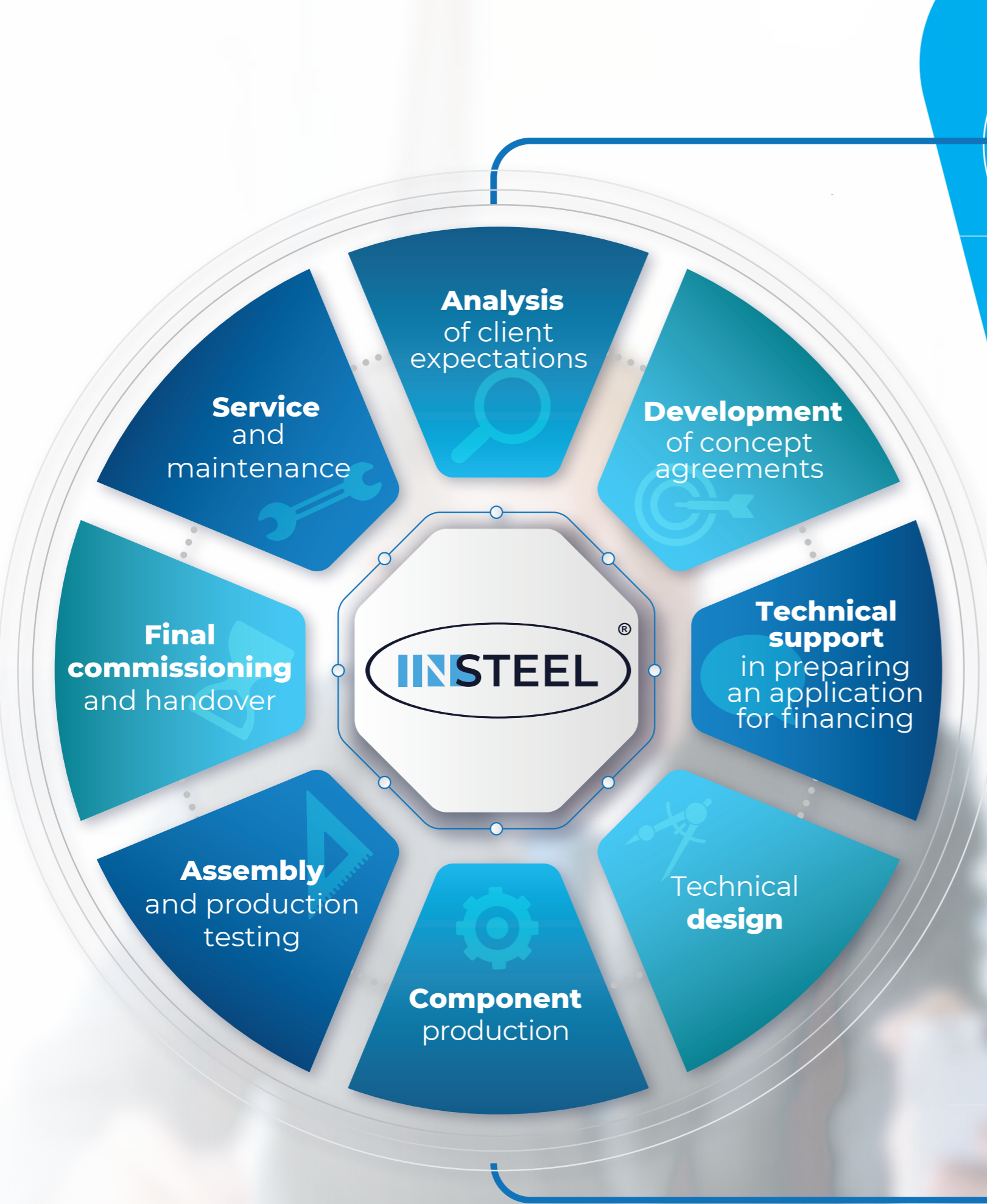


WE ARE **INSTEEL**

We are a manufacturer of automated processing lines for sheet metal and steel strip processing. We provide an individual approach to all our clients, working closely at all levels of project implementation. Thanks to our qualified staff and extensive manufacturing facilities, we are able to cope with even the most complex tasks. Our lines are characterised by a high degree of automation and effective integration of functionally diverse technological processes.

INSTEEL was created from the partnership between **RStechonology**, **Instal-Inox** and **Inmet**, which over the years has carried out many innovative projects to optimise and develop production processes.

**WE LOOK FORWARD
TO WORKING WITH YOU!**



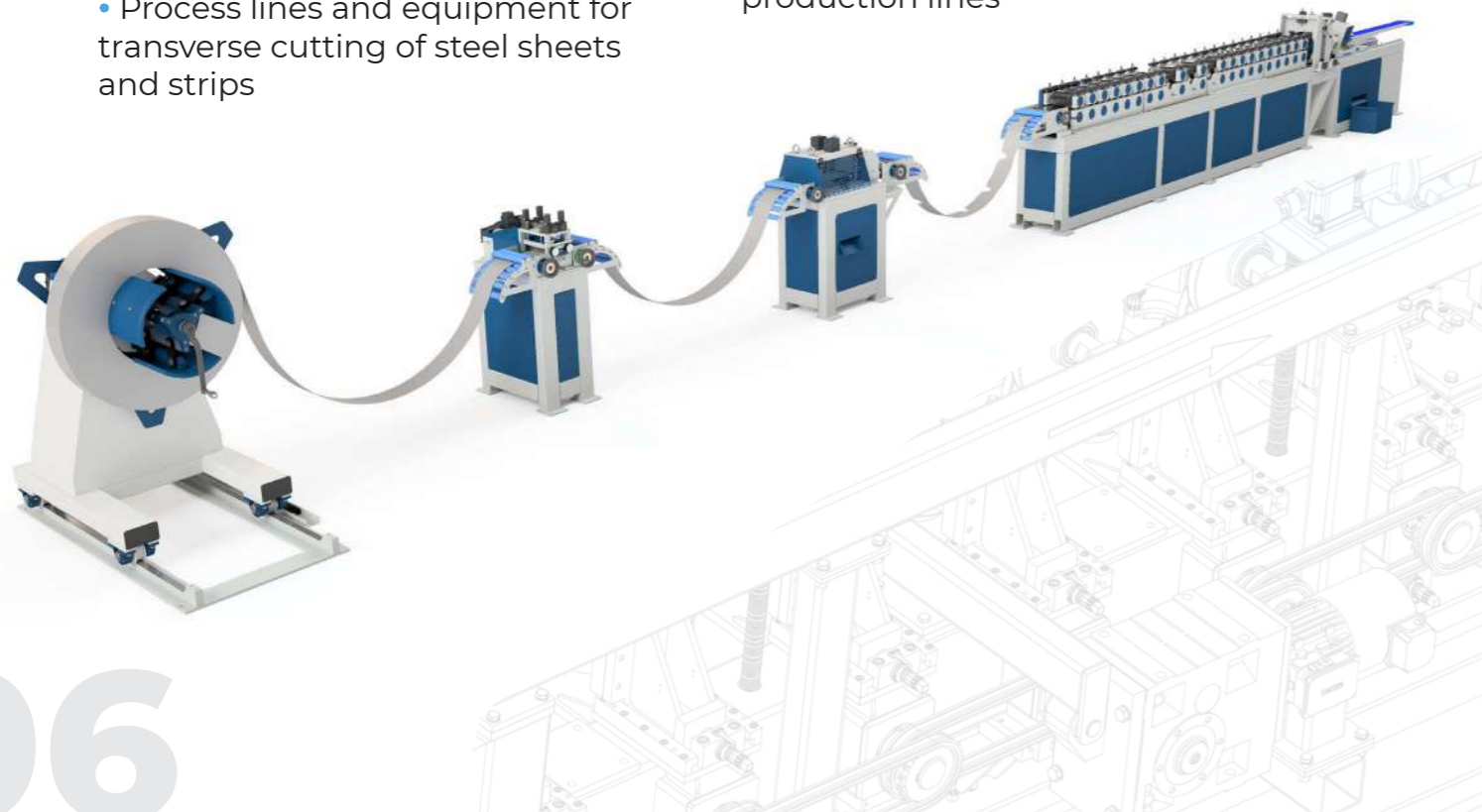
ACTION strategy

We are specialists

We specialise in the manufacture of innovative, integrated process lines and equipment dedicated to sheet metal and steel strip processing.

Our product range includes:

- Process lines and equipment for cold profiling of steel sheets and strips
- Universal lines for creating pressed and perforated parts
- Process lines and equipment for longitudinal cutting of steel sheets and strips
- Process lines and equipment for transverse cutting of steel sheets and strips
- Feed lines for and integrated with presses
- Steel industry installations
- Specialist technological equipment intended for a wide range of clients
- Modernisation and servicing of production lines



KNOW -HOW

We have the knowledge and an experienced engineering team to design and manufacture specialised equipment tailored to your individual needs and requirements.

Our specialists undertake advanced technical designs, including:

- technological algorithms
- strength and performance analyses
- construction and assembly designs
- electrical documentation and control software
- hydraulic and pneumatic system designs
- comprehensive line safety systems

PROCESSING LINES

for longitudinal and transverse cutting

We offer a wide range of slitting lines for longitudinal cutting of coils and transverse cutting into sheets. We have specialised lines for a variety of purposes and capacities:

- Classic slitting lines or with recoiling option.
- Lines for automatic collection of coils from slitting lines and packing into shipping units.
- Continuous transverse cutting (sheeting) lines with an automatic stacker.
- Start/stop transverse cutting (sheeting) lines.
- Universal slitting and transverse cutting lines with a multi-blanking option.

As standard, the entire line is integrated with an intuitive control system as well as a safety system that meets the highest requirements.

Our lines perform the cutting process for a range of materials:

- cold-rolled and hot-rolled steel strips
- stainless steel
- non-ferrous materials, including aluminium and titanium-zinc
- coated materials



PROCESSING LINES

for longitudinal cutting

We offer complete longitudinal cutting lines. The individually configured equipment makes it possible to cut a batch coil into strips of any width, within the range provided by the slitting programme. Our lines are equipped with sets of cutting tools from well known suppliers. The design of the equipment ensures process stability and the highest quality of the cut edge.



Our slitting lines can also be equipped with:

- single- or double-sided surface foiling modules
- two- or four-arm knife changing units
- four-arm coil take-up units
- pick-up tables with a push button clamping system

PRODUCTION PARAMETERS OF OUR LINES:

0,5 - 6,0 mm

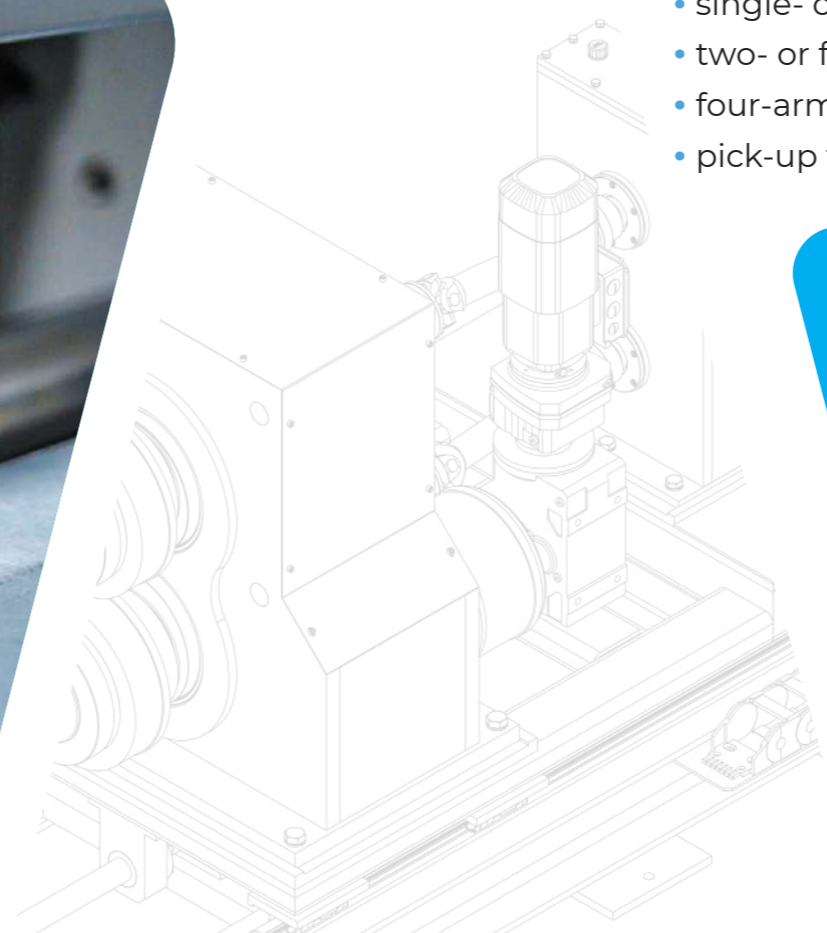
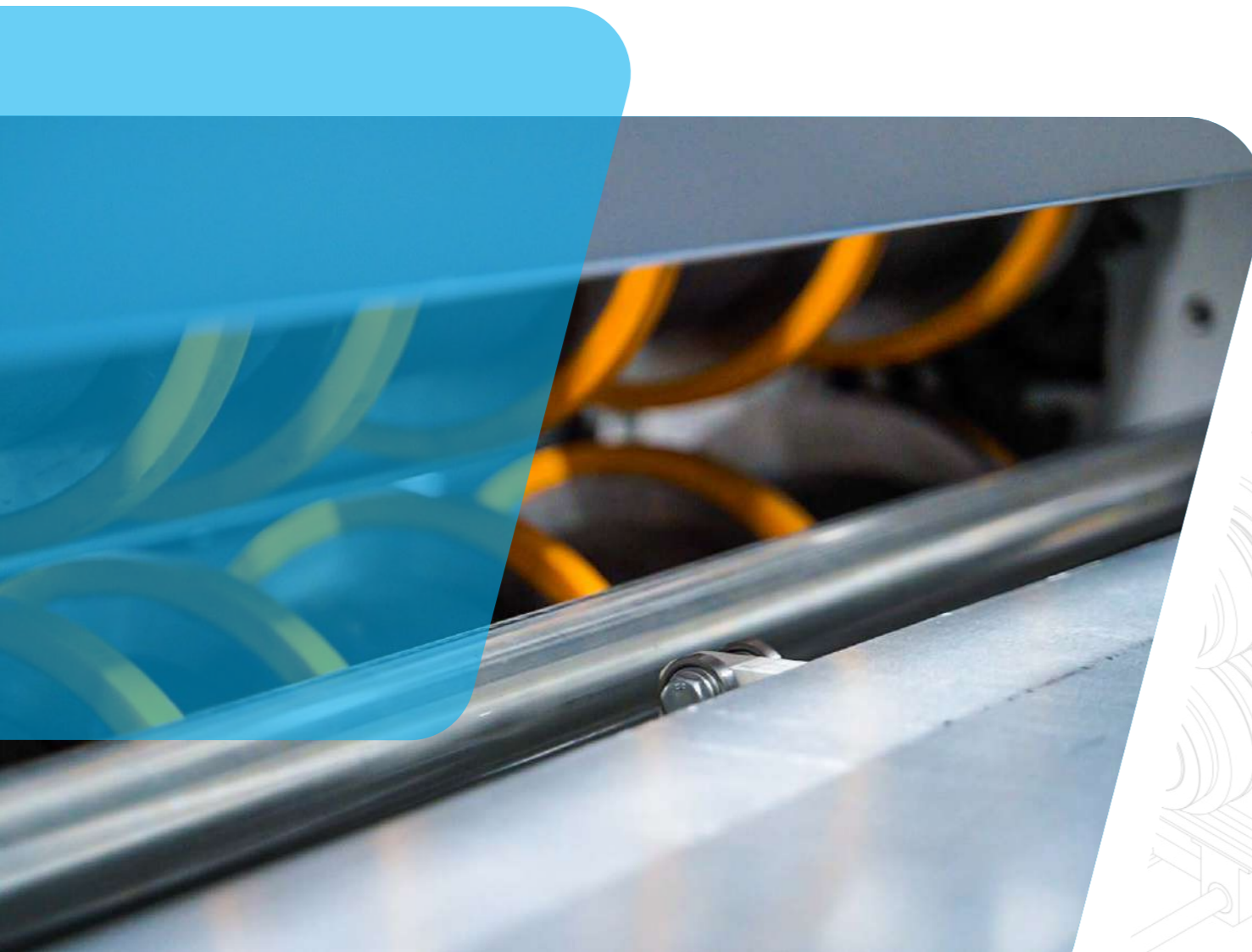
batch tape
thickness

2000 - 24000 kg

batch coil
weight

500 - 2000 mm

width
of batch coil



PROCESSING LINES

for transverse cutting

For many years, our team has been designing, building and putting cross-cutting lines into production.

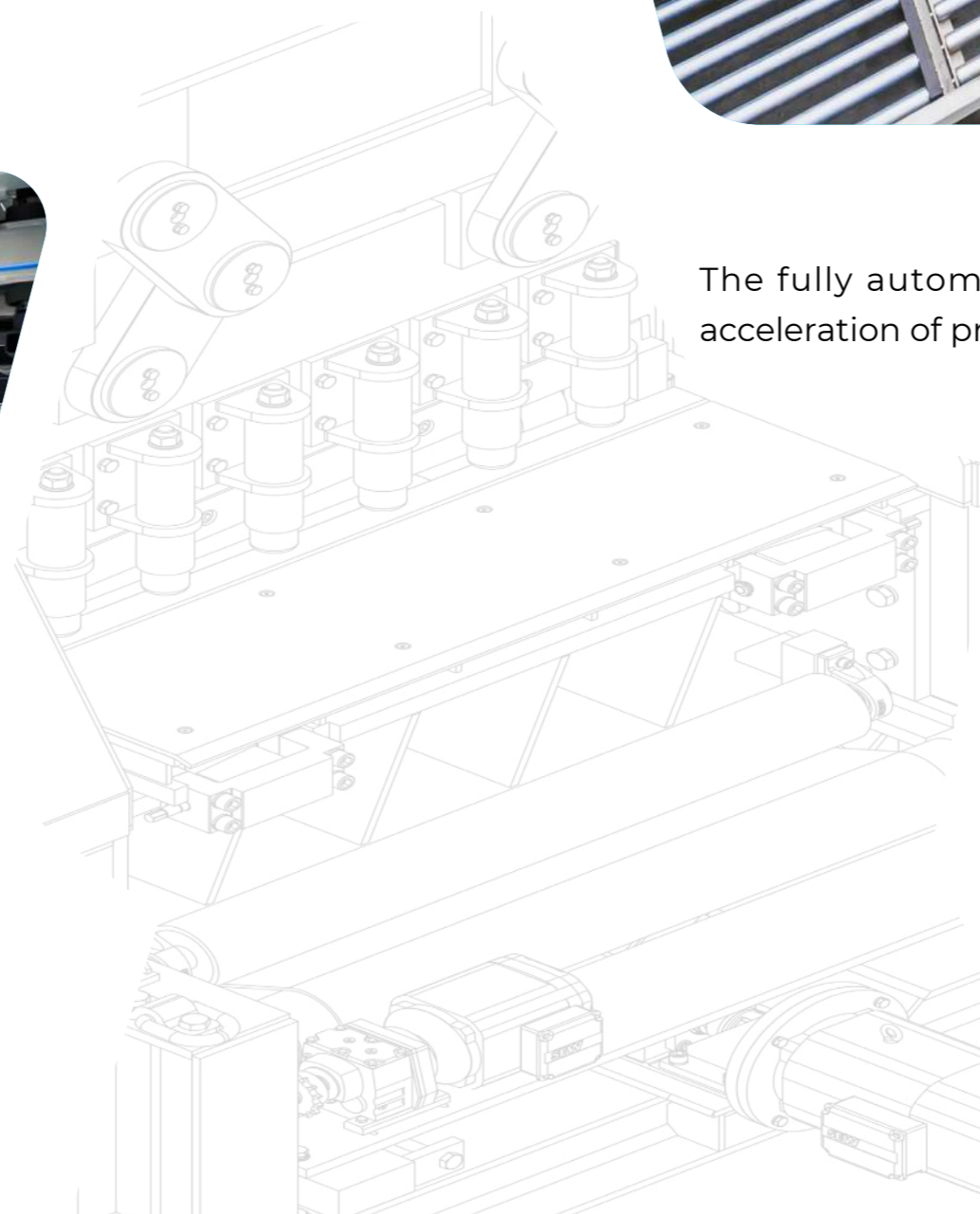
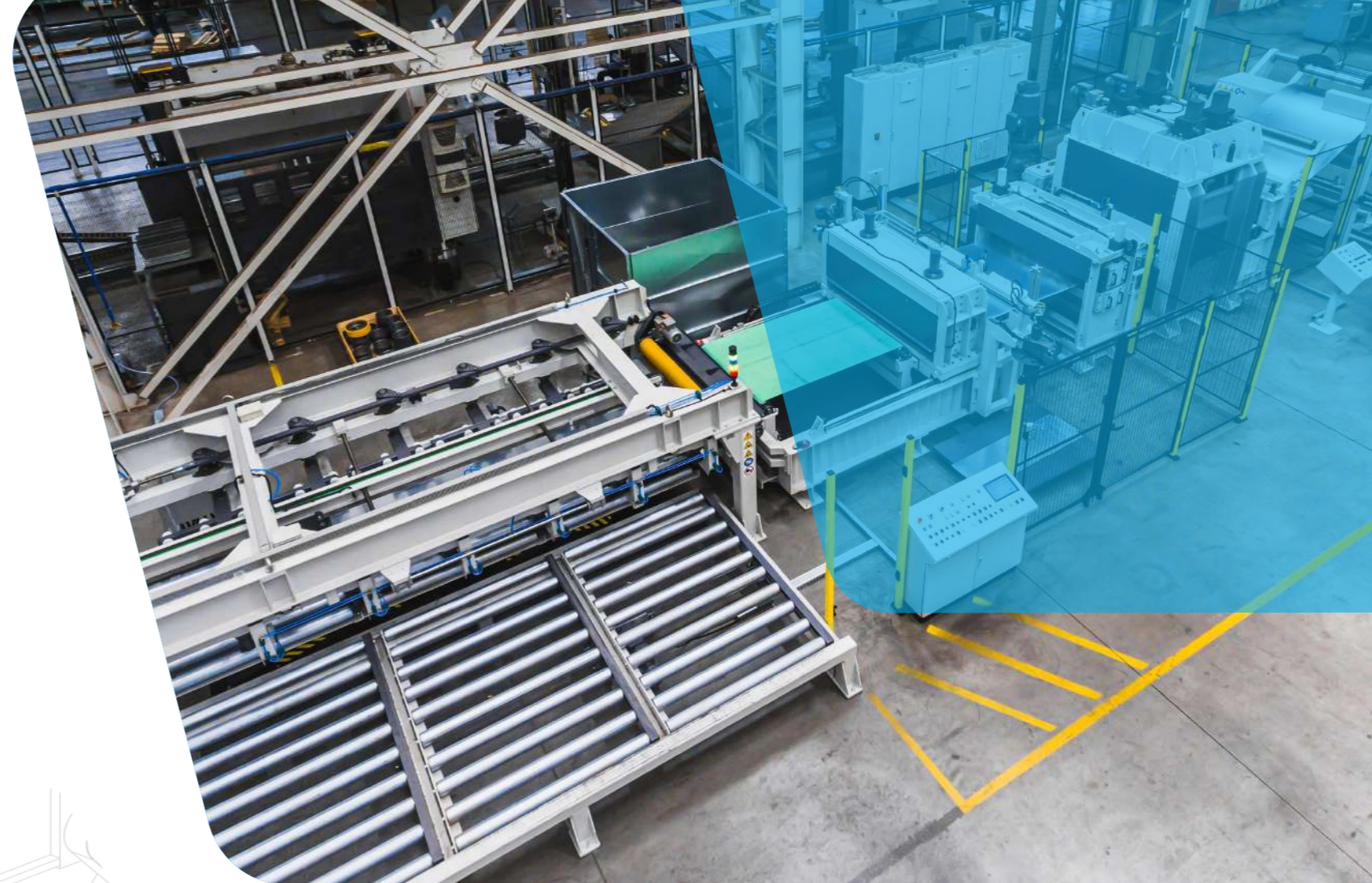
In its basic version, our line consists of:

- coil unwinding module
- roll straightening machine
- guillotine shear for overhead cutting
- sheet stacker
- power and control installation and safety system



We can also equip our lines with:

- double-sided folding band modules
- multi-sheet "multiblanking" cutting functions
- tape edging systems



The fully automated process allows the maximal and significant acceleration of production.

INPUT MATERIAL PARAMETERS:

0,5 - 12,0 mm

batch tape
thickness

2000 - 24000 kg

batch coil
weight

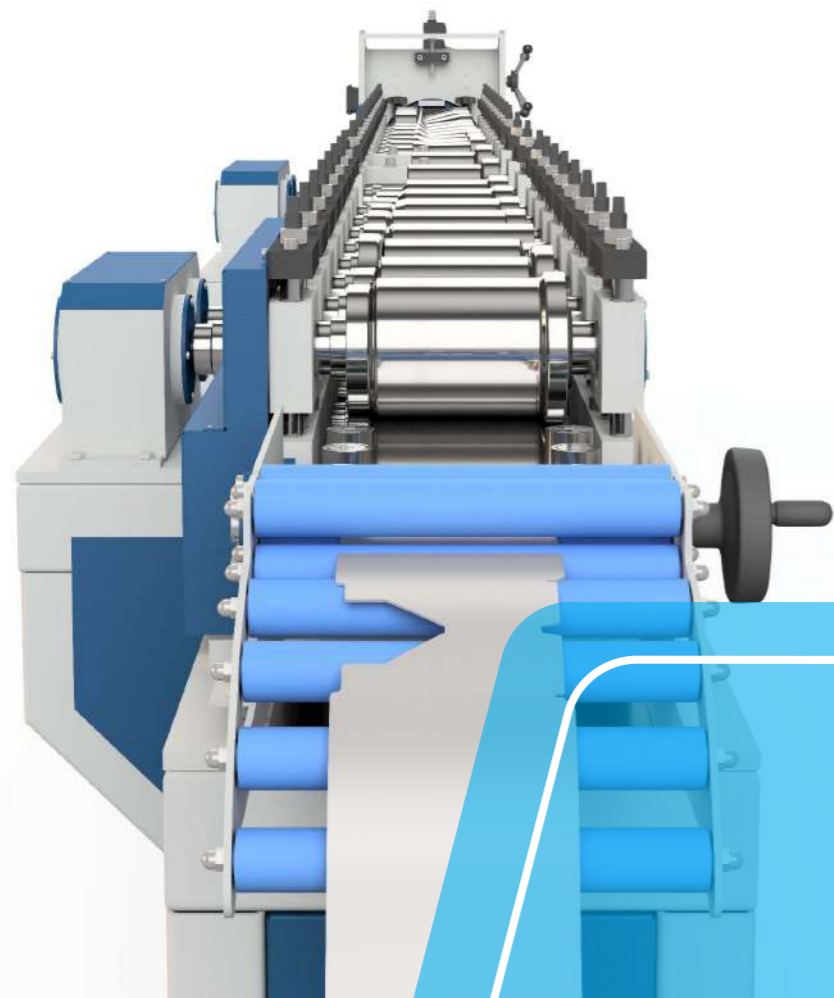
300 - 2000 mm

width
of batch coil

PROCESS LINES

for cold profiling of steel sheets and strips

We offer a wide range of profiling lines for the production of a diverse range of cold-formed profiles with open or closed sections. We simulate the profiling process based on advanced computer-supported methods, supported by 20 years of experience.



PROCESS LINES

for cold profiling of steel sheets and strips

Our profiling expertise is based on our experience with many projects that have resulted in lines producing a diverse range of profiles for many industries.

Our know-how enables us to supply complete lines, ready for production:

- light open sections in various shapes, lengths and materials, such as for storage systems, window and gate frames and frame structures
- profiles for gutter systems, including gutter profiles and downpipes that are interlocked and longitudinally welded
- a comprehensive range of frame profiles and corners for plasterboard drywall systems
- hollow sections of varying transverse profiles with weld seams produced by high-frequency welding and plasma arc welding, based on direct current or alternating current technology
- heavy-duty open sections for highway barriers, load-bearing and frame structures, and C-Z-U-S systems
- surface trapezoidal and corrugated profiles for many applications, including metal roofing sheets and external cladding for grain silos



We offer lines equipped with profiling machines in various designs:

- profiling machines with a fixed installation of the profiling rollers, dedicated to the production of one type of profile
- profiling machines with interchangeable profile shaping modules and fixed installation of rollers for alternate production of different profile types
- advanced adjustable profile shaping machines in which the produced profile can be changed by altering the configuration and settings of the profile shaping machine, designed for the production of several types of profiles.



UNIVERSAL LINES

**for creating pressed
and perforated parts**

Thanks to our know-how, we can offer an automatic line to produce a wide variety of products shaped from steel flat bars fed from a coil or from flat sections.



UNIVERSAL LINES

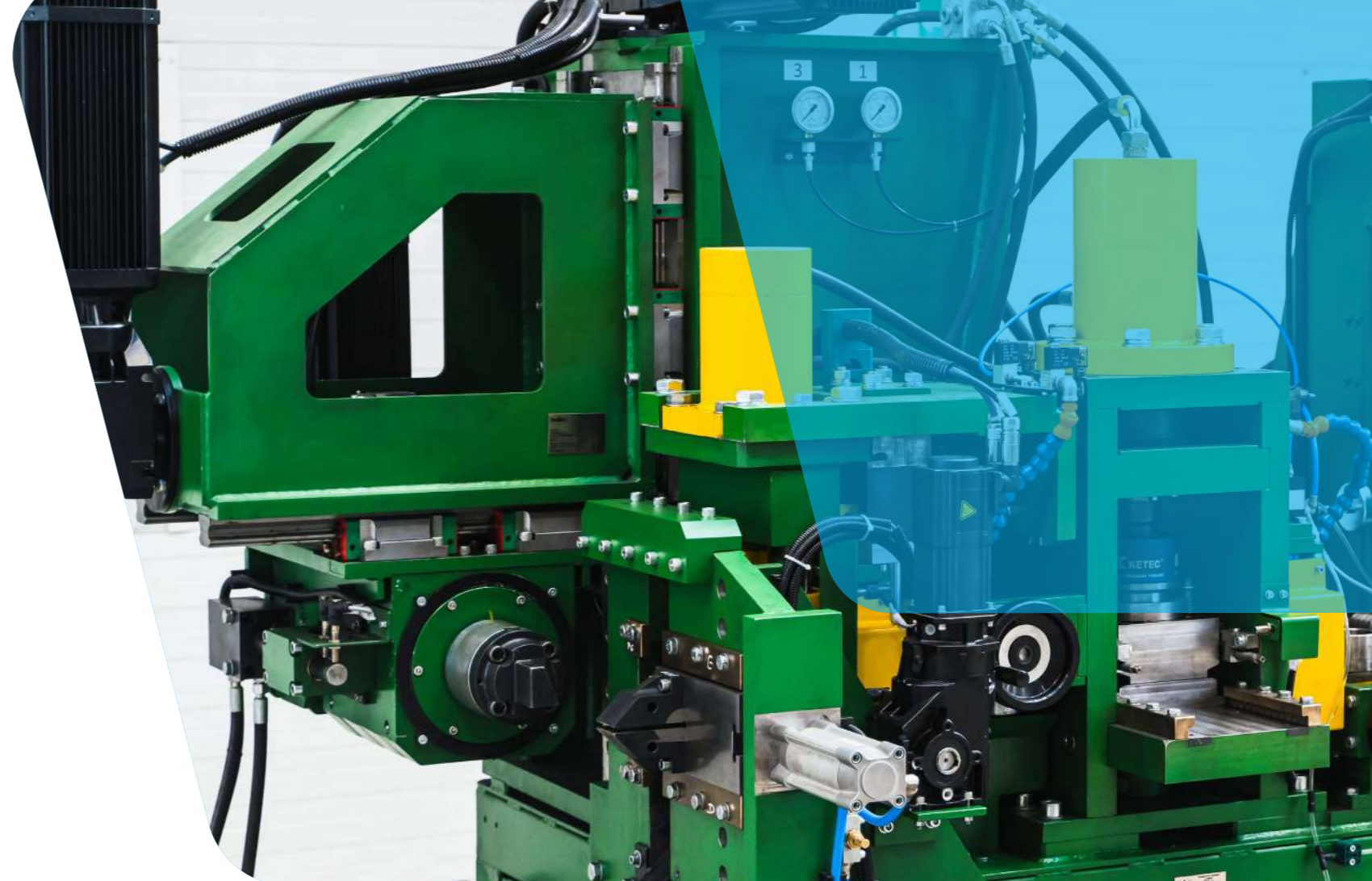
for creating pressed
and perforated parts

Example product range:

- flat workpieces with variable holes, end forms and the possibility of threading
- single or multiple bent components with variable hole patterns and the possibility of threading
- multi-fold bent components with the possibility of curve bending with different bore holes and the possibility of threading
- multi-fold bent components with different bore holes and the possibility of transverse cutting ... and many other configurations.

The line integrates many technological processes, including these operations:

- straightening
- punching
- cutting
- threading
- multi-axis bending
- straight and contour cutting



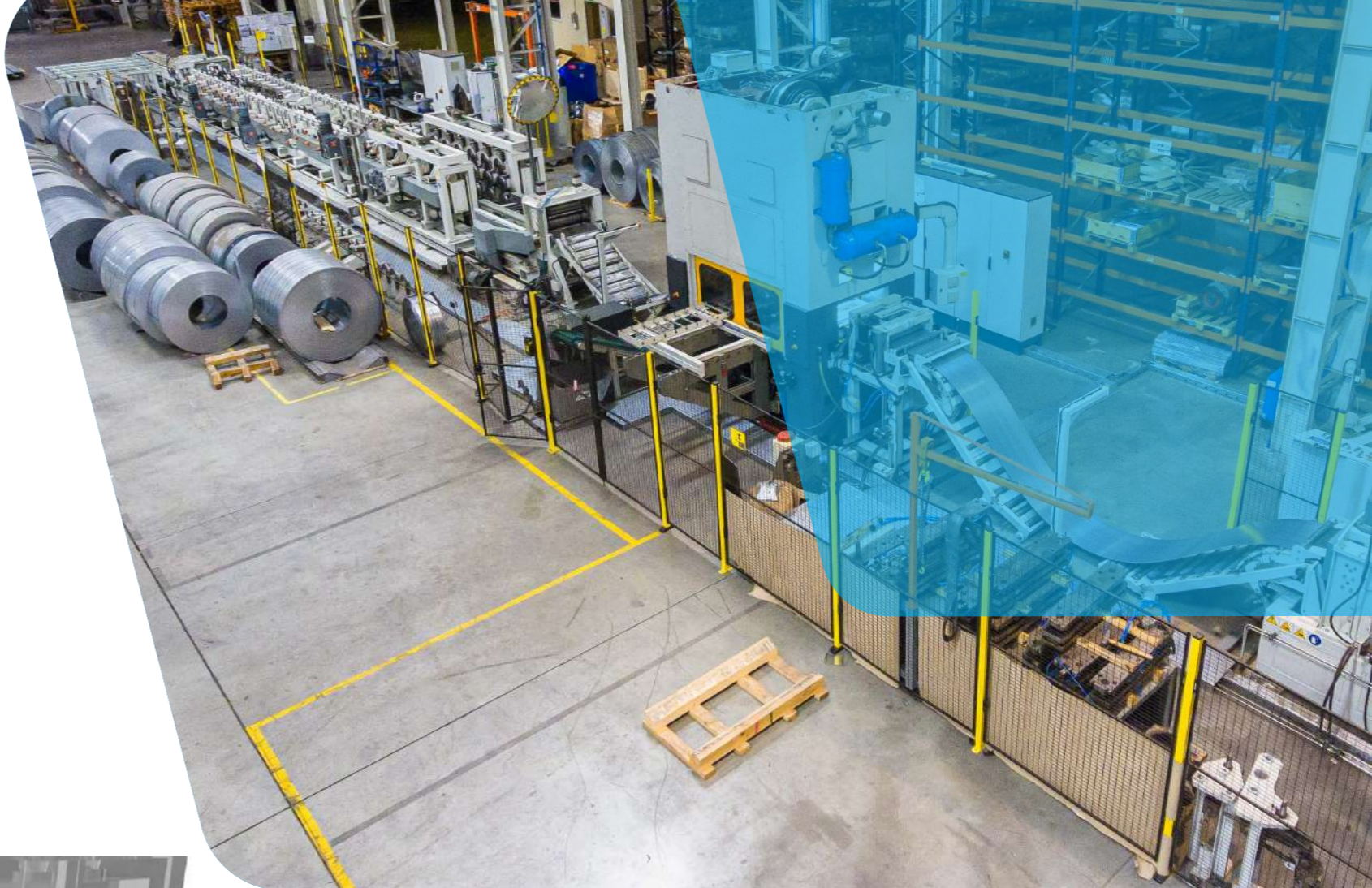
Advanced software enables the management and control of the production process as well as the collection of databases. The new product range is simple to implement and programmable by the operator, offering enormous production possibilities.



FEED LINES

for and integrated with presses

The experience gained in working closely with sheet metal contractors allows INSTEEL to produce complete automatic infeed lines for unwound coil strip, for use in integration with a range of equipment, including presses, shears, bending presses, punching machines, profiling machines etc.



FEED LINES

for and integrated with presses

Traditional unwinding and straightening lines ensure accurate alignment and easy strip guidance. After the loop, the tape is fed by an electric servo-driven roller feeder mounted on the press. This type of system is preferred when installation space is not an issue and when higher production speeds are required.

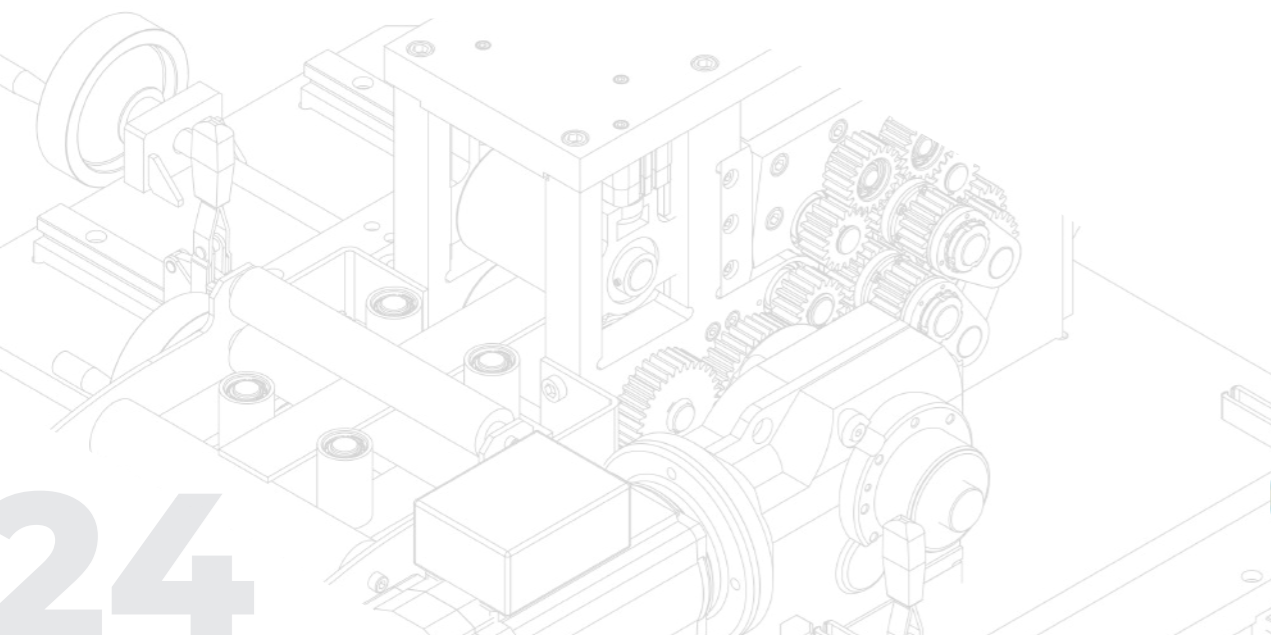
Compact feeder lines, thanks to their versatile design, provide high performance with a short overall length. The straightener and decoiler are mounted on a common base for accurate feeding to the presses and other equipment.

We have the expertise necessary to build and integrate into our line the mechanical and hydraulic presses from the various suppliers we work with. The configuration of the type of press and supplier is based on an analysis of the needs of the technological process occurring in the project.

The use of a press in the line allows for increased productivity and expansion of the available production range.

We provide full integration of the press control system with the line control system as well as a set of tools necessary for installation in the press as part of the implemented process.

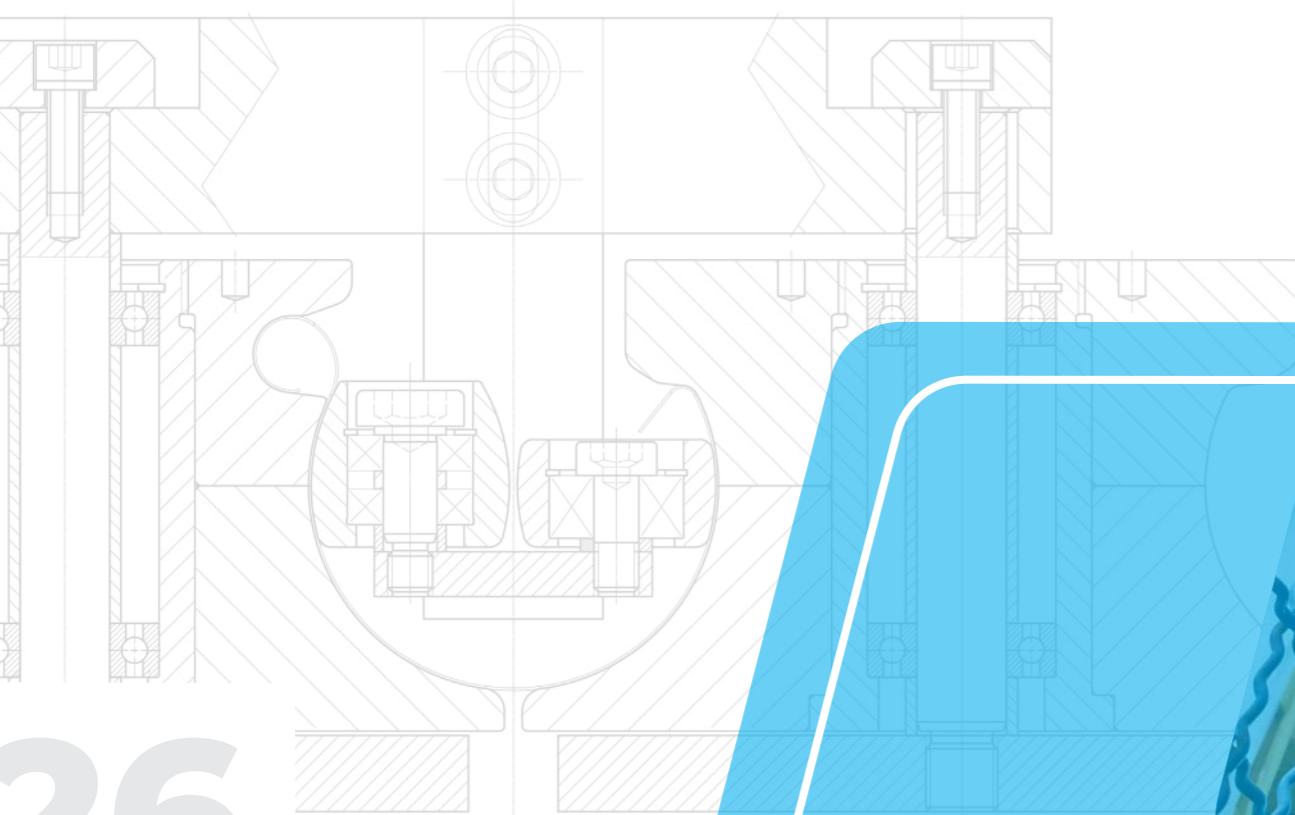
The complexity of our solutions guarantees full functionality and integrity of the entire production line.



LINES FOR THE PRODUCTION

of gutter systems

INSTEEL offers complete production lines for the manufacture of a diverse range of metal gutter systems. We manufacture and supply lines for gutter profiles and lock-folded or longitudinally welded downpipes. We recommend the use of a profile shaping machine with interchangeable profile modules featuring a fixed roller set-up for alternate production of different profile types. The fixed installation and adjustment of the rollers reduces the operator's involvement in presetting. The available equipment on the lines include simple pick-up systems as well as sophisticated packaging and palletising systems.



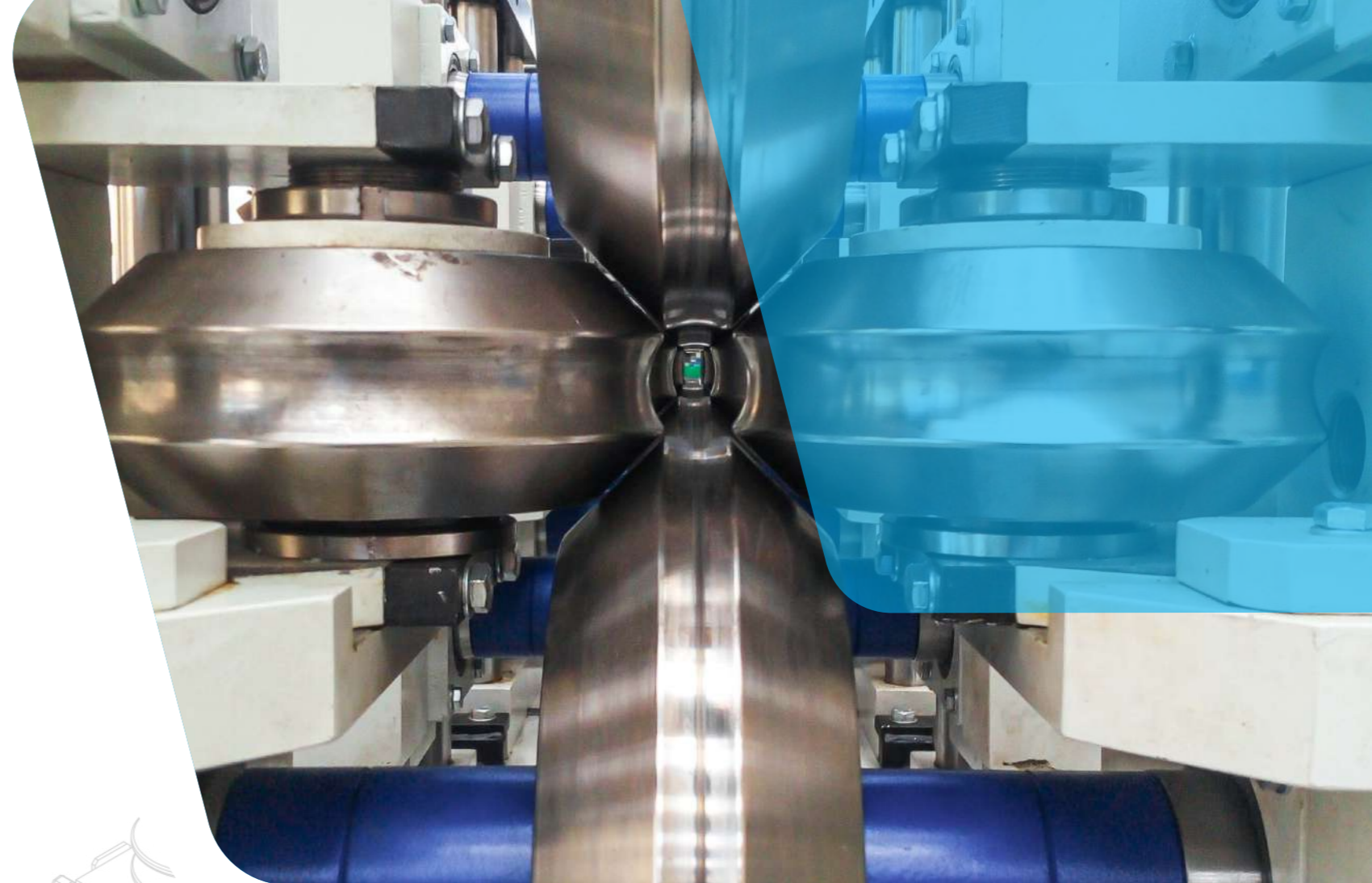
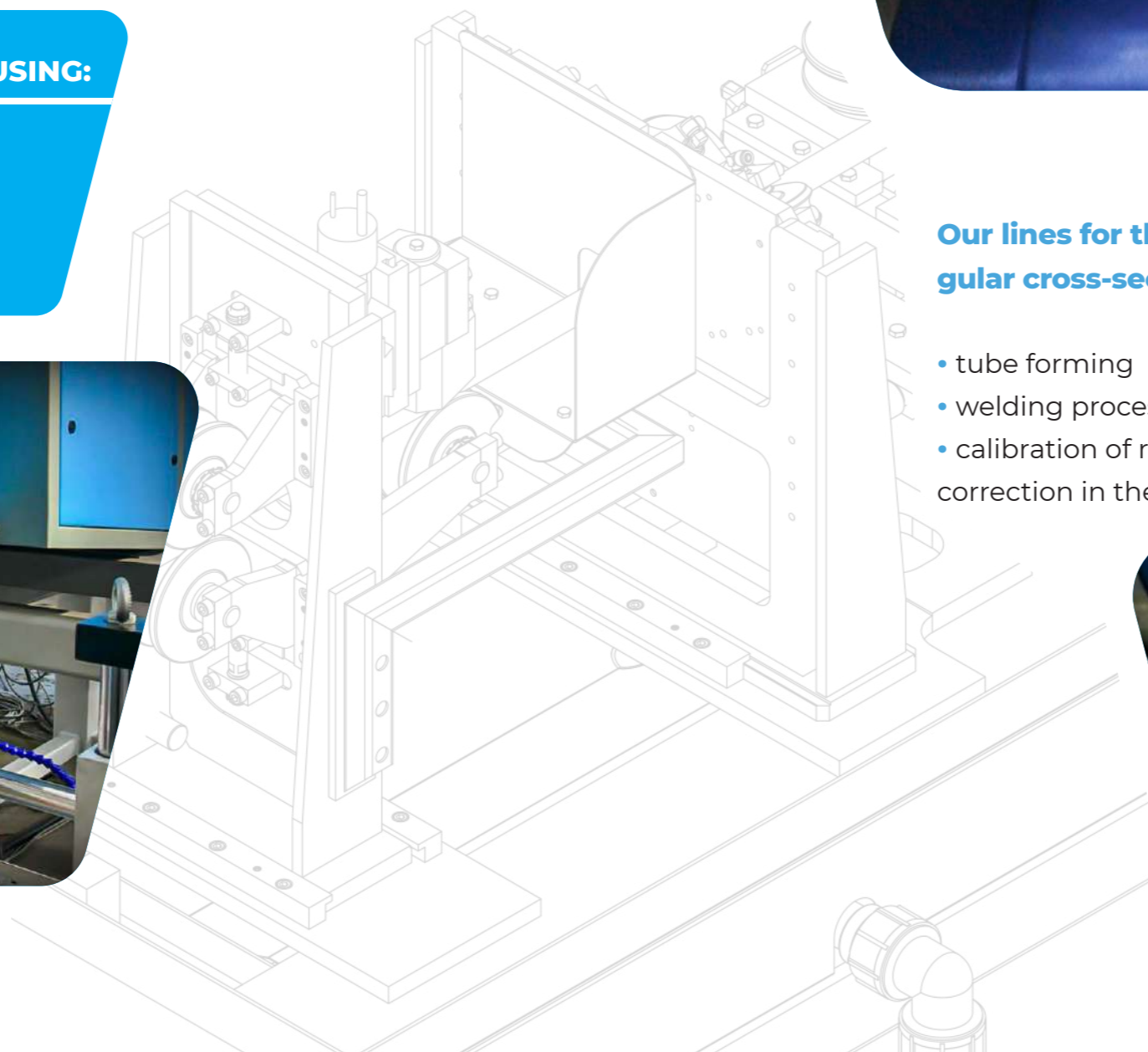
LINES FOR FORMING

tubes and longitudinally welded profiles

Our knowledge and experience enable us to offer you advanced process lines for the production of tubes and longitudinally welded closed profiles. In our installations, we use various welding technologies depending on the composition of the input material, the performance parameters of the line and the expected quality of the weld.

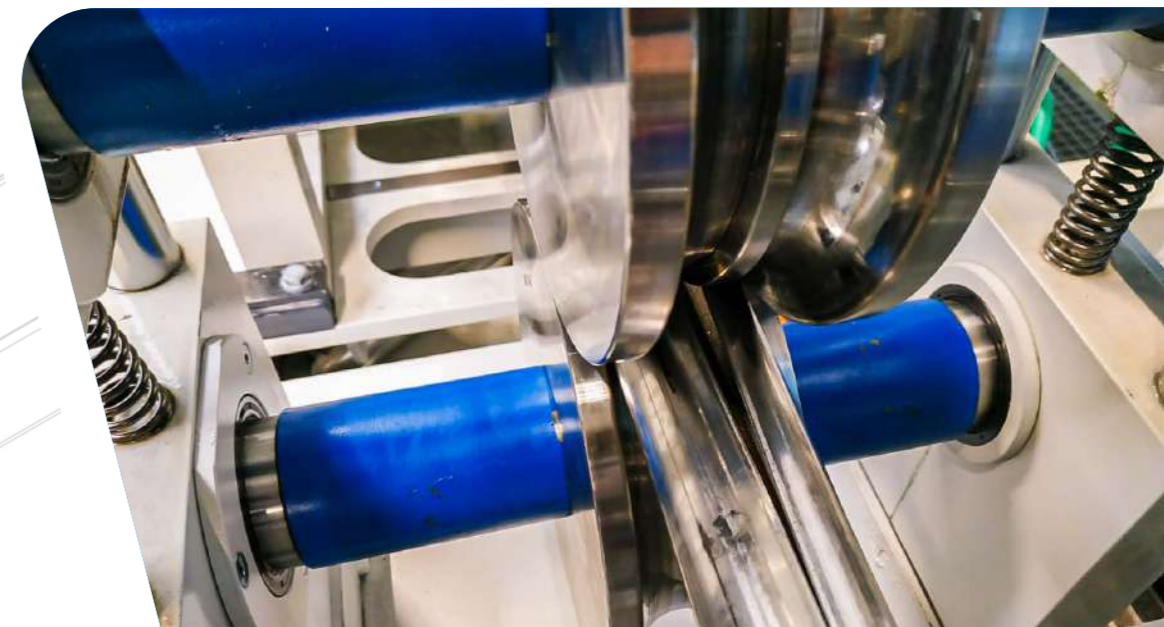
WE WELD OUR PROFILES USING:

- high-frequency currents
- laser technology
- TIG methods (TIG DC, TIG AC)



Our lines for the production of closed sections with square or rectangular cross-sections work with the following technological layouts:

- tube forming
- welding processes
- calibration of rectangular cross-sections from tube stock with possible correction in the weld position



LINES FOR THE PRODUCTION

of grain silo components

We have years of experience in designing and building specialised, fully-automated lines for cutting, profiling, perforating, and shaping bent and perforated parts, etc. We have created a broad range of lines dedicated to a diverse portfolio of clients representing various industries. We can supply lines designed for silo manufacturers.

We offer complete and fully automated lines for:

- profiling (including perforation) of vertical column reinforcements
- profiling (including perforation) of silo sides
- profiling and bending of hopper reinforcements
- profiling and bending of silo sides



All lines are designed and built according to your individual requirements.

Of course, we are able to design and manufacture complete lines, as well as individual equipment or line assemblies.

We offer:

- bending machines for hopper reinforcements
- bending machines for silo sides
- profile bending machines

TANK PRODUCTION LINES

for production facilities

We typically offer our tank production lines as two or three-station designs, to meet the needs of demanding customers in the industry.

Two-station production line:

Stand I - cargo production

- unwinding sheet metal from a coil in a vertical position,
- initial straightening and forming of the lip of the desired diameter of the produced tank,
- automated vertical cutting using a plasma cutter,
- automated vertical welding using a vertical welding bench,
- optional grinding/cleaning of vertical welds.

Stand II - vertical production of the tank

- regrinding of tack welds prior to the welding process,
- automated circumferential welding of the combined lips of the fabricated tank and the pressing of the completed welds,
- regrinding of the completed welds,
- grinding/cleaning of the external and internal surface of the circumferential welds.

Three-station line:

Stand I - cargo production

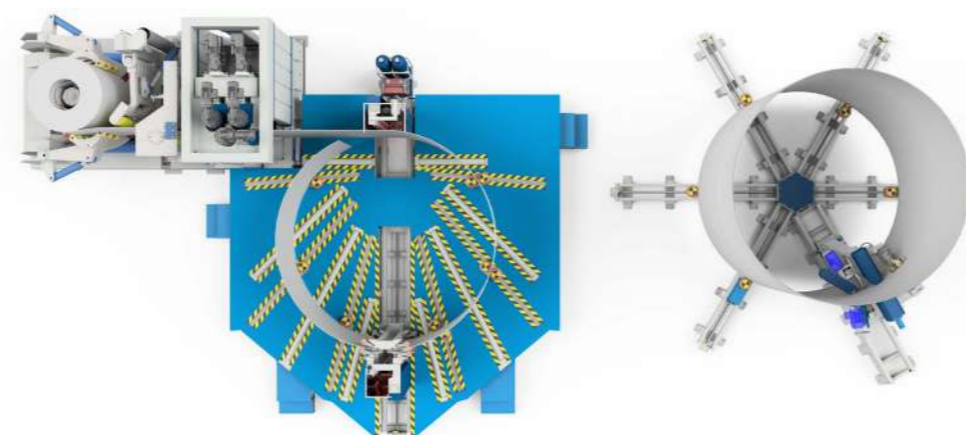
- unwinding sheet metal from a coil in a vertical position,
- initial straightening and forming of the lip of the desired diameter of the produced tank,
- automated vertical cutting using a plasma cutter,
- automated vertical welding using a vertical welding bench,
- optional grinding/cleaning of vertical welds.

Stand II - vertical production of the tank

- regrinding of tack welds prior to the welding process,
- automated circumferential welding of the combined lips of the fabricated tank and the pressing of the completed welds,

Stand III - grinding and cleaning of all the welds

- grinding the inner surface of the circumferential welds on the root side and cleaning the outer surface of the welds on the face side



PARAMETERS OF THE FEED MATERIALS AND OF THE MANUFACTURED TANKS

2,0 - 6,0 mm

thickness
of batch sheet

7000 - 24000 kg

batch coil
weight

1000 - 2000 mm

width
of batch coil

2000 - 4500 mm

tank
diameter

MOBILE LINE

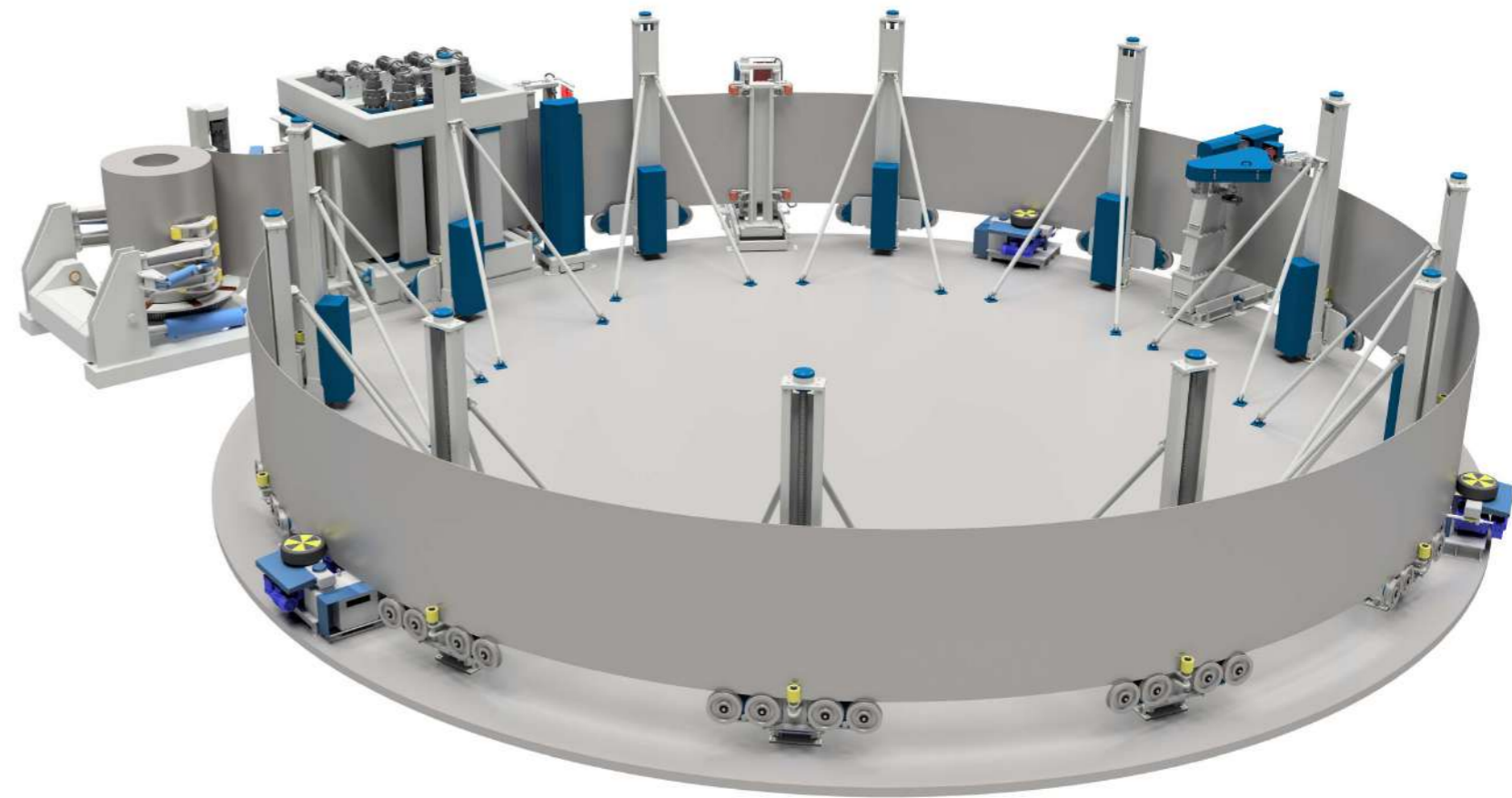
for the production of external large tanks

The experience and know-how gained from working closely with companies in the field of lines designed for cutting and forming stainless steel has allowed us at INSTEEL to extend our range of products by adding a mobile line for the production of large external tanks.

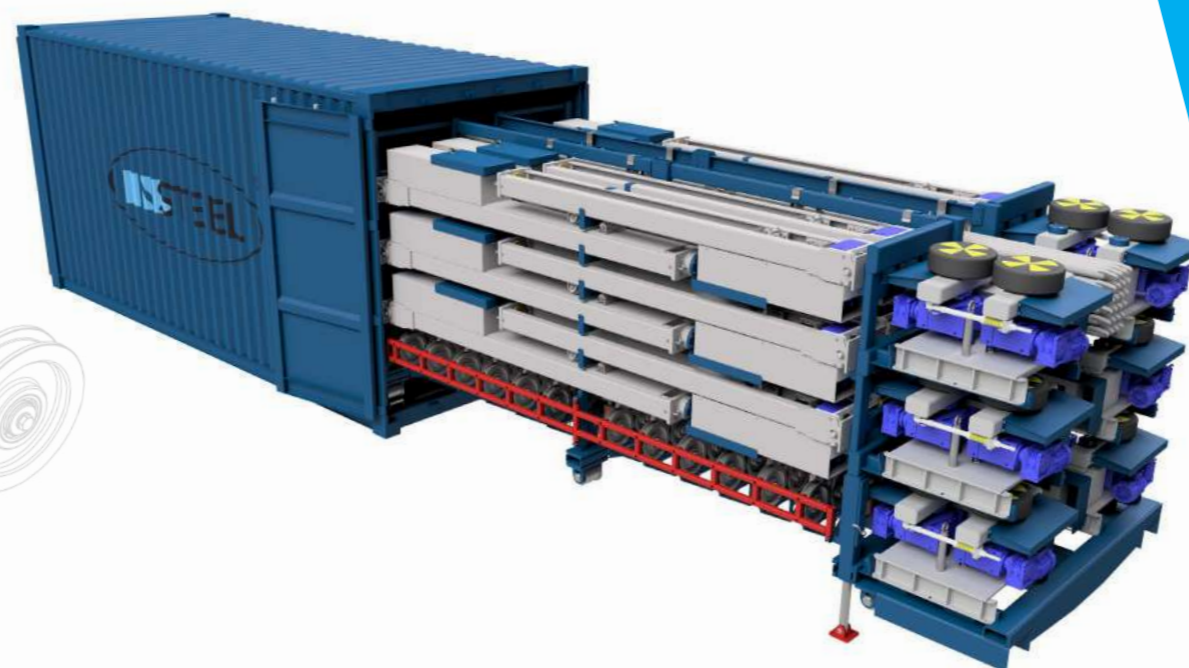
Once the line has been delivered and set up on site, it enables the complex production of subsequent tank cargos and the construction of the tank itself in an automated manner.

The line enables the following processes to be carried out:

- unwinding of sheet metal from a coil in a vertical position, for thicknesses of 3 - 8 mm
- possibility of producing cargos from sheet metal with a thickness of 8 - 12 mm
- preliminary straightening and forming into an arc of the given radius of the manufactured tank
- cutting and welding of vertical junctions of the cargo
- circumferential welding of the joined lips
- regrinding, grinding and cleaning of welds
- lifting the tank structure above the formed lip without the need for a crane



The application of this solution allows the significant reduction in the costs and time involved in tank construction and installation. We also offer autonomous peripheral equipment dedicated to the tank manufacturing industry.



PARAMETERS OF THE FEED MATERIAL AND THE MANUFACTURED TANK

3,0 - 12,0 mm

Batch tape thickness

7500 - 24000 kg

Batch coil weigh

1000 - 2000 mm

Width of batch coil

5000 - unlimited

Tank diameter

COIL PACKING LINES

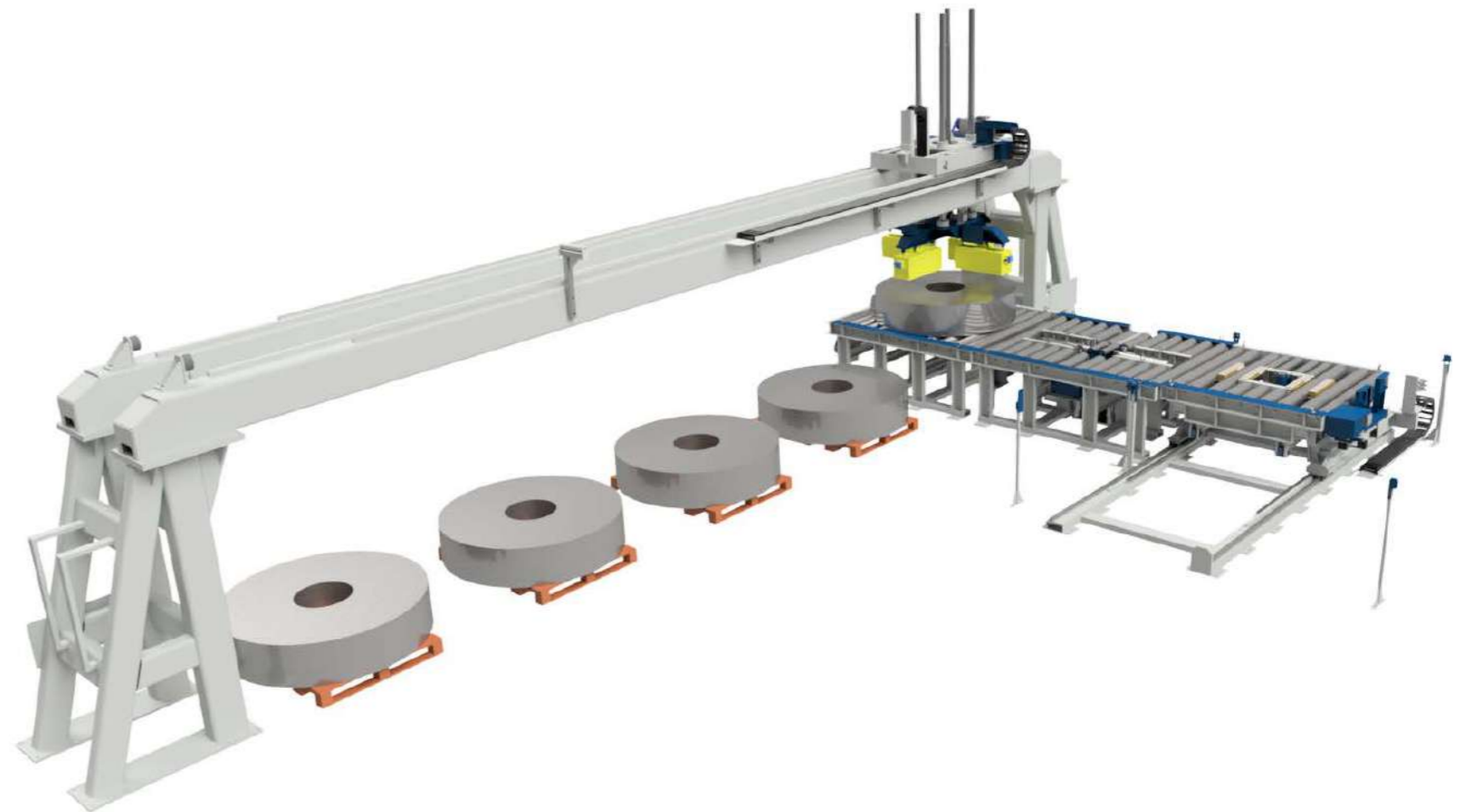
The coil packing line is an extension of the slitting line, increasing production efficiency by automating the removal of coils from the line.



The standard coil packing line consists of:

- Mobile tilting platform - for picking up the coils from the storage arm and transferring them to the roller conveyor while changing the transport plane
- Coil centring table - acting as a radial position for the clamping of coils. Rotating rollers facilitate and speed up the binding process itself, which can be carried out manually or automatically, depending on the line configuration
- End-of-line conveyor - responsible for positioning the coils before placing them on the pallet
- Stacker. Enables the coils to be transferred and stacked according to a preset sales programme into dispatch stacks on pallets. The unit is equipped with a set of electromagnets whose power is adapted to the weight of the coils.

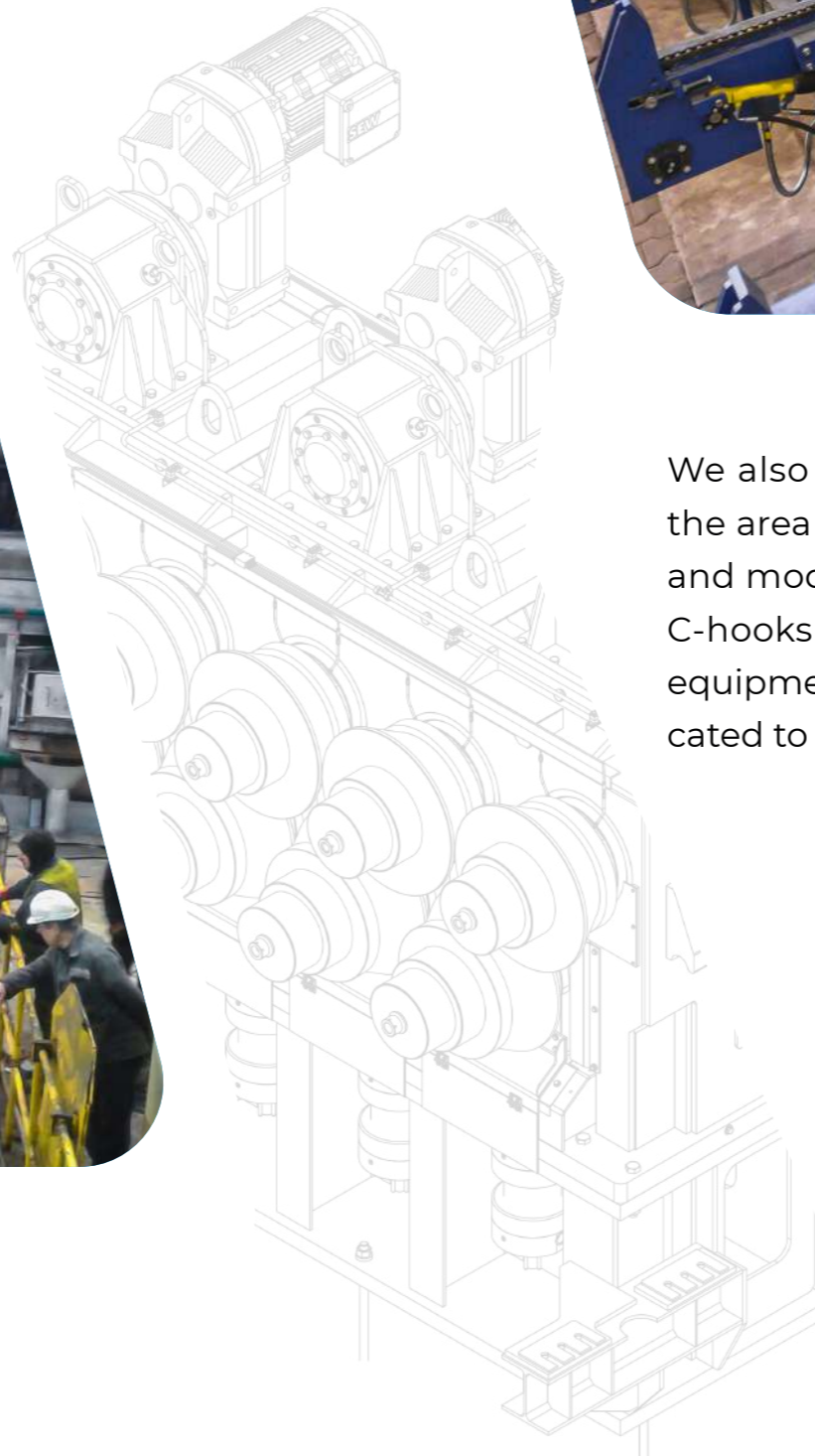
The whole unit is connected to the necessary power supply installations, the control programme and the safety system.



STEEL INDUSTRY

installations

As part of INSTEEL activities, we carry out modernisation work and make deliveries for the steel industry. Along with our partners, we have implemented projects to modernise selected areas of the metallurgical process lines, especially in the areas of loading and transport of the charge, including edging and final packaging.



We also have the knowledge and expertise to carry out projects in the area of steel heat treatment facilities - including the construction and modernisation of quenching tanks. We manufacture specialised C-hooks and transport crossheads, according to our own designs, as equipment for overhead cranes, standard cranes or forklift trucks dedicated to non-standard applications.



AUTONOMOUS

equipment

We manufacture, supply and integrate into existing lines a full range of advanced process equipment that we can also equip with independent, autonomous power and control systems to maintain seamless communication with the main line control programme. We offer solutions tailored to your needs and requirements.

Our product range includes:

- Coil unwinders
- Coiling machines
- Multi-roll straighteners
- Roller feeders
- Transverse shears
- Longitudinal shears
- Profiling machines
- Profile bending machines
- Perforating units
- Band accumulators
- Sheet stackers
- Profile stackers



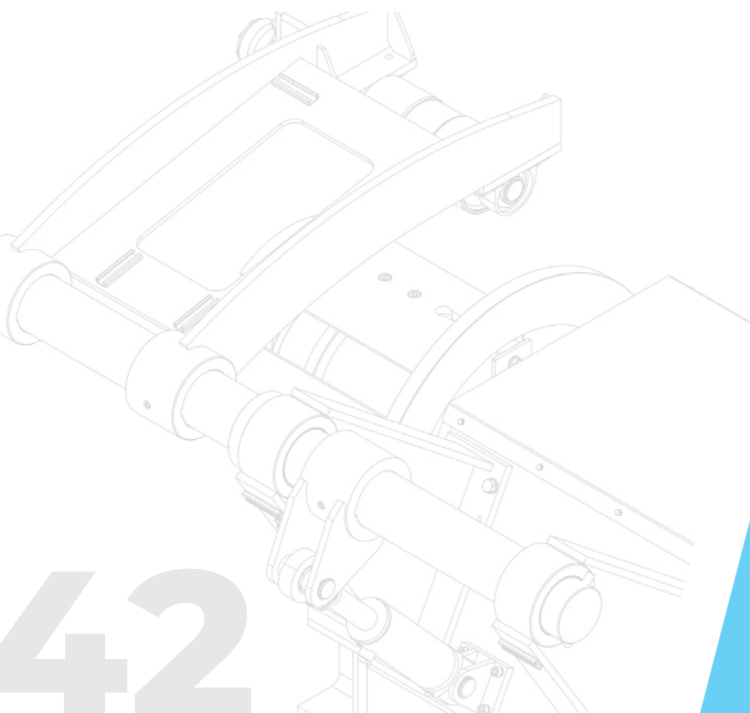
COIL UNWINDERS

We offer stationary and mobile decoilers made in various technical variants, adapted in design to the required load capacity, from 1000 - 25 000 kg and batch coil widths of 50 - 2000 mm.

Depending on the configuration of the line and the size of the coil, we can manufacture single or double decoilers. We also offer twin-spindle decoilers for high-capacity lines that require rapid coil changes.

Depending on the variant, our decoilers are equipped with:

- Coil loading table
- Band edge controller
- Hydraulic expanding mandrel
- Powered pressure roller
- Transition pads for different inner diameters of coils

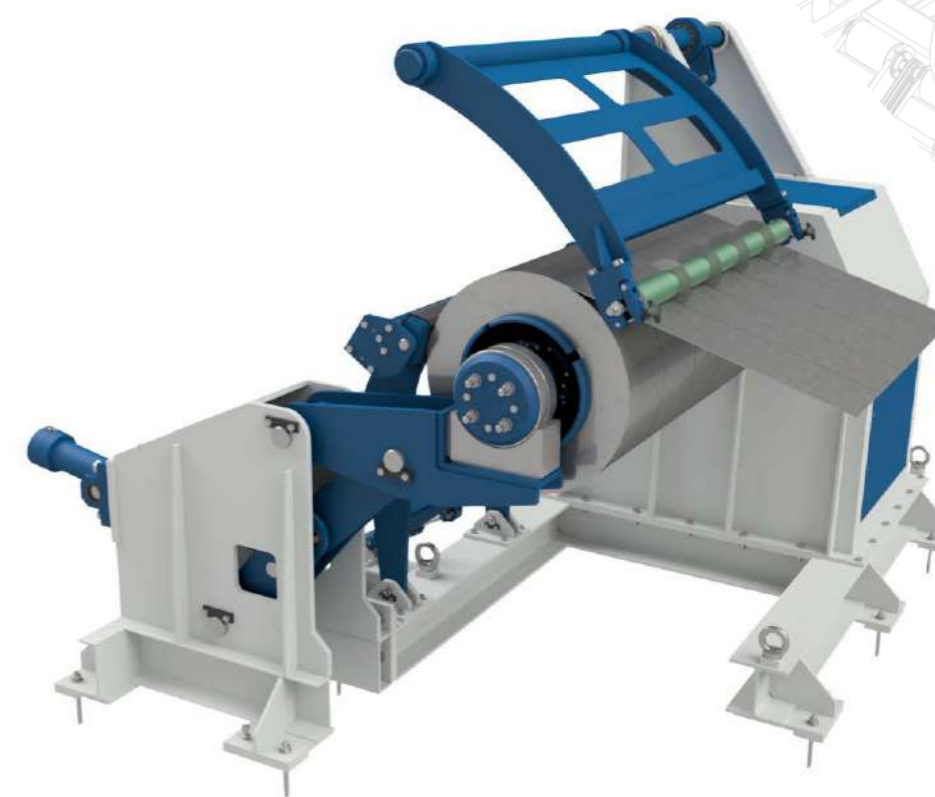


COILING

machines

We supply coil winders sized to the required load capacity and coil width, to guarantee the highest quality in the material winding. Depending on the configuration of the line and the size of the coil, we can manufacture single or double decoilers.

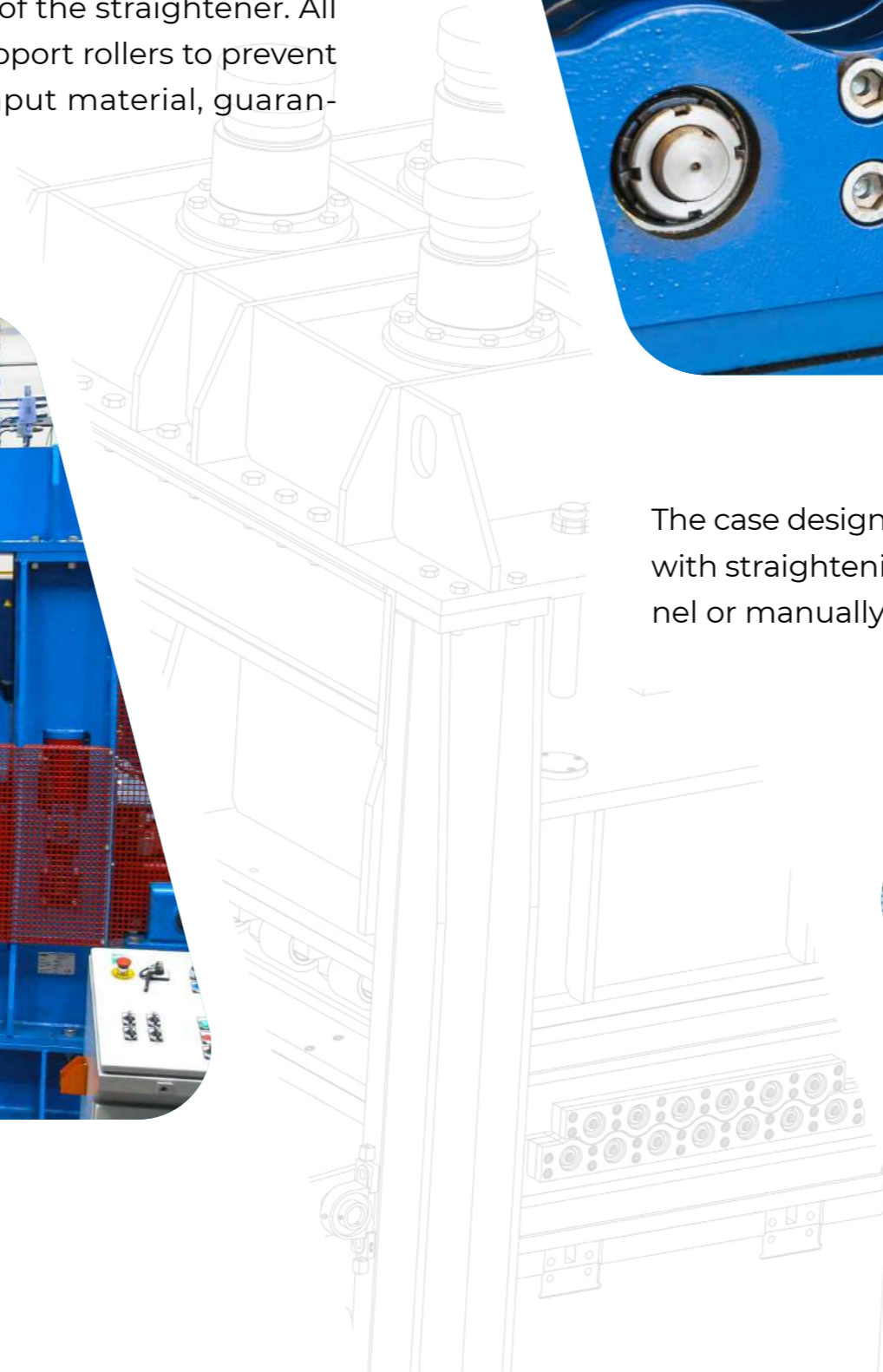
The material received by our equipment can be coiled directly onto an expanding mandrel with a lock or onto a cardboard sleeve.



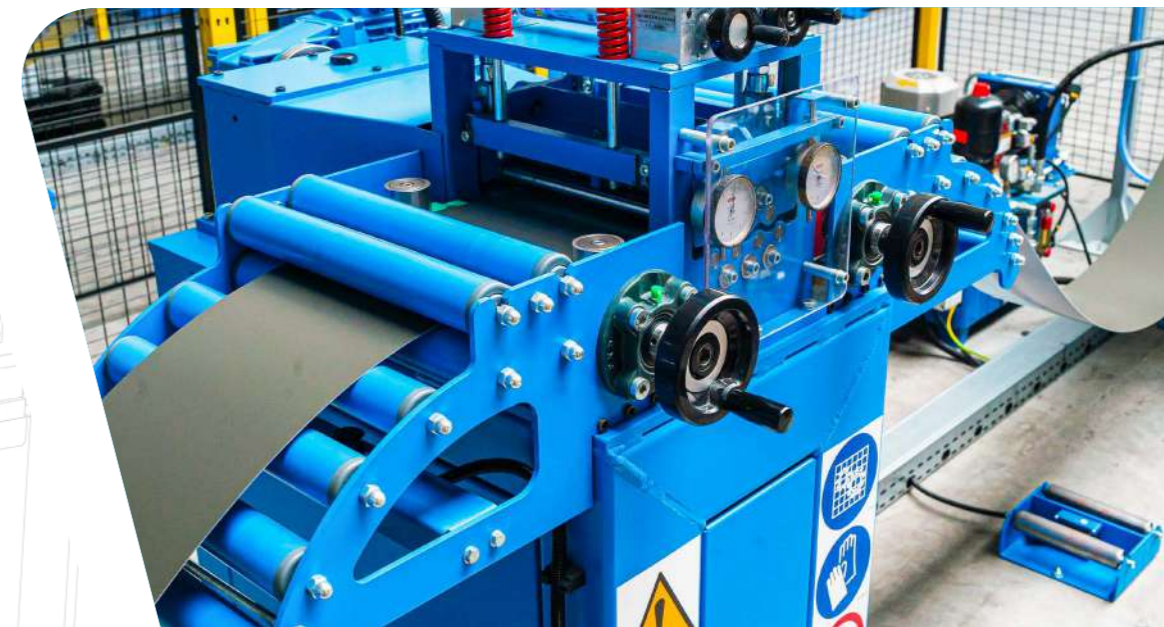
As part of the equipment for the coiler, we provide, as standard, a receiving table for coils and, as an option, an advanced evacuation system for coils not clipped after the cutting process, allowing the coiler to be quickly released for further production and clipping of coils outside the line's working zone.

STRAIGHTENING machines

INSTEEL offers a range of straightening machines for sheets with different cross-sections. The number and size of the straightening shafts is adapted to the input material and the purpose of the straightener. All straightening rollers in our machines feature support rollers to prevent them from bending while straightening the input material, guaranteeing high sheet quality.



The case design enables easy servicing. Control of the setting of the case with straightening rollers is achieved automatically from the control panel or manually in the case of simpler solutions.



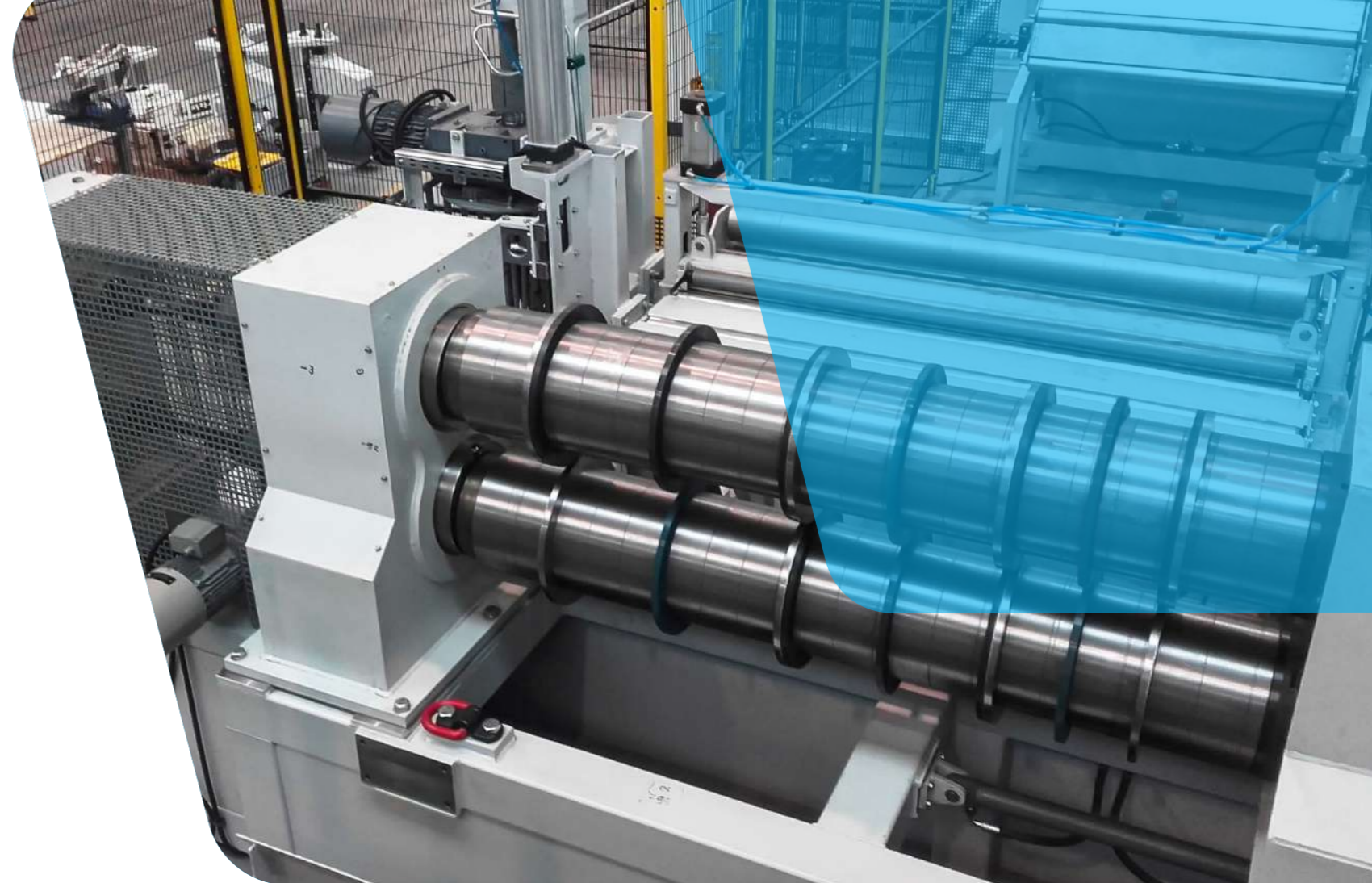
LONGITUDINAL

shears

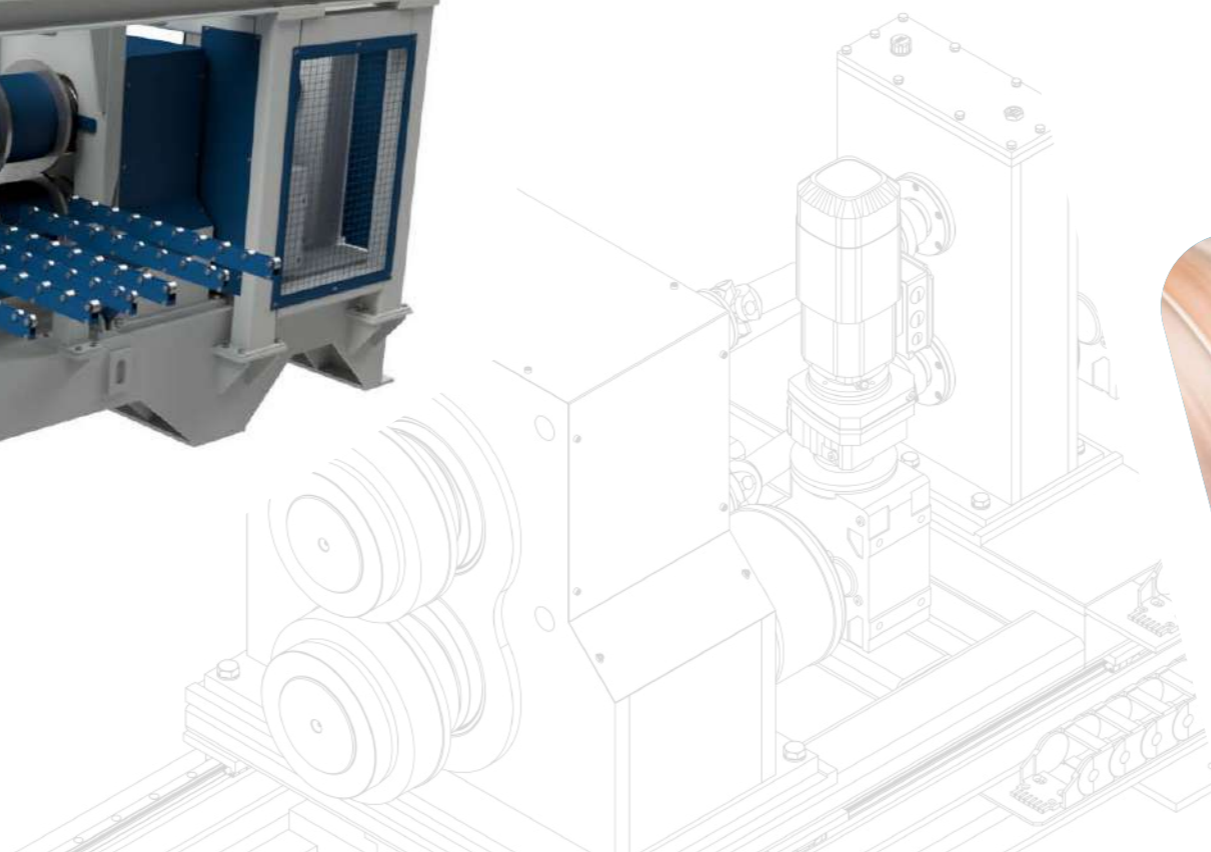
The longitudinal shears in our range are characterised by sturdy construction, high rigidity of the cutting shafts and precise bearings, which combine to guarantee the best possible quality of the cut edges.

Depending on the type of material to be cut and the size of the waste material generated during the strip trimming process, our shears are equipped with waste reels or waste cutting systems.

We supply equipment designed for cutting sheet metal in the 0.5 mm to 6.0 mm feed thickness range.



Optionally, it is possible to equip the shears with a quick-change system for circular knives, recommended if you need to make frequent changes in the cutting process.



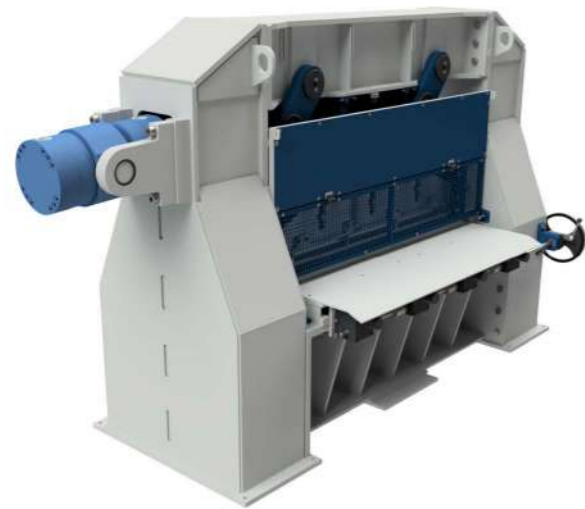
TRANSVERSE

shears

INSTEEL offers a wide range of guillotine shears for cross-cutting flat steel and shaped sections. We supply complete cutting modules for in-line installation as well as stand-alone guillotines for cutting sheets of various sizes and thicknesses.

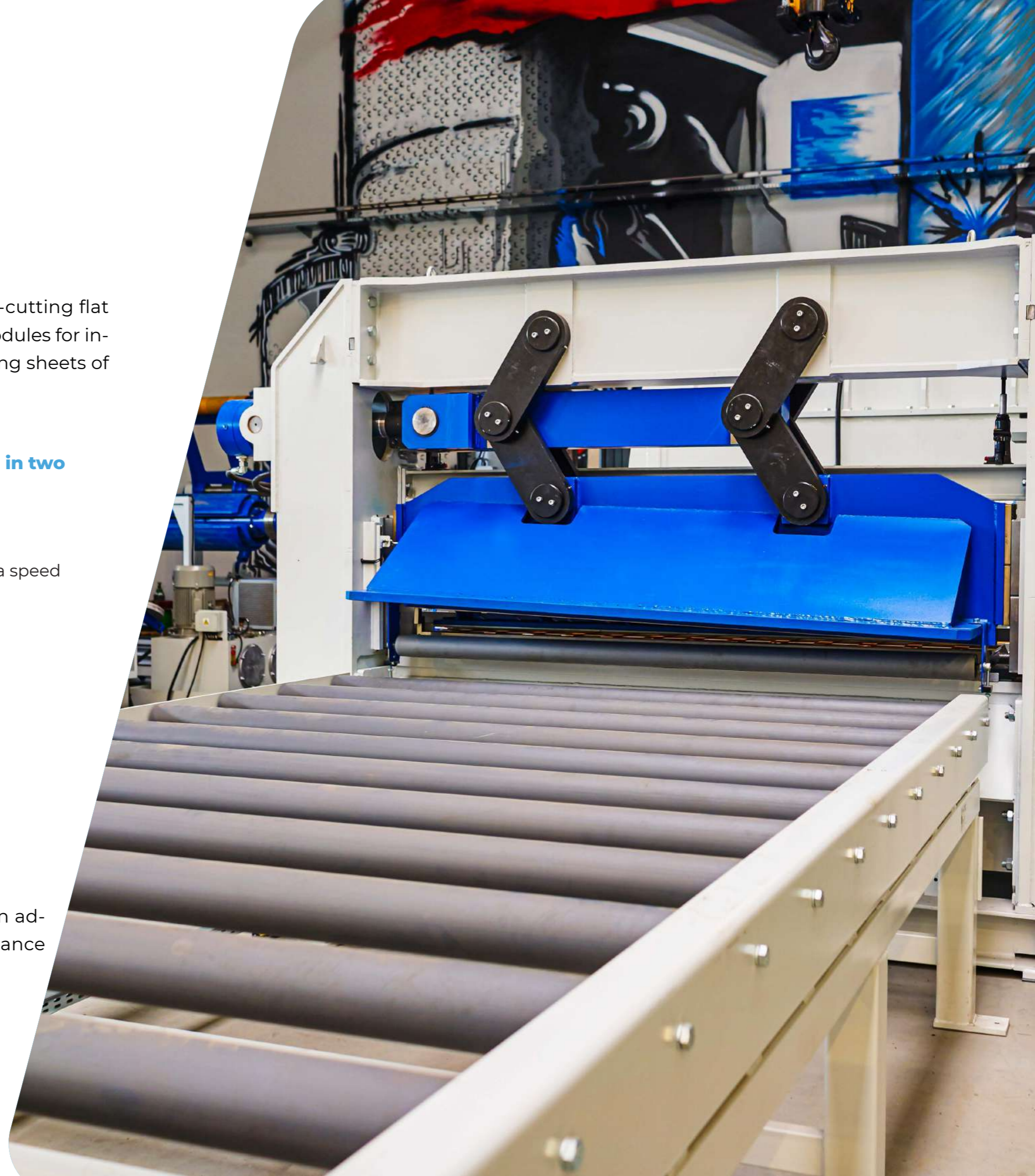
We manufacture cutting modules for in-line installation in two variants related to the operating mode of the line, i.e:

- stationary shears working with the line in start/stop mode,
- tracking shears allowing cutting without stopping the line, at a speed automatically adapted to the line operation.



Our shears use a segmented cutting knife system with an adjustable inter-knife gap, which greatly simplifies maintenance operations.

We also offer tracking saws for cutting hollow sections.

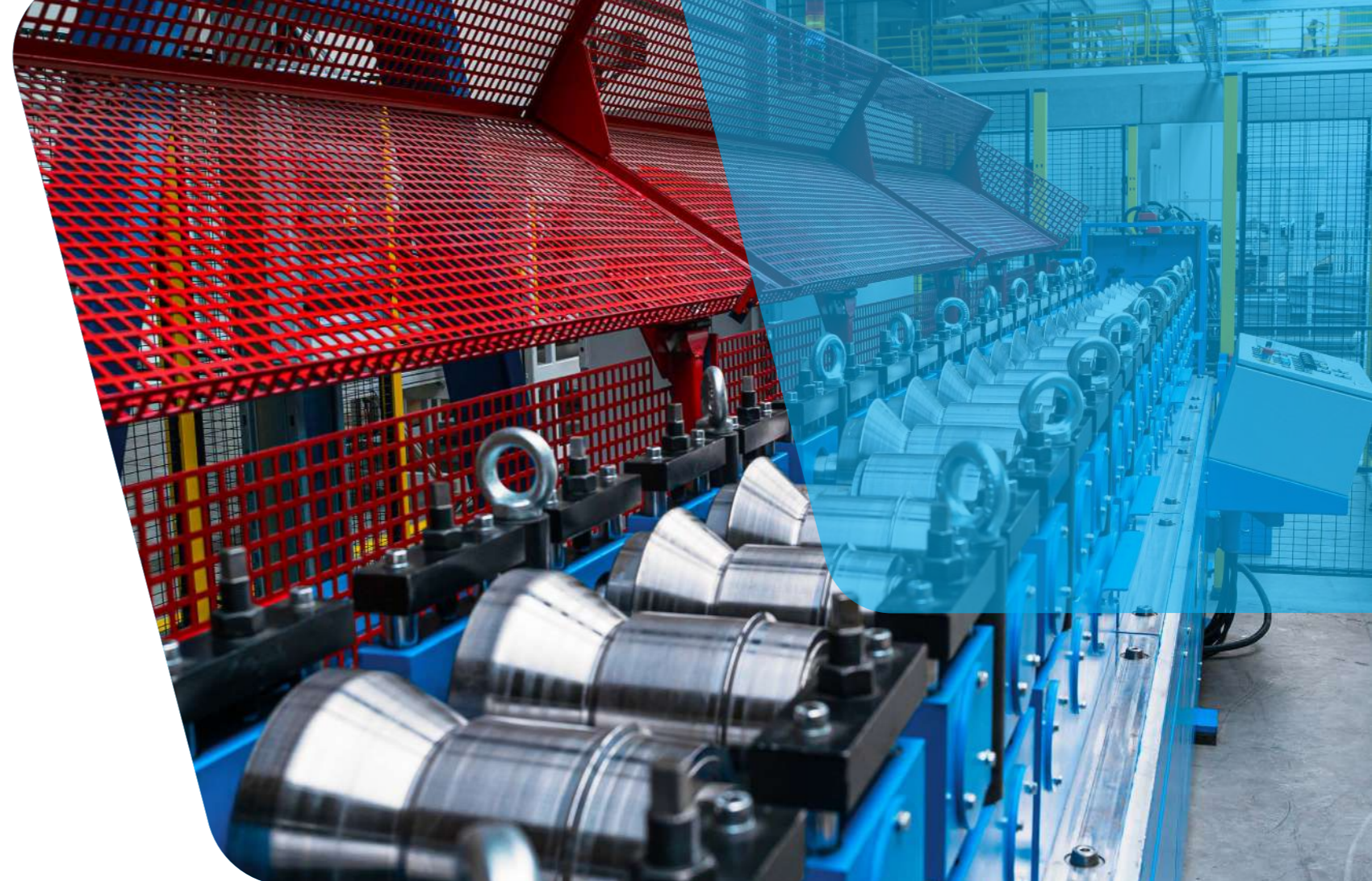


PROFILING

machines

We offer various designs of profiling machines, resulting from the range of profiles produced and individual customer requirements.

Each profile shaping machine is equipped as standard with a set of profile correcting heads and a metric adjustment system for ease of operation. The profile rollers, the outlines of which are developed using the latest computer-assisted design systems, are made from high-quality tool steel and are heat-treated to preserve their durability.



We supply profile shaping machines for both open and closed profiles:

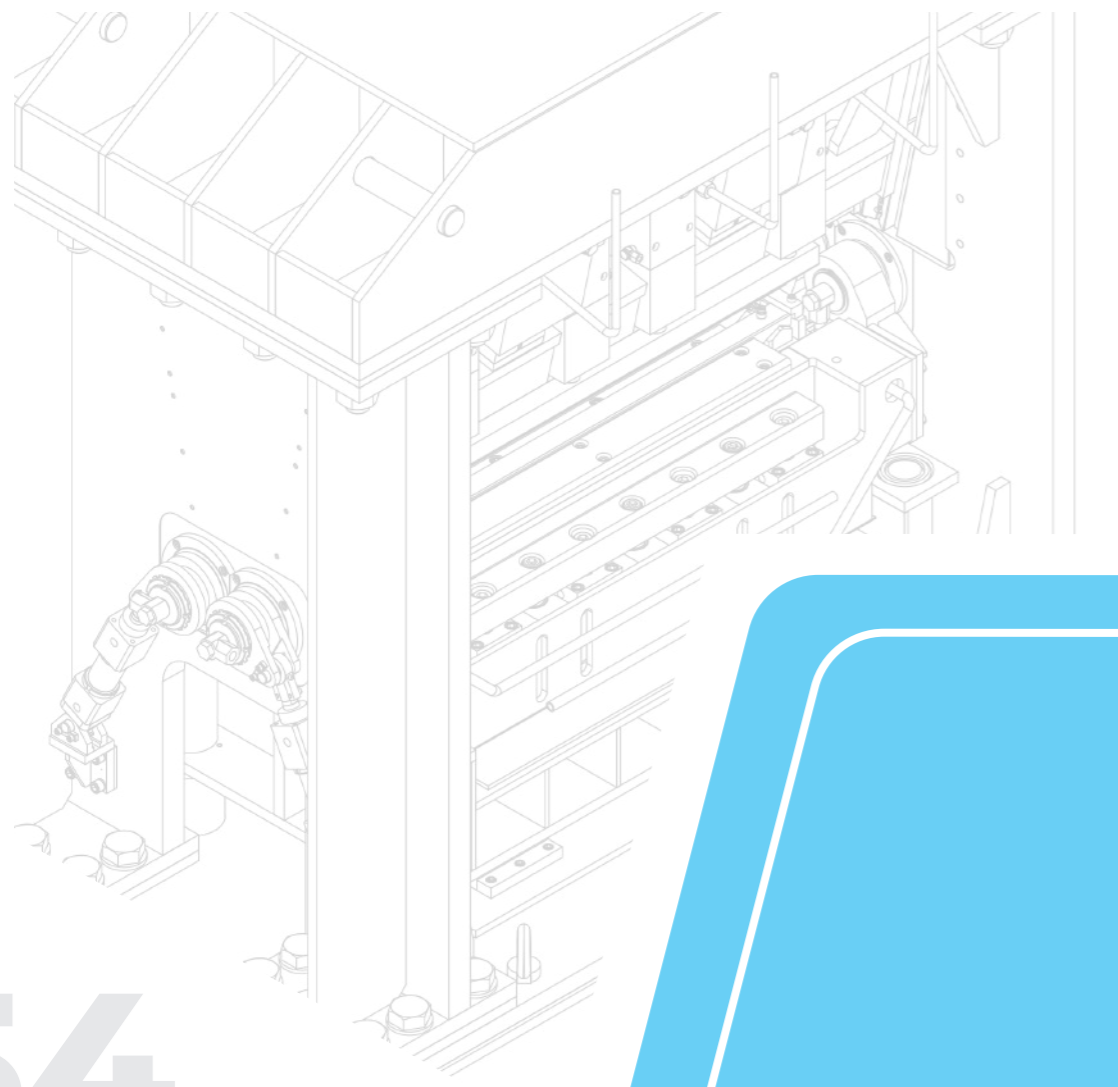
- Profiling machines with a fixed installation of profiling rollers dedicated to the production of one type of profile
- Profiling machines with interchangeable profile shaping modules and fixed installation of rollers for the alternate production of different types of profile
- Advanced adjustable profile shaping machines, in which the produced profile can be altered by changing the configuration and settings of the profile shaping machine, which are designed for the production of several types of profile.

PROFILE BENDING

machines

We supply highly-specialised bending machines for producing flat and profiled curved profiles. As standard, we manufacture four-roll bending machines. This makes it possible to obtain a curve along the entire length of the profile. It is also possible to supply the machine in a three-roll design. The bending radius is changed from the control panel. These are used in the manufacture of shell components for multi-element tanks.

The bending machines we manufacture can be fitted with an infeed system as well as a stacker for the bent profiles.

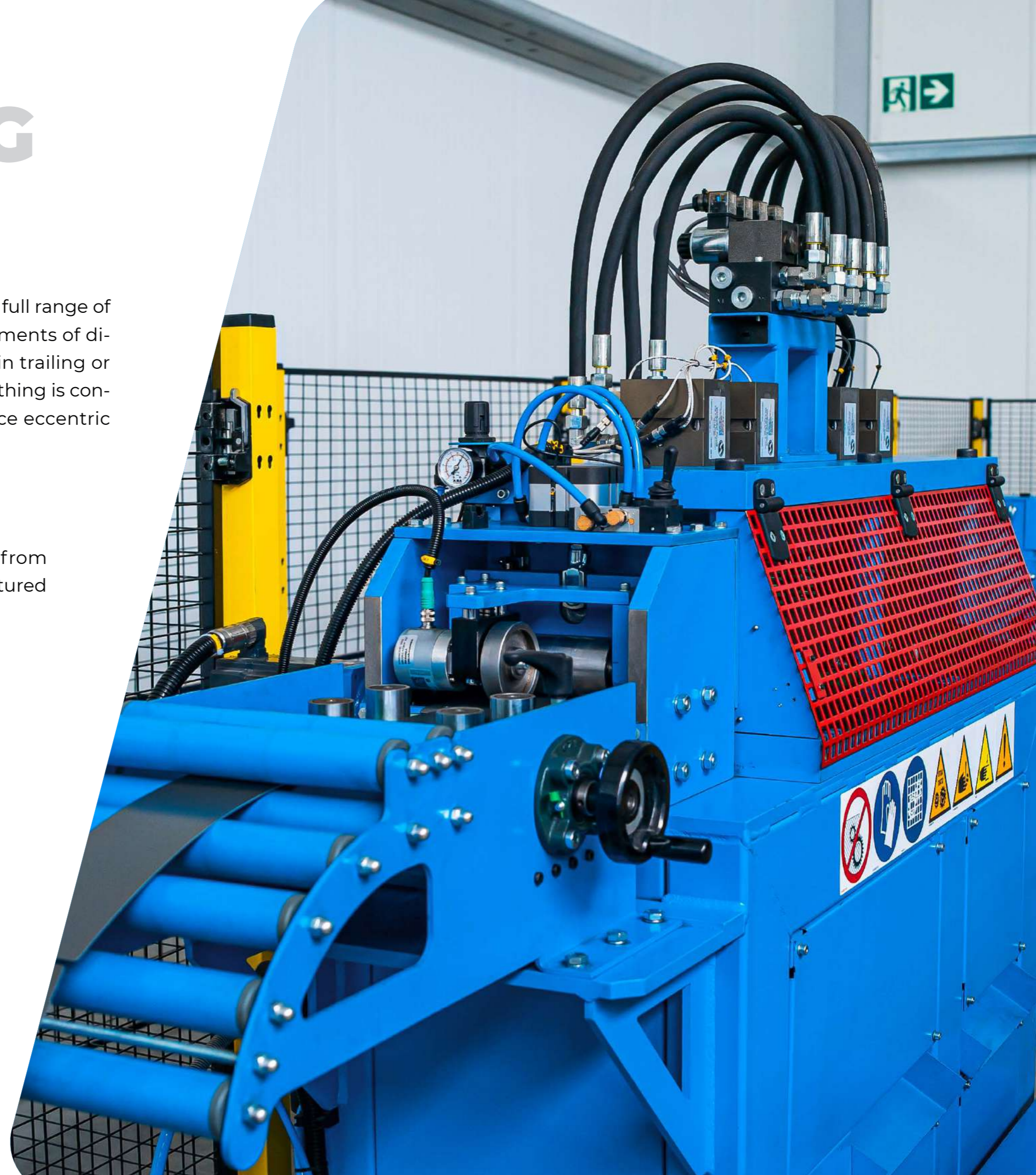


PERFORATING

units

We manufacture, supply and integrate into existing lines a full range of advanced perforating units to meet the exacting requirements of dimensional accuracy and line speed, intended to operate in trailing or start-up modes, depending on the needs of the line. Everything is constructed from a variety of designs, from high performance eccentric perforators to hydraulically powered gates.

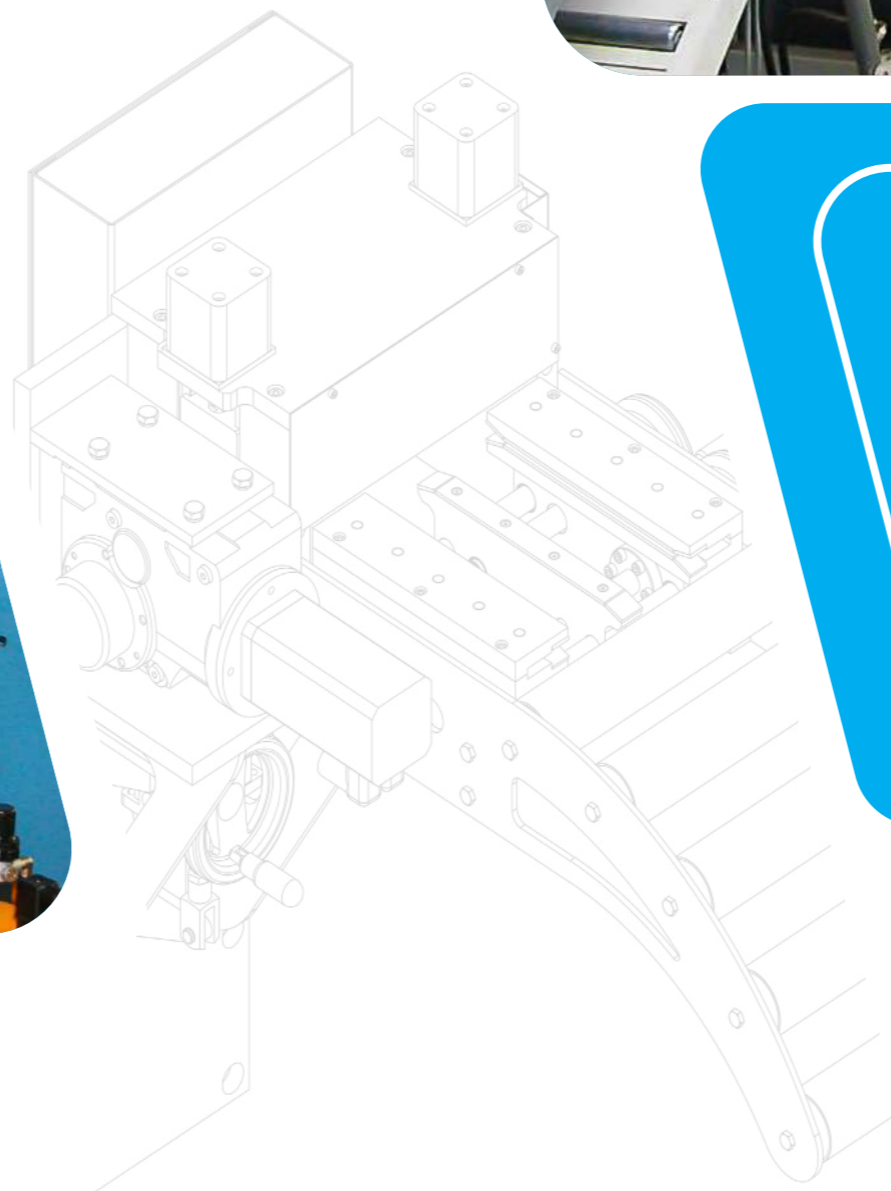
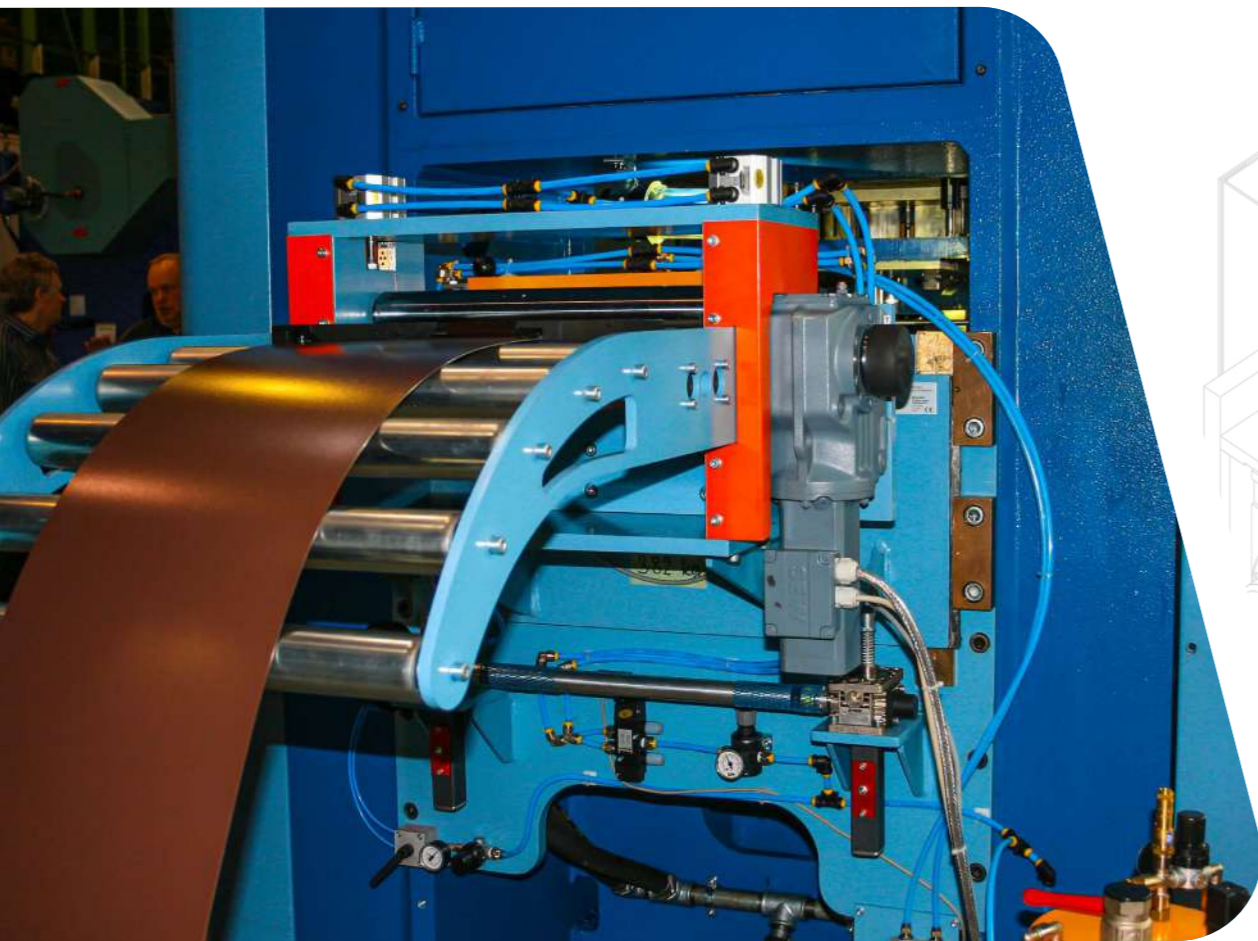
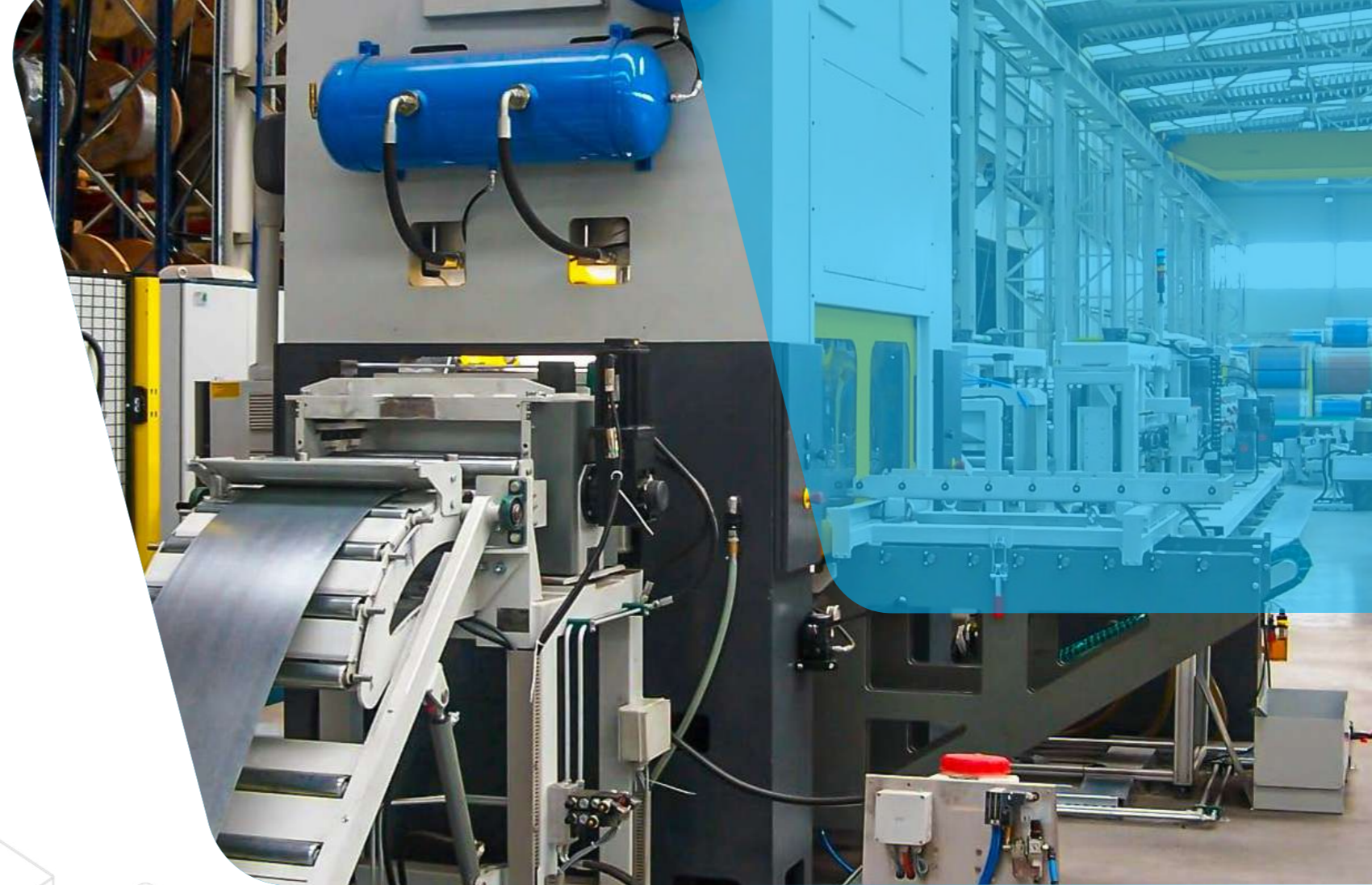
We equip them with the required set of punching tools from respected suppliers. Custom dedicated tools are manufactured in-house to the highest standards from tool steel.



ROLLER

feeders

Our roller feeders enable fast, cyclic and extremely precise feeding of steel strips. They are typically mounted directly on the press or on a support structure, with an adjustable working height for manual or automatic panel control. The feeder rollers are made of hardened steel, with a diameter adapted to the belt thickness. The feeder is also equipped with a measuring system to guarantee stable feeding.



The feeder operates in two modes: a continuous cycle in line with the press speed or a single cycle.

Feeders can be installed on presses as well as on other equipment.

BAND

accumulators

For lines intended for continuous operation, we offer band accumulators to extend the operating time of the line (circular accumulator) or to eliminate production stops altogether by means of a roller or horizontal accumulator.

The size of the accumulator and its capacity are adapted to the amount of space available and the line's capacity.

Our equipment is equipped with start- and end-of-line coupling systems that are structurally matched to the type of feedstock.

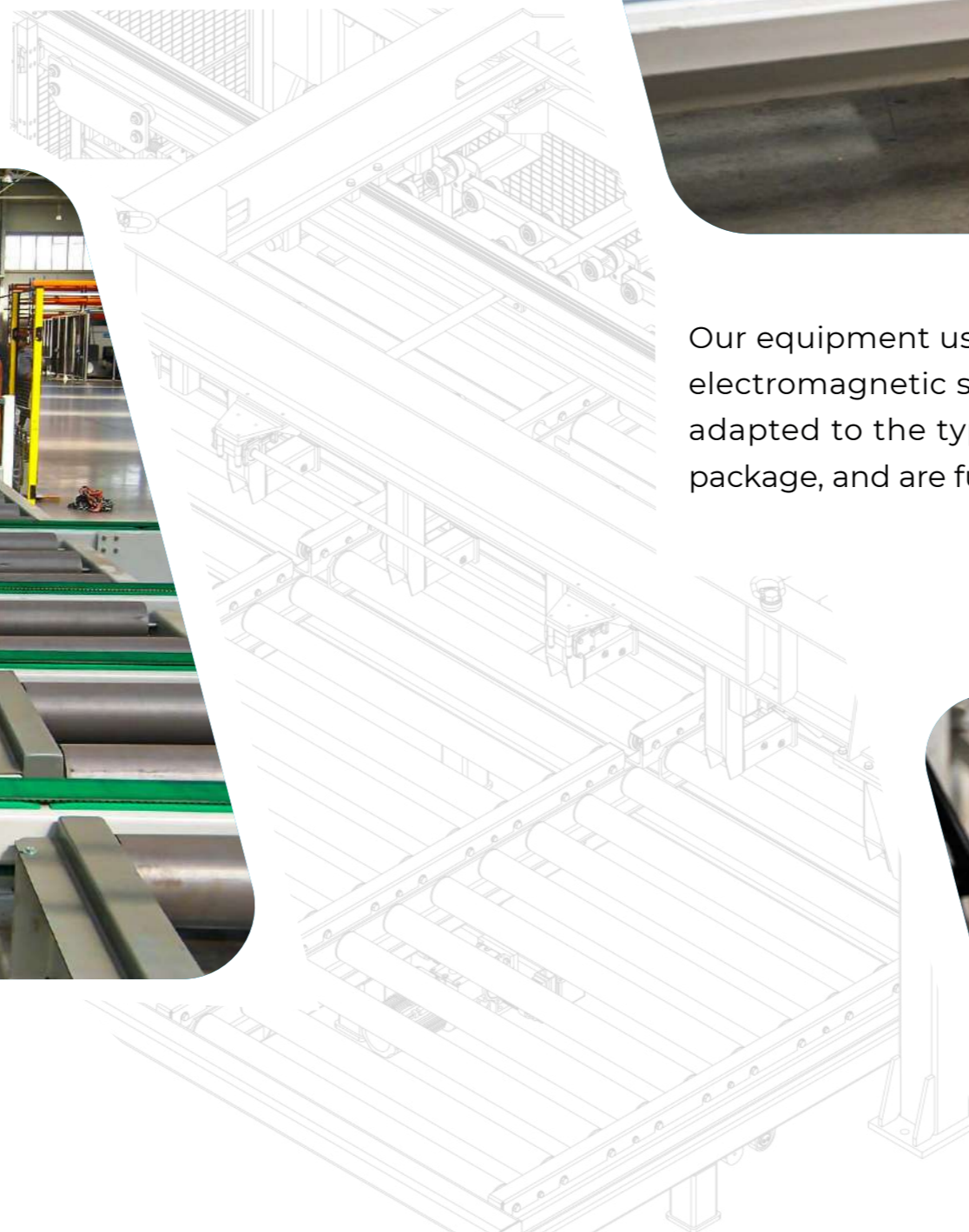
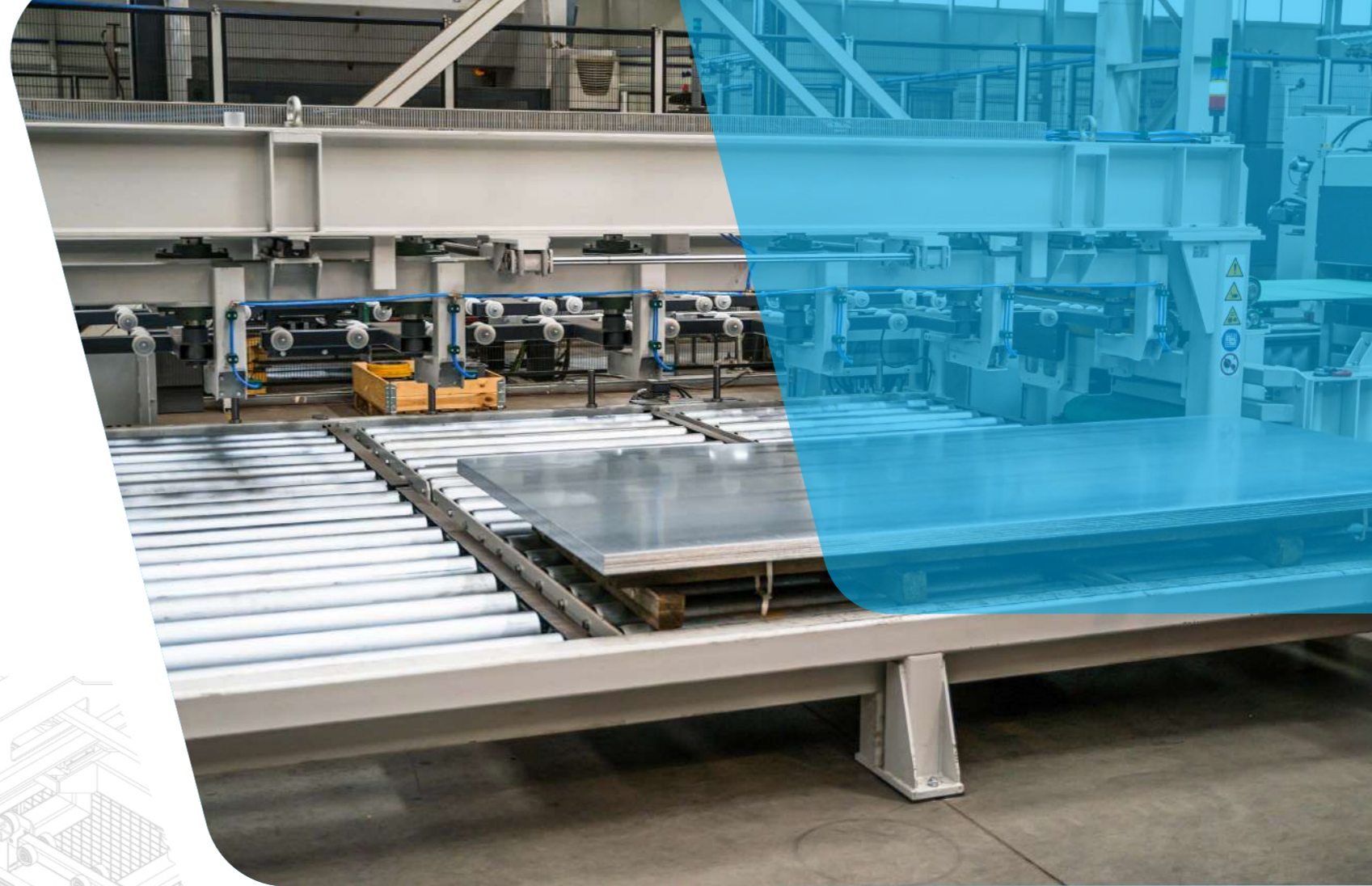
A set configured in this way allows stable production without the need to re-thread the band each time the batch coil is completed, which increases the line's efficiency.



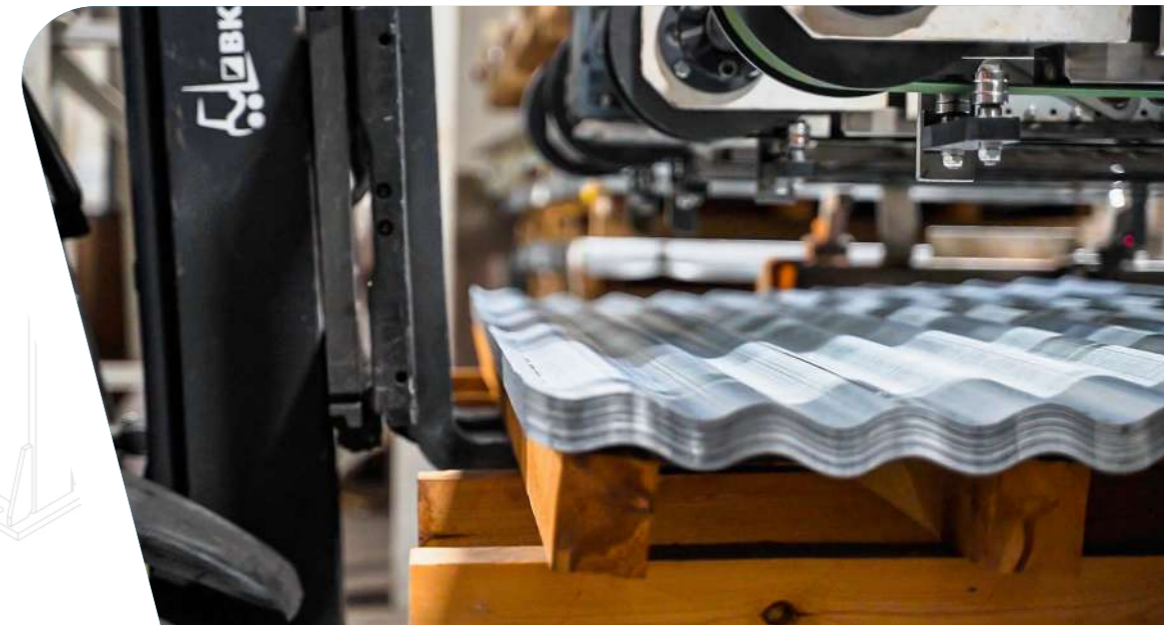
SHEET AND PROFILE

stackers

The INSTEEL product range includes highly specialised stacker machines for flat and profiled sheets as well as various types of open and closed shaped profiles.



Our equipment uses solutions based on pneumatic suction systems, electromagnetic systems, etc., with the specifications always strictly adapted to the type of profile to be stacked. The stackers form the package, and are fully automated according to your requirements.



TRANSPORTERS

and roller conveyors

We also offer roller conveyors, belt and chain conveyors plus various types of pneumatic and magnetic conveyors for the intermediate transport of flat sheets and formed profiles. Conveyors and roller conveyors are integral components of fully automatic production lines.



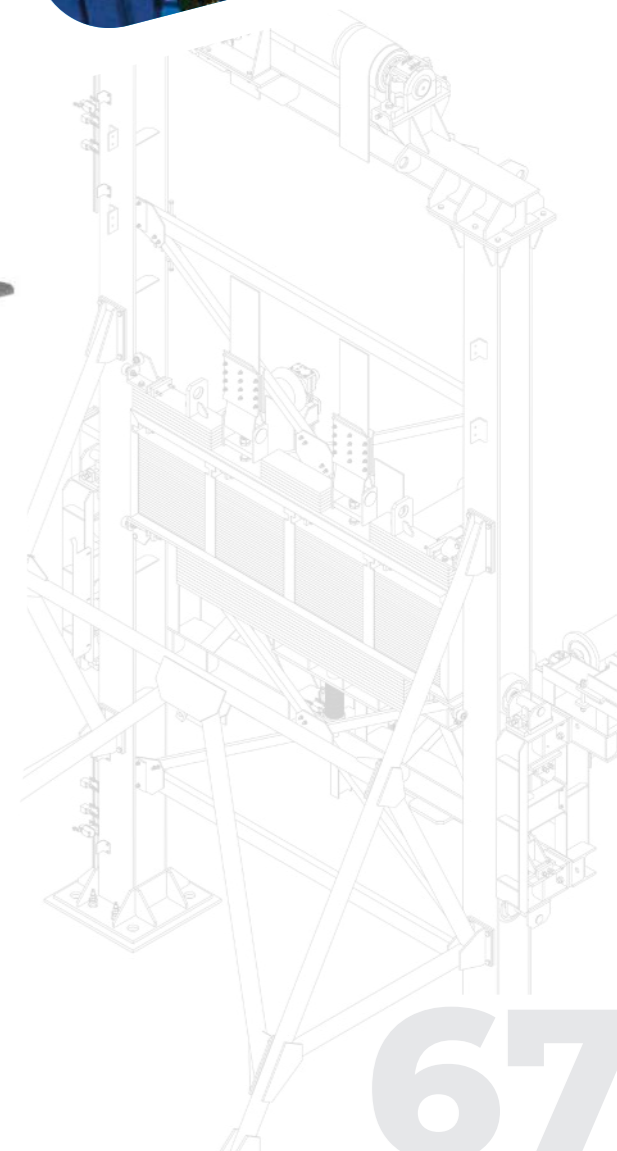
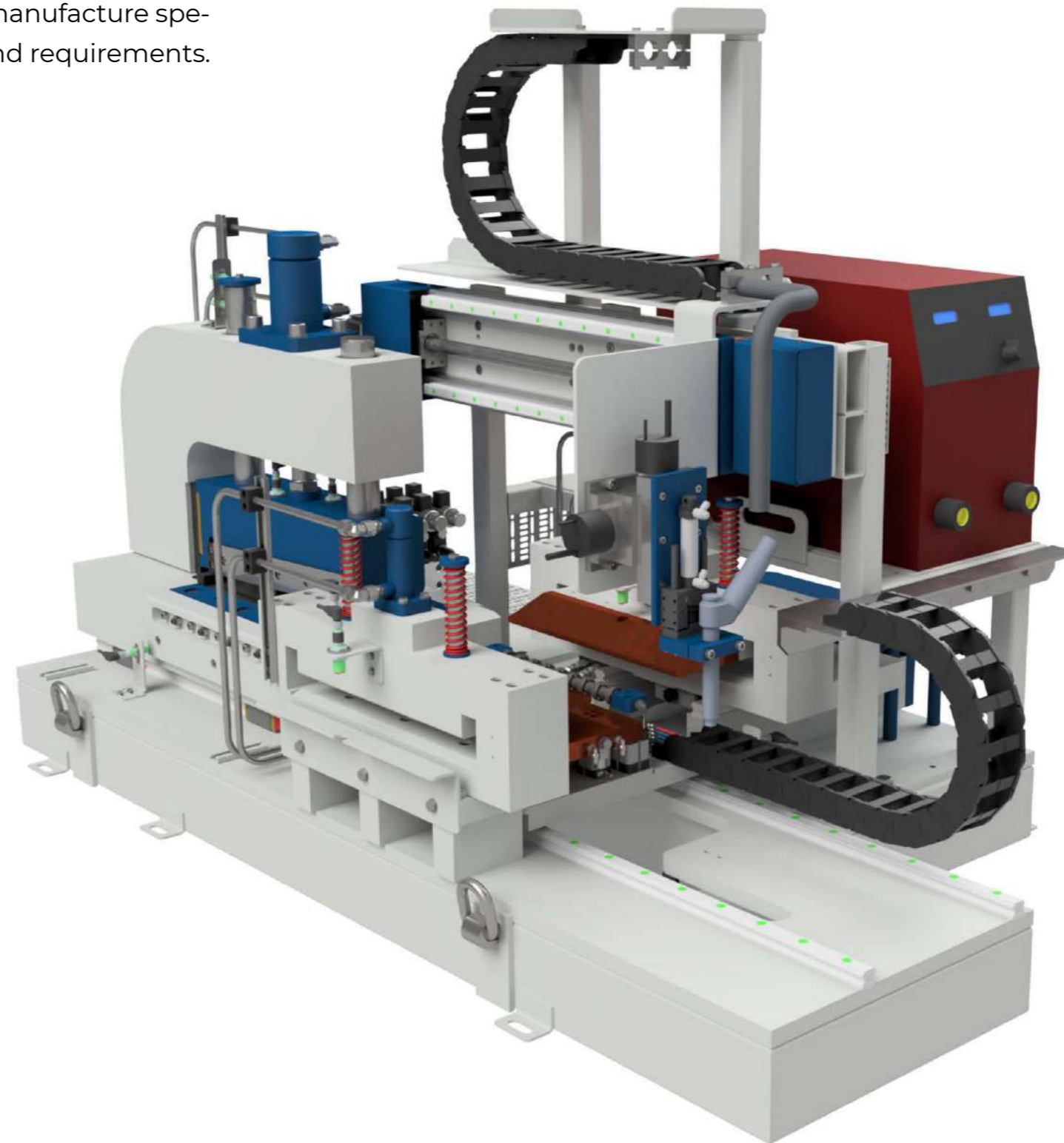
SPECIALISED

technological equipment dedicated to your needs

Our qualified engineering team is able to design and manufacture specialised equipment tailored to your individual needs and requirements.

Introduce a product to us,
and we can help you
become a production leader!

The initial information is the range and volume of the products to be manufactured. On this basis, our concepts and simulations can be developed, resulting in a prototype that meets all the requirements.



AUTOMATION

and modernisation of the (line) production processes

Within the scope of our activities, we also implement projects to automate production processes in existing or newly created production lines. Our qualified staff of programmers, automation engineers and designers allows us to comprehensively build modern, reliable solutions equipped with the latest automation and control systems.

The knowledge and creativity of our engineers, combined with components from leading manufacturers, creates control systems of the highest quality.



Our solutions are 100% tailored to your specific business needs. Each of our systems is always designed based on the detailed information you provide, which is then implemented in stages. Its operation is uncomplicated and is precisely manufactured from high-quality materials to guarantee a long service life. Our systems are created based on thorough analyses and consultations, allowing us to develop a detailed and effective plan. We create, distribute and install highly configurable technologies, whose settings are adapted to differing needs and requirements, ready to be developed in the future.

We like to work with clients for whom development is a real value, achieved through practical measures like investments in process automation innovations. By entrusting your design and installation needs to our team, you can be sure that the implementation will run smoothly and efficiently, so that the finished systems functions as intended for a long time.

SERVICES

Modernisation, renovation, service

Our service department consists of highly specialised technical staff who can offer you a wide range of maintenance services in mechanical engineering as well as industrial automation.

What do we carry out?

- renovations of entire cutting, profiling, packaging, feeding and other lines,
- renovations of individual assemblies, machines or single line equipment,
- modernisation of lines by increasing line capacity, either changing or expanding the volume of the production capacity,
- optimisation of production processes through line automation,
- ongoing servicing of lines, machines and equipment,
- periodical inspections of functioning lines,
- renovation or replacement of service parts,
- service audits,
- line relocations.

Our employees have many years of experience, which means that we can cope with even the most demanding of projects, including out-of-the-box approaches. Our service technicians have the support of the engineering department.



You are welcome to use our services!

serwis@insteel-piw.com

WHAT MAKES US DIFFERENT?

INSTEEL Sp. z o.o. combines more than 20 years of experience in the thriving sheet and strip processing market, through the high qualifications of our outstanding specialists and the use of state-of-the-art technologies.

THE FOUNDATION OF OUR STANDARDS:

Partnership and client relations

Through the identification of needs and the implementation of commissioned projects, we become an integral part of the development and an important link in the further operation of your organisation. We remain in constant contact with you before and after the completion of a given order, which in turn results in loyalty, openness and the strengthening of further business relationships. We never leave you on your own! We provide you with support at every stage of a given project. You can always count on us!

Modern and innovative solutions

In our company, we focus on continuous development and the use of new technologies, including the optimisation of production processes. As a result of our research and development activities, we repeatedly test and optimise our solutions before we supply them. The products we offer are manufactured on the basis of maximised efficiency and minimised costs in their production.

Trust

Our priority is to continuously deepen the trust of all our clients, whom we treat as if they were members of our family. It is your trust in our company, as well as in our products and services, that is our highest goal. Thanks to our strategy, INSTEEL has become a recognisable and valued brand that everyone is happy to use and trust.

A white outline map of Poland is centered on a blue background. A large white oval is superimposed over the map, containing the word "INSTEEL" in a bold, white, sans-serif font. A red location pin is placed in the southern part of the map, with a red line pointing to the text "WE ARE HERE!".

INSTEEL

WE ARE HERE!

CONTACT US!

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