

GENERAL CATALOGUE

ALUMINIUM / PVC

2024 / 25

MACHINES AND SYSTEMS FOR PROCESSING
ALUMINUM AND PVC PROFILES

pertici.it

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ALUMINUM AND PVC PROFILES



solid quality first

Pertici is a reference company in the production of solid quality technological solutions for the processing of aluminium and PVC extrusions. Pertici technologies, distributed globally, are destined for the world of window and door frames and many other industrial applications.

+25K SYSTEMS INSTALLED
WORLDWIDE

+50 YEARS OF
EXPERIENCE

Pertici traces its roots back to 1965 when Leto Pertici started Costruzioni Meccaniche Pertici, a company dedicated to the production of traditional woodworking machinery. Subsequently, the company shifted its production focus to the manufacture of machinery for the aluminium and PVC window and door industry, a production that still constitutes its current core business.

From the very beginning, the company has grown steadily, maintaining the highest quality and reliability of its solutions. Since the 1980s, it has been experiencing a strong push towards the internationalisation of its business and has built a solid and extensive distribution network, powered by a production that is totally articulated within the Italian headquarters through state-of-the-art industrial equipment.

Today, Pertici is guided by solid, deep-rooted drivers such as experience, expertise and continuous improvement: through these values shared by the entire group, the company is constantly committed to proposing solid solutions capable of generating value for its customers, through optimisation of performance, but also through outstanding functionality and ease of use. Pertici is always at the customer's side also through a global service that includes assistance, maintenance, installation, support and timely training.

Today, the company's industrial solidity consolidates the distinctive pluses that have always characterised Pertici technologies, launching the brand on the international competitive scenario with renewed energy.

FIELDS OF APPLICATION

Pertici's *solid quality* is applied in a wide range of industrial applications.

Pertici machines are built to meet a wide range of needs in different industrial sectors. From the window and door industry, the company's main focus, Pertici can claim incursions into many other industrial sectors such as automotive, naval, energy, design, lighting and many others.

Pertici machines find application in numerous sectors, each with its own specific requirements. In the window and door industry, Pertici technology is recognised and distinguished for its productivity, functionality, precision, and wide range. In the automotive sector,

Pertici sawing machines and machining centres are appreciated for their reliability, flexibility and machining precision.

Each reference sector brings with it different needs to which Pertici responds effectively by providing its expertise, energy, care and customisation. Each reference enriches the know-how of Pertici, which, by means of this marked multiple disciplines, is a candidate as a partner of absolute quality for a large industrial panorama.



DOORS &
WINDOWS



RAILWAY



BUILDING



AUTOMOTIVE



MARINE



ENERGY



DESIGN &
FURNITURE



LIGHTING



PERTICI TEAM

Experience and innovation: the strong and dynamic heart of Pertici

+100 EMPLOYEES

At Pertici, innovation drives an experienced team committed to creating high-quality, high-performance and reliable innovative solutions. A team that responds dynamically to the challenges of an ever-changing market.

On the strength of solid experience gained over the years, the Pertici team has been able to structure itself and evolve over time, thus remaining in tune with the changing needs of an increasingly globalised market.

The professional skills and expertise developed over the years have enabled the company to create innovative and reliable products for both the window and door industry and the industrial sector.

The company culture encourages a climate of synergetic trust and recognises in the human factor a key element that, dedicated to continuous improvement, is able to guarantee the best in terms of technology and customer service.



PERTICI CARE

Pertici Care: Pertici customer care focuses on digitalisation, competence, reliability and care

Pertici Care is Pertici's assistance service that ensures optimal customer care and support. From remote assistance to scheduled maintenance, every aspect is taken care of to guarantee fast, effective responses and to keep a privileged listening channel open for each customer.

Pertici Care is structured to improve customer service and support, focusing on greater efficiency and speed of response, thus reducing machine downtime. Pertici Care offers a wide range of solutions to improve the customer experience:



Remote customer care

Remote assistance via connection tools and video calls for more detailed and immediate problem analysis.



Training & Installation

Customized training and specialist installation with ongoing post-installation support.



On-site assistance

Availability of qualified technicians for advice and quick troubleshooting.



Check-up and scheduled maintenance

Customized programs with discounts on the purchase of spare parts.



Spare parts

Spare parts warehouse for quick supplies.



Modifications and refitting of pertici machinery

Services for customizing and updating machinery according to customer requirements.

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ALUMINIUM

 **MACHINING CENTERS**

Pertici’s machining centres are the ideal tool for performing various types of machining on aluminium, PVC, steel and light alloy profiles in general.

They represent the most advanced solution to combine great productivity, flexibility and guarantee high quality standards. Their main use embraces two areas, the window and door and the industrial one.

The range consists of 4 and 5-axis machines with working lengths from 3.2 to 9 m, all interfaced with 3D CAD-CAM software, and designed for connection with third-party applications.

The R&D department also offers a machine customization service to meet specific customer work requirements.

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P527 | P529 ESSENTIAL



AL PVC

P527 | P529

ESSENTIAL

CNC machining center with 5 controlled axes, designed to perform milling, drilling, threading, cutting and end milling operations on bars or workpieces, even of large dimensions, in aluminium, PVC and light alloys. Choose your machining center to your specific needs, guaranteeing flexibility and maximum efficiency!

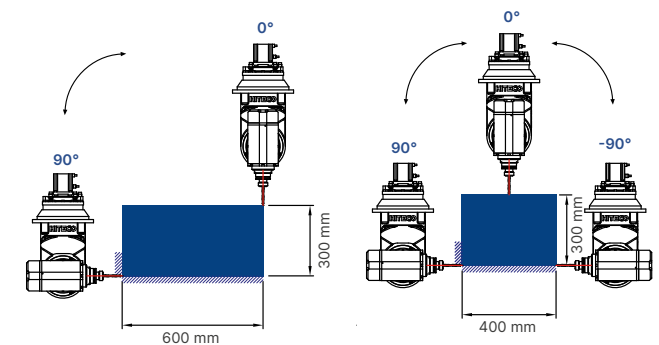
Two versions are available, 7m and 9m with two different working modes: a single working area or the pendulum mode with two independent working areas offering customized solutions to maximize productivity. The electro spindle with a power of 8.5 kW in S1 (11 kW as an option) and HSK-F63 cone connection, allows even heavy-duty machining such as that typical of the industrial sector.

The combination of unlimited movements of the A and C head axes allows the electro spindle to position itself at any angle. From $\pm 90^\circ$ for the A-axis to $\pm 320^\circ$ for the C-axis, freedom of movement is the key to amazing results. The center has an integrated 10-position rotating magazine on the carriage with the ability to store standard milling cutters and disc milling cutters with a maximum diameter of 180 mm.

The 400 mm blade tool with HSK-F63 cone connection is housed separately in a dedicated magazine, exploiting the 5 interpolated axes of the electro-head to perform compound cuts, straight cuts, end milling and trimming operations. Depending on the length,

the center can be configured with 8 or 12 automatic clamps. The arrangement along the X-axis is a key feature of these centers. Each clamp operates independently, allowing extraordinary precision during machining.

This system offers an incomparable flexibility in workpiece positioning and machining. A remarkable feature of these centers is the ability to perform profile head machining after cutting and separating the parts. This means that the machine can continue working even after the main cutting phase, greatly increasing the overall efficiency of the production process.





P527 | P529 PREMIUM



AL PVC

P527 | P529

PREMIUM

CNC machining center with 5 controlled axes, designed to perform milling, drilling, threading, cutting and end milling operations on bars or workpieces, even large ones, made of aluminium, PVC, light alloys and steel. Choose your machining center to your specific needs, guaranteeing flexibility and maximum efficiency!

Two versions are available, 7mt and 9mt with two different working modes: a single working area or the pendulum mode with two independent working areas offering customized solutions to maximize productivity.



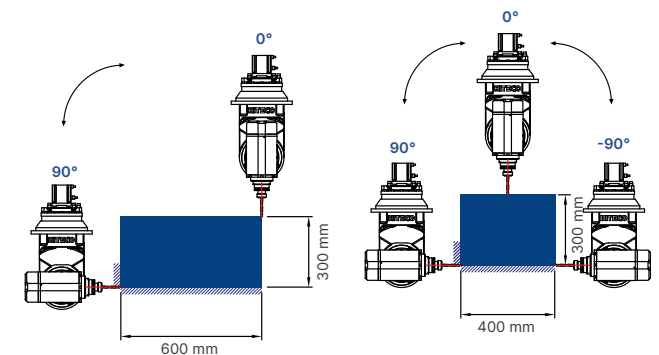
The electro spindle with 11 kW power in S1 and HSK-F63 cone attachment allows even heavy-duty machining such as that typical of the industrial sector. The combination of unlimited movements of the A and C head axes allows the electro spindle to position itself at any angle. From $\pm 90^\circ$ for the A-axis to $\pm 320^\circ$ for the C-axis, freedom of movement is the key to amazing results. The center has an integrated 16-position rotating magazine on the carriage with the ability to store standard milling cutters and disk milling cutters with a maximum diameter of 180 mm. The 450 mm blade tool with HSK-F63 cone connection, housed separately in a dedicated magazine, takes advantage of the 5 interpolated axes of the electro-head to perform compound cuts, straight cuts, end milling and trimming operations. Depending on the length, the center can be configured with 8 or 12 automatic clamps. The arrangement along the X-axis is a key feature of these centers. Each clamp operates independently, allowing extraordinary precision during machining. This system offers incomparable flexibility in workpiece positioning and machining. A remarkable feature of these centers is the ability to

perform profile head machining after cutting and separating the parts. This means that the machine can continue working even after the main cutting phase, significantly increasing the overall efficiency of the production process.

THE ADVANTAGES OF THE PREMIUM VERSION:

In addition to what is already present in the Essential version, the Premium version is enriched with interesting solutions, here we highlight some of them.

- > On the clamps there is an **additional support** that lengthens the support surface.
- > The entire movement system of the clamps, managed by **pipe-holder chains**, is inserted inside the base. This eliminates any type of obstruction on the bed surface, facilitating the extraction of chips and scraps deriving from cutting operations.
- > **The tool length measuring device**, integrated into the machine software, is crucial in industries where accuracy is critical. This is essential to ensure that operations are carried out with the highest possible precision and speed, directly affecting the quality of the work
- > The **grease distribution system** plays a vital role in ensuring that the recirculating ball guides run smoothly. Proper grease application reduces friction, minimizes wear and improves the overall efficiency of the machine.





P527 | P529 PREMIUM PLUS



AL PVC

P527 | P529

PREMIUM PLUS

CNC machining center with 5 controlled axes, designed to perform milling, drilling, rigid threading, cutting and end milling operations on bars or workpieces, even large ones, in aluminium, PVC, light alloys in general and steel. Choose your machining center to your specific needs, guaranteeing flexibility and maximum efficiency!

Two versions are available, 7mt and 9mt with two different working modes: a single working area or the pendulum mode with two independent working areas offering customized solutions to maximize productivity. The electro spindle with encoder is a powerful solution in the industrial sector. With a power output of 11 kW in S1 and the HSK-F63 cone connection, it is able to deal with heavy machining with great efficiency. The encoder, a key component of the electrospindle, ensures the highest rotation accuracy. Some machining operations require low speed, such as milling with large tools or rigid tapping. The encoder proves to be a reliable helper even in these situations, guaranteeing the rotational stability that is essential for precise results. The combination of unlimited movements of the A and C head axes allows the electro spindle to position itself at any angle. From +/- 90° for the A-axis to +/- 320° for the C-axis, freedom of movement is the key to amazing results. The center has an integrated 16-position rotating magazine on the carriage with the ability to accommodate standard milling cutters and disc milling cutters with a maximum diameter of 180 mm. The 450 mm blade tool with HSK-F63 cone connection, housed separately in a dedicated magazine, exploits the 5 interpolated axes of the electro head to perform compound cuts, straight cuts, end milling and trimming operations. Depending on the length, the center can be configured with 8 or 12 automatic clamps. The arrangement along the X-axis is a key feature of these centers. Each clamp operates independently, allowing extraordinary precision during machining.

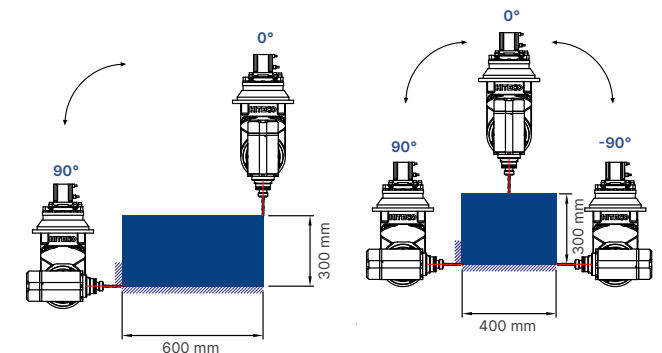


This system offers incomparable flexibility in workpiece positioning and machining. A remarkable feature of these centers is the ability to perform profile head machining after cutting and separating the parts. This means that the machine can continue working even after the main cutting phase, significantly increasing the overall efficiency of the production process.

THE ADVANTAGES OF THE PREMIUM PLUS VERSION:

In addition to what is already present in the Premium version, and in addition to the **electrospindle** already mentioned in the description, the Premium Plus version is enriched with interesting solutions. Here are some of them.

- > The machine has a **fast 120 m/min X-axis**, an interesting solution that improves the cycle of the workpiece.
- > The internal cleaning of the machine is entrusted to a **chip conveyor belt** (optional). This component plays an important role in keeping the machine in perfect working condition, ensuring a longer service life.
- > One of the distinguishing features is the special **clamps absolute encoder**. This isn't just a technical detail: it's the key to achieving maximum positioning accuracy. With this encoder, you can be sure that you know the position of the clamps at all times, ensuring perfect machining.





P304 | P307 | P309



AL PVC

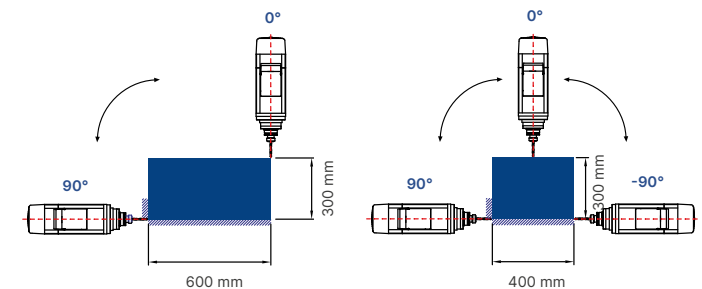
P304 | P307 | P309

CNC machining center with 4 controlled axes, designed to perform milling, drilling, threading, cutting, end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel.

Three versions are available, 4mt, 7mt, 9mt with two different working modes: a single working area or the pendulum mode with two independent working areas.

The electro spindle with power of 8.5 kW in S1 (10 kW as an option) with HSK-F63 cone connection, allows even heavy-duty machining operations such as those typical of the industrial sector. In all versions, the electro spindle rotates continuously along the A-axis from 0° to 180°, machining in any position within this range.

The centre has a 10-position rotating magazine housed on the carriage with the possibility of accommodating standard milling cutters and disc milling cutters. Depending on the version, the center is configured with 8 or 12 automatic clamps that are positioned along the X axis in automatic mode via a mobile carriage or independently with a dedicated axis (as an option). A 500 mm blade unit for 90° cutting is available as an option.





P104 ESSENTIAL



AL PVC

P104

ESSENTIAL

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel, up to 2 mm thick. Adapt your machining centre to your specific needs, guaranteeing flexibility and maximum efficiency!

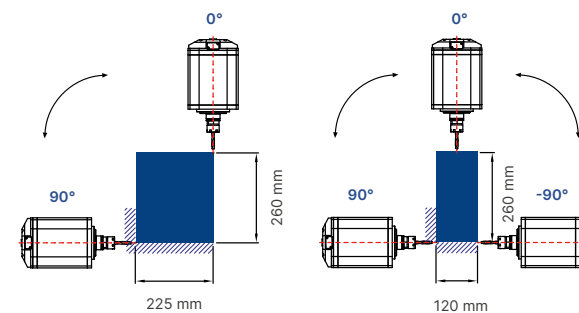
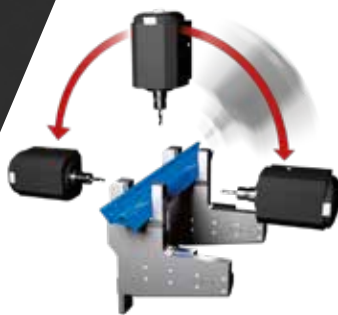
The centre has a pneumatic left-hand zero stop that allows profiles up to 3.2 m to be machined, a length that is doubled with the optional installation of a second zero stop.

The electro-spindle with 5 kW power in S1 and HSK-F50 cone attachment allows machining on the profile at any angle between 0° and 180°.

Profile clamping is ensured by four clamps with reduced overall dimensions to allow maximum machinability on the three faces of the profile and the possibility of loading even relatively short workpieces. The maximum cross-section of the clamp can accommodate a profile of 225 mm in base and 260 mm in height. The arrangement along the X axis is a key feature of these centres. Thanks to the mobile carriage, the clamp is hooked and positioned with maximum precision, guaranteeing optimized positioning over the machining operations of the profile and maximum safety against possible collisions.

The P104 machining centre has an 8-position tool magazine, fixed to the centre of the bed.

The moving-column machine concept also allows high work rates to be achieved with a relatively compact machine overall size, offering the operator excellent ergonomics when loading/unloading workpieces.





P104 PREMIUM



AL PVC

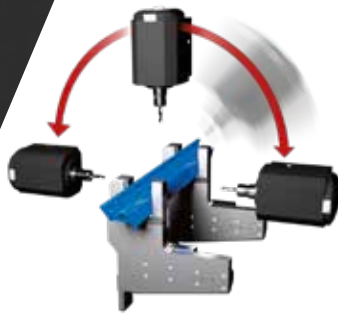
P104

PREMIUM

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel, up to 2 mm thick. Adapt your machining centre to your specific needs, guaranteeing flexibility and maximum efficiency!

The centre has two standard pneumatic zero stops, which define a working range of 3.2m, with the possibility of doubling the working length.

The electrospindle with 5 kW power in S1 and HSK-F50 cone attachment allows machining on the profile at any angle between 0° and 180°.

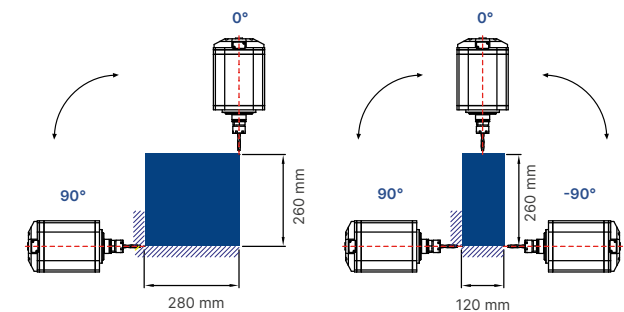


Profile clamping is ensured by four space-saving clamps to allow maximum machinability on the three faces of the profile and the possibility of loading even relatively short workpieces. Two aspects empower this version: an increased clamp support to 280 mm and special adjustable clamp pads that clamp the workpiece with the most extreme care, avoiding clamping the profile on unsuitable or too flexible points. The arrangement along the X-axis is a key feature of these centres. Thanks to the mobile carriage, the clamp is hooked and positioned with maximum precision, guaranteeing optimized positioning over the machining operations of the profile and maximum safety against possible collisions.

The P104 machining centre has an 8-position tool magazine, fixed to the centre of the bed, with an integrated tool length measuring system. As an option, this machine allows a second tool magazine to be installed and thus manage 16 tools in total.

The P104 Premium is equipped with a full covering and safety side tunnels for machining long bars.

The moving-column machine concept also allows high work rates to be achieved with a relatively compact machine overall size, offering the operator excellent ergonomics when loading/unloading workpieces.





P107



AL

PVC

P107

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel up to 2 mm thick. Adapt your machining centre to your specific needs, guaranteeing flexibility and maximum efficiency!

The centre has two standard pneumatic zero stops, which define a 7m working range in two different modes: a single working area or the pendulum mode with two independent working areas, allowing customised solutions to maximise productivity.

The electrospindle with 5 kW power in S1 and HSK-F50 cone attachment allows machining on the profile at any angle between 0° and 180°.

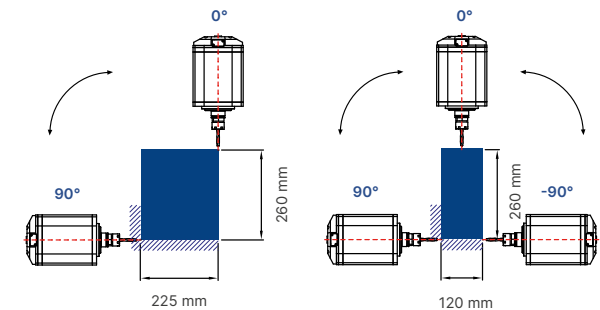
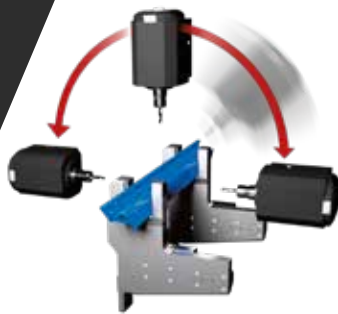
Profile clamping is ensured by four space-saving clamps to allow maximum workability on the three faces of the profile and the possibility of loading even relatively short workpieces. The maximum cross-section of the clamp can accommodate a profile of 225 mm in base and 260 mm in height. The arrangement along the X axis is a key feature of these centres. Thanks to the mobile carriage, the clamp is hooked and positioned with maximum precision, guaranteeing optimized positioning over the machining operations of the profile and maximum safety against possible collisions.

As an option, the machine can be equipped with an independent

clamps positioning system, which increases the productivity of the machine.

The P107 machining centre has a full covering and a dynamic 8-position tool magazine on the work area, which allows fast pick-up from any point of the machine.

The moving-column machine concept also allows high work rates to be achieved with a relatively compact machine overall size, offering the operator excellent ergonomics when loading/unloading workpieces.





PVC

In this section, we provide a comprehensive overview of all equipment dedicated to processing PVC profiles. This includes all preparatory activities before the welding phase.

We cover the entire process, starting from cutting and proceeding through processing stages, including the execution of special operations. We present integrated lines of cutting and machining centers connected through benches. Additionally, we also propose standalone cutting and processing centers, as well as specific equipment for iron cutting and special machines.

SFC CUTTING & MACHINING LINES

| | |
|-------|----|
| U-SFC | 30 |
| Z-SFC | 30 |

MACHINING CENTERS

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|--------|----|
| FC2000 | 32 |
|--------|----|

CUTTING CENTERS

| | |
|-------------|----|
| SC55 SC65 | 34 |
| P-IRON | 36 |

CNC END MILLING MACHINES

| | |
|-----|----|
| P45 | 38 |
| WLS | 39 |



U-SFC | Z-SFC



AL PVC

U-SFC | Z-SFC

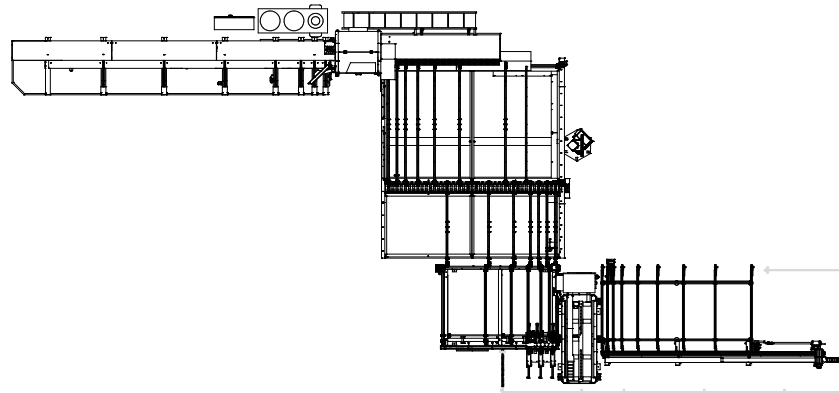
Pertici's cutting and machining lines are developed from the integration of a cutting centre with one or more machining centres. These meet the requirements of customers who prefer an integrated solution rather than separate machines.

A central element in this configuration is the connecting table, which offers the advantage of automatic transport of the cut parts directly to

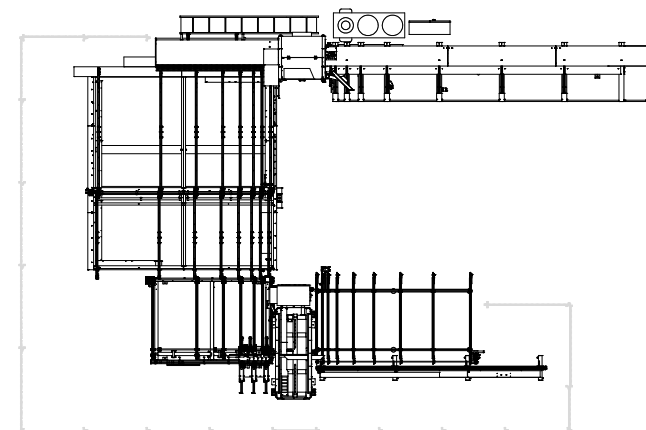
the machining centre, eliminating the need for operator intervention and the associated human errors.

The station does not only simplify the process, but also makes it possible to handle the iron reinforcement. Depending on the customer's specific needs and production context, we can offer two types of lines: U-SFC or Z-SFC.

Z-SFC LAYOUT



U-SFC LAYOUT





FC 2000



AL PVC

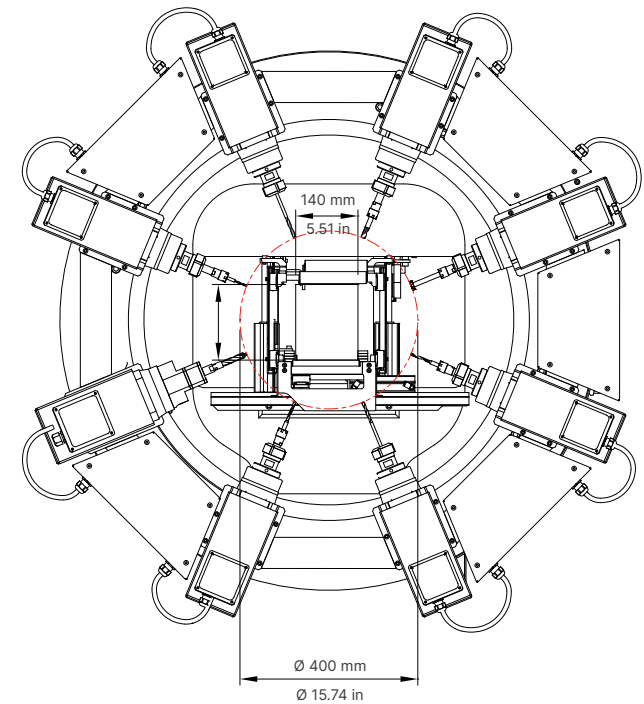
FC 2000

FC 2000 is a CNC machining and automatic screwing line. It consists of a profile loading magazine, a central multi-spindle ring module and an unloading magazine.

The machine's production cycle allows all work phases, screwing, drilling and milling, to be carried out in sequence. The profile is moved by a motorized gripper, adjustable in width and height, which grips the profile and brings it to the work area.

The screwing unit is housed on the loading table in a fixed position and adjusted in height by means of a special motor; as an option there is the possibility of adding 2 screwing units (total 3 screwing units) which have the function of improving the cycle time. Eight electro spindles are installed on the 4-axis CNC milling module, which allow machining on the entire contour of the workpiece however it is oriented.

The loading magazine has a capacity of 7 bars and the machinable section is 140 mm in width by 140 mm in height. The length of the profiles ranges from a minimum of 300 mm to a maximum of 4000 mm. The working unit is equipped with a soundproof cabin in the central operating area, which not only protects the operator but also reduces the noise impact on the environment. FC2000 is interfaced by Pertici's 3D CAD-CAM software, which is prepared for connection with third-party applications.





SC55 | SC65



AL PVC

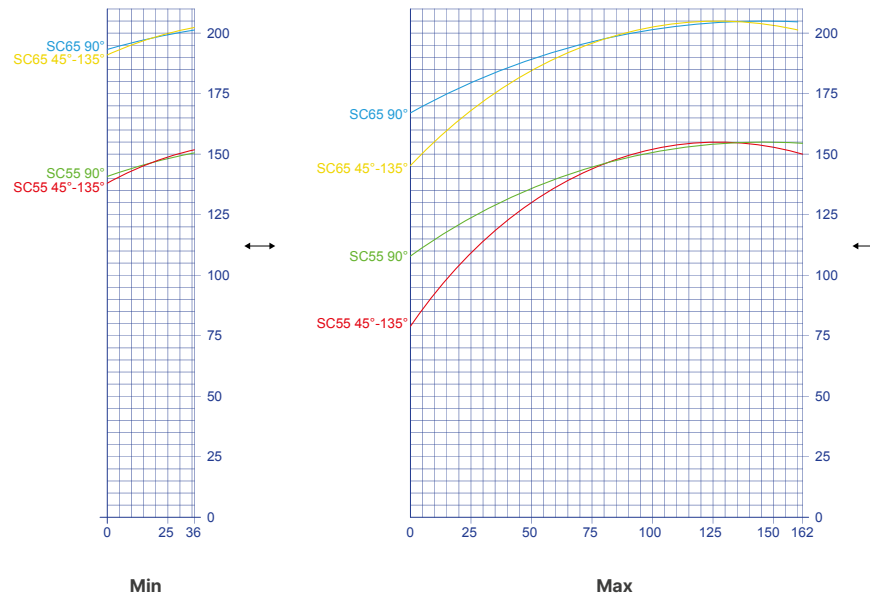
SC55 | SC65

CNC cutting center with 1 controlled axis, designed to cut PVC profiles with the highest cutting speed and quality.

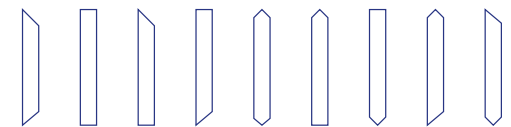
The machine loads the profiles from the bar stock, cutting and unloading the workpiece, in complete autonomy and without operator assistance. The working direction is available according to customer requirements, from left to right and vice versa. The software, developed entirely by Pertici Industries, ensures improved management of the work cycle and cutting lists, automatically interfacing with the main cutting list processing programs available on the market.

The automatic bar loading unit has a capacity of up to 10 bars with a maximum length of 6.6 m and is equipped with a bar presence detection device. Thanks to the arrangement of the belts, short lengths of up to 400 mm can be loaded. The cutting unit with \varnothing 600 mm blade (SC 65) and \varnothing 500 mm blade (SC 55) performs cuts at three main angles, 45° - 90° - 135° (intermediate degrees as an option).

The profile is clamped during cutting by a special centering device, which allows the blade rotation center to be positioned in the center of the profile section, so that even wedge cuts can be performed automatically. The cutting unit is fully guarded with a front door for free access to the cutting area for calibration, cleaning and maintenance purposes. At the rear, the center is equipped with a special evacuation system for cutting waste and swarf. The automatic unloading unit places the cut pieces in a special storage bench equipped with a safety photocell with a capacity of 12 pieces.

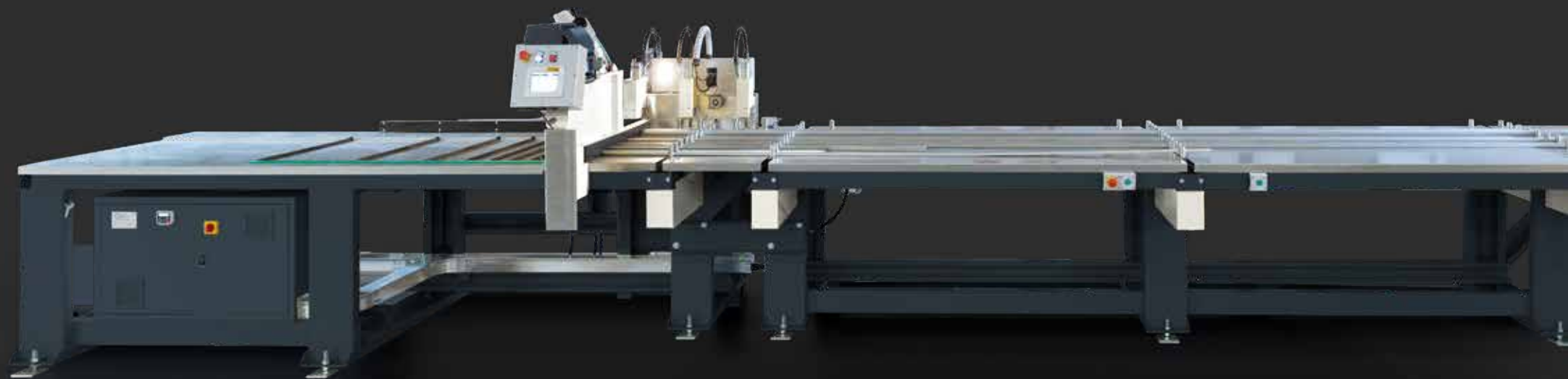


TYPES OF CUTTING





P-IRON



P-IRON

The P-Iron cutting center is the ideal solution to perform the automatic cutting of iron reinforcements, for PVC windows and doors in a fast and precise way.

Extremely flexible and reliable, thanks to highly innovative technical solutions, it can guarantee a piece cut every 7 seconds.

Thanks to this extraordinary production capacity, P-Iron can work as a single unit and therefore receive from the management system in use at the customer's premises the cutting list of reinforcements that the operator can label (optional) and place on special trolleys.

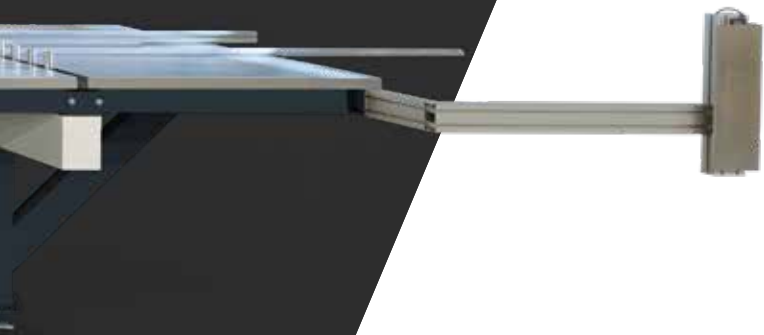
Alternatively, P-IRON can cut in parallel with the pvc cutting center,

always providing the correct reinforcement for the relative PVC piece just cut; this solution allows you to produce with great efficiency: a single operator can run the PVC cutting centre and the P-Iron.

Other advantages include the great ease of use, the extremely intuitive and simplified software, and extremely compact dimensions

The cut is done dry, thus avoiding any problems with the welding of the PVC.

The machine can be supplied with left or right load depending on the layout needs.





P45



AL PVC

The CN end milling machine P45 has been designed to perform a partial contouring operation on the head of the profile.

This operation allows the profile to be prepared for the next welding operation resulting in a seamless fusion. Thanks to its 3 interpolated axes and a specially shaped milling cutter, the machine performs the milling operation following the profile shape previously loaded on the CAD-CAM. The machine can accommodate 4 profiles simultaneously to optimize cycle times.

Thanks to the powerful CAD-CAM working on a 3D basis, all operations are easily editable by choosing speed and feed parameters. The 3D graphics give the operator the actual material removal that the machine will then perform, limiting programming errors and possible collisions.





WLS



AL PVC

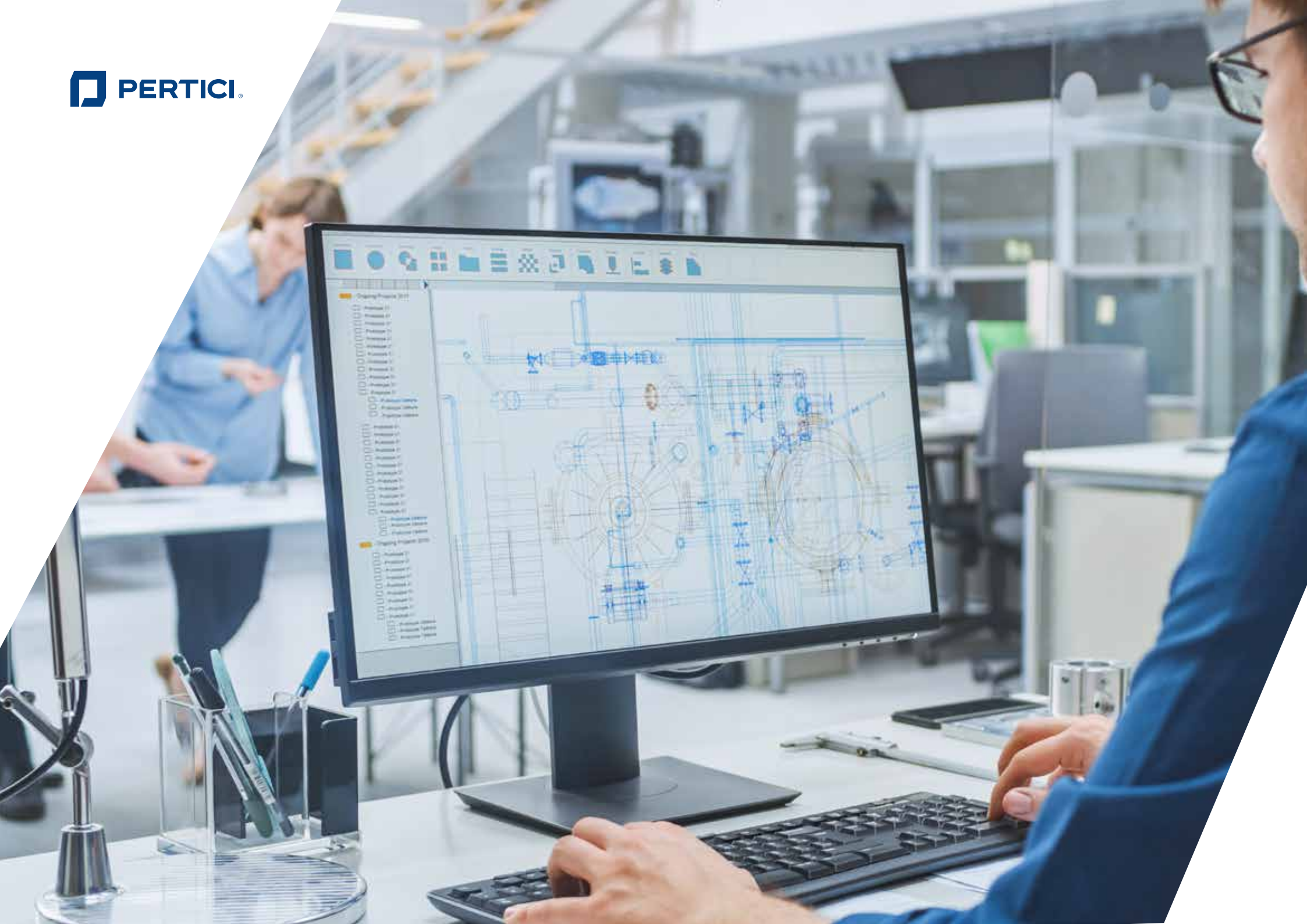
The CN end milling machine WLS is designed to perform specific milling operations on PVC profile heads.

The specificity of this machining makes it possible to obtain an innovative angle coupling by re-proposing the 90° joint of the wooden window frame. The aesthetic effect is also combined with the advantage of no longer having to carry out cleaning on this side, the joint itself being finished after the normal welding operation.

The profiles are clamped in pairs in two special clamps where they are machined as vertical and as horizontal piece of the square; the different types of machining are managed by a series of shaped tools housed on a special tool magazine.

The machine can handle end machining both on the internal and external side of the window, following the requirements.





SOFTWARE

Pertici's software tools represent the means of connection between the operator and the machines.

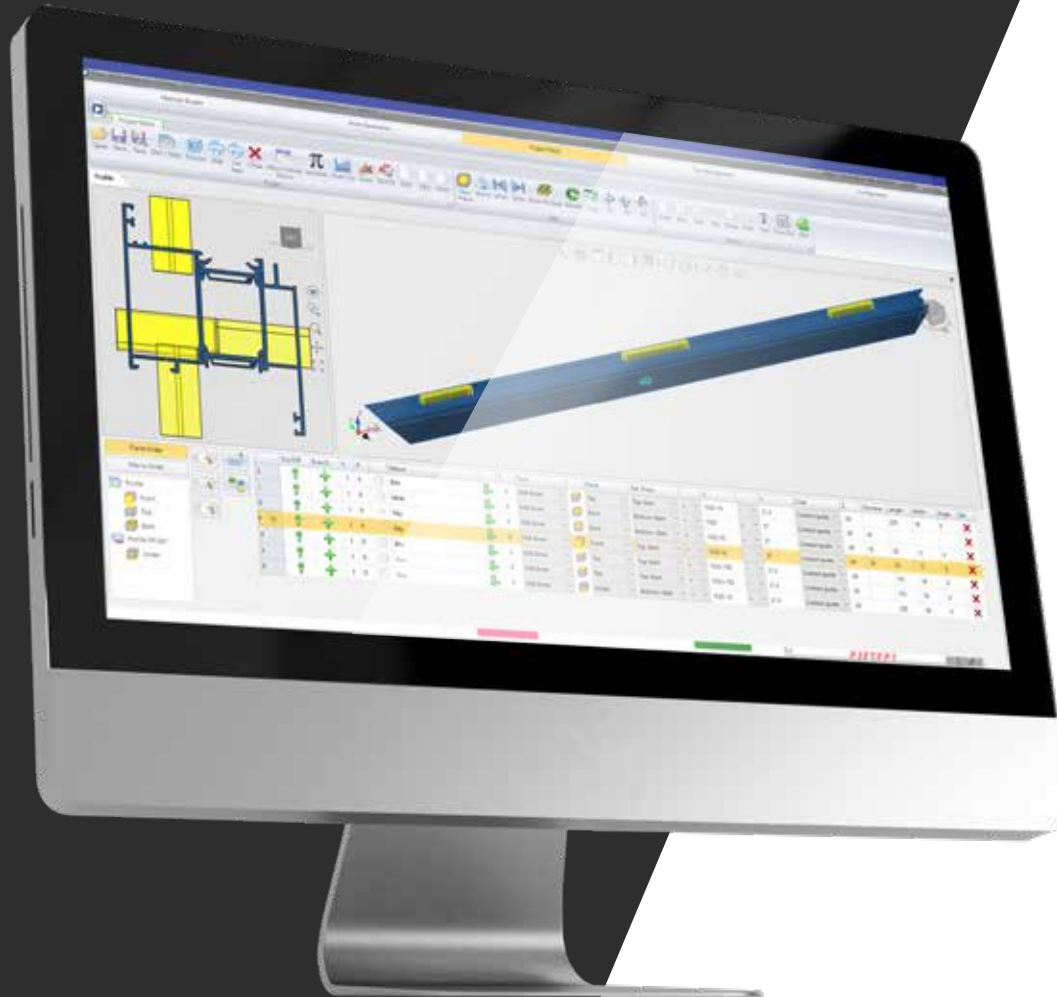
They have been developed with the aim of facilitating all human/machine interface operations, for the generation of work lists for cutting centers and double heads and for generating macros for machining centers. This software allows you to carry out final simulations for verification and calculation of work times and interface with third-party software.



| | |
|--------|----|
| P-CAM | 42 |
| FC-CAM | 44 |



P-CAM



Pertici's CAD/CAM platform for the aluminum sector has been designed to manage the entire work order, from 3D design to production.

The "P" series software was created to help technicians and operators develop small and large work orders with Pertici's CNCs. The use of this software allows you to obtain excellent results in terms of machine cycle and processing times.

The range consists of four applications, all complementary and integrated:

P-CAM | P-SIMULATION | P-REPORT | P-INTERFACE

Their ease of use and integration allow you to graphically define all drilling, milling, cutting operations and move on to the actual production phase in short steps.

Thanks to a simple programming logic, the operations that the operator must perform are extremely facilitated.

P-CAM

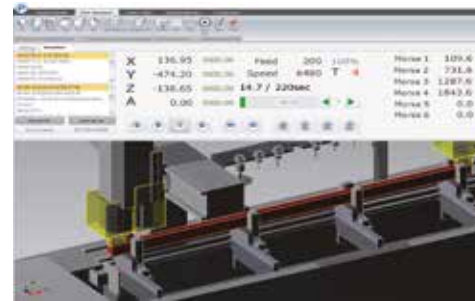


P-CAM is our 3D graphic software for the programming of all processes.

Import two-dimensional geometries in DXF / DWG format and three-dimensional geometries in Step format. A sorted archive of macros (holes, slots, rectangular slots, locks, etc.) makes the programming of machining fast and intuitive and thanks to a series of advanced tools it is possible to manage disc cutters, tapping cycles, creation of free figures and in the P-CAM/5 version the management of the bar with multi-piece function.

Tool management and clamp positioning with anti-collision function complete the structure of this powerful software.

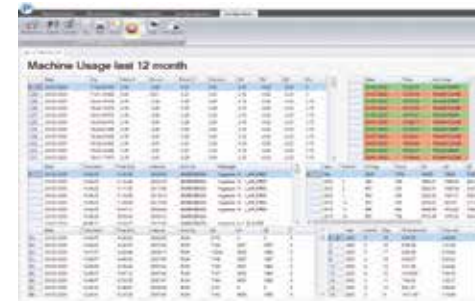
P-SIMULATION



P-SIMULATION is our work cycle simulation software.

It is perfectly integrated with the P-CAM platform and its use allows the entire work cycle to be simulated as well as the estimated workpiece working time in real time. P-SIMULATION is the ideal tool for the operator who wants to improve the cycle time by acting on machining priorities and the type of tool to be used.

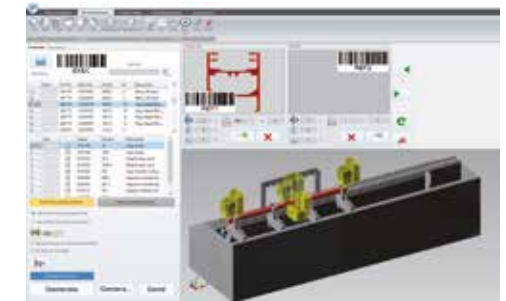
P-REPORT



P-REPORT is our software for recording all machine functions.

Specifically, it analyzes the distance traveled by the axes, the working time of the electrospindle, the number of programs executed, etc. Thanks to this software, a basic diagnosis is also implemented for the management of routine maintenance.

P-INTERFACE



P-INTERFACE is our software that coordinates the interfacing of our machining centers with external window management programs.

It then manages the data input in completely digital form thanks to the reading of the label with Bar-code and transforms it into machine language for the processing of profiles.



FC-CAM



Pertici's CAD/CAM platform for the PVC sector has been designed to manage the entire work order, from 3D design to production.

The software of the "FC" series was created with the aim of interfacing perfectly with the most popular window management programs. The prerogative of the program is to digitize the entire process with the use of special guns for reading barcodes.

Thanks to a user-friendly programming logic, the operations that the operator must perform are extremely facilitated.

ON-BOARD MACHINE



The main interface of the software gives us a general overview of the process in progress. It displays the sequence of parts loaded with related information, gives us a real-time preview of the machining process, and provides basic functionality for operator use and display of axis parameters.

PROFILE ARCHIVE



Thanks to the two-dimensional drawing in dxf or dwg format, we can generate the profile library in 3D format, consequently associating all the information that interests the piece for its machining, such as:

- cutting angle
- gripping point and relative offsets
- loading direction on the machine
- parameters for clamps management

MACHINING ARCHIVE



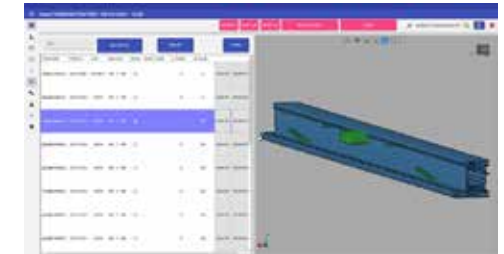
With simple steps, it allows management of the machining operations already defined on the machine for each profile (create, edit, delete, duplicate and save).

The geometry of each machining operation is fully programmable by the operator.

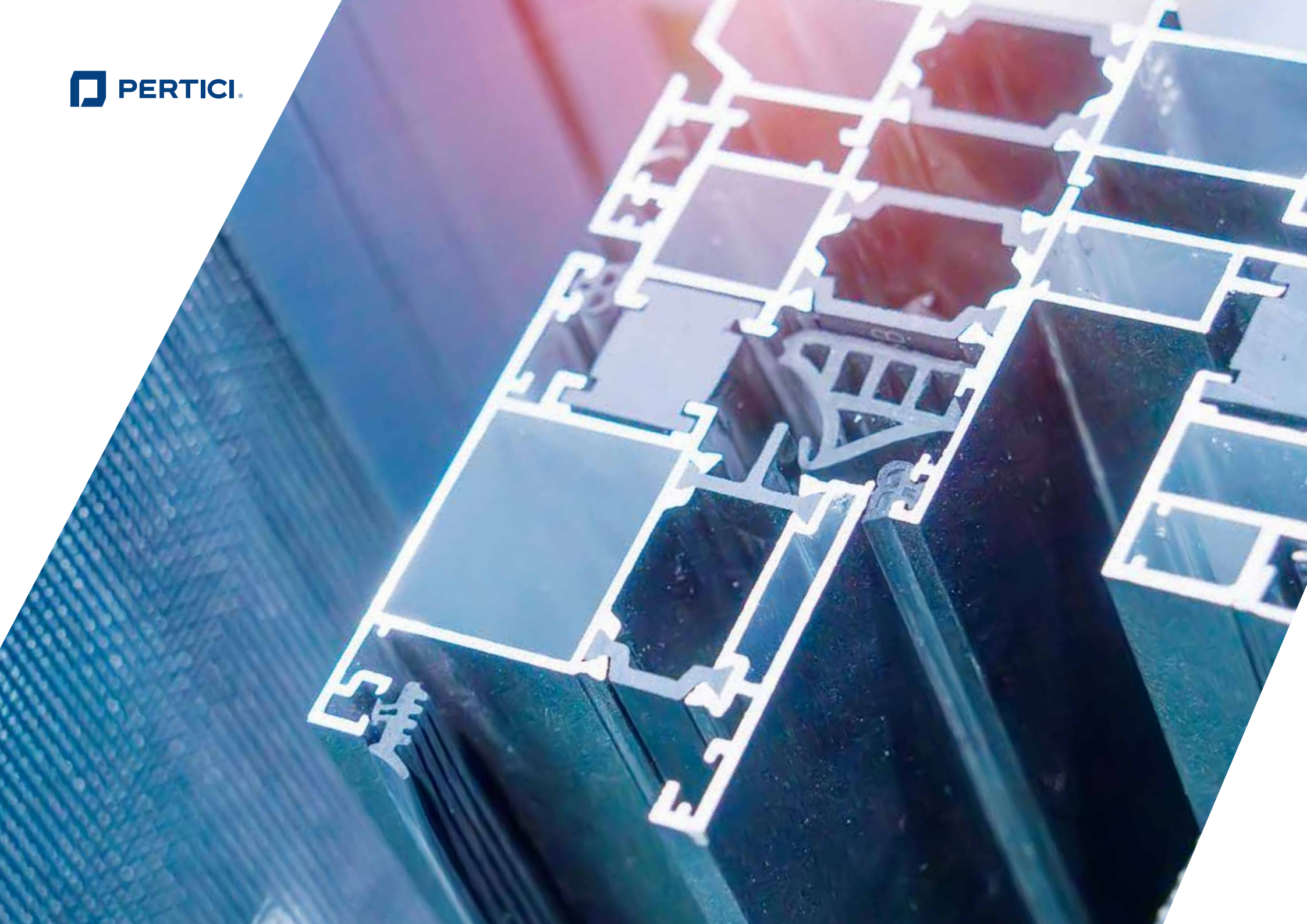
The machinings that can be realised are:

- Hole, simple or interpolated
- Slot, linear, interpolated or rotated
- Box, with adjustable corner radius
- Gasket milling, with special T milling cutter
- 3 handle holes, with special 3-drills tool
- Keyhole, user-programmable
- Screwing

JOB MANAGEMENT



For the management of the order we use a dedicated page where we can see all the imported profiles and their preview. Thanks to this tool, the operator can query the individual piece and verify that all the machining macros are correctly positioned. From this page we can also decide to delete a single piece or an entire order.



DOUBLE HEAD CUTTING MACHINES

Double-head cutting machines are used for cutting aluminum, PVC and light alloy profiles. They are ideal for mass production and special applications as they guarantee great reliability.

These highly rigid series are fitted with two independent cutting heads, one fixed and the other movable, which operate in two different ways:

automatically via AC motor with control system by magnetic scale (electronic machines) , or manually with control system by metric scale (semi-automatic machines).

All movements are performed on bars and linear guide rails (equipped with recirculating ball bearings on the 550 - 600 series). These features make it possible to cut all types of profiles, even large ones, with centesimal precision, thanks to a wide range of models equipped with blades from 400 mm to 600 mm diameter.



| | |
|-----------------|----|
| 600TSE – 550TSE | 48 |
| CTE600 – CTE500 | 50 |
| 500TS – 500D2K | 52 |
| 402IP – 403IP | 54 |



550TSE | 600TSE



AL PVC

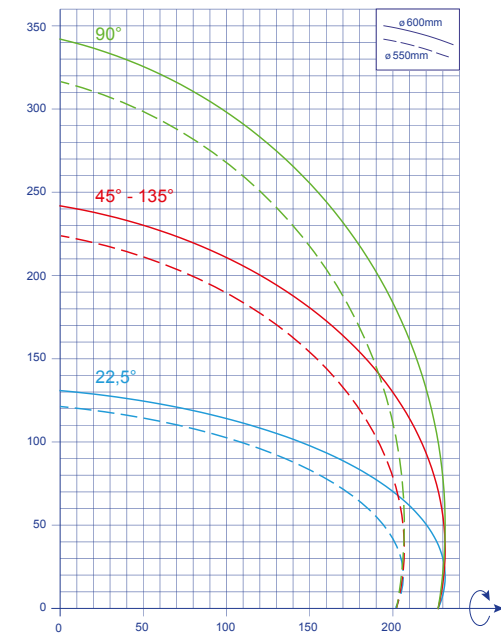
550TSE | 600TSE

550 TSE and 600 TSE are double-head cutting machines with controlled axes with blades of Ø 550 mm and 600 mm respectively.

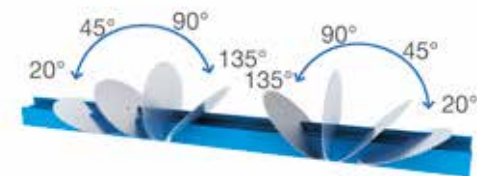
The machine consists of three main structures, a robust electro-welded steel base where the fixed cutting unit is secured and a movable cutting unit that slides along the electronically positioned base (X-axis). The rotary axes of both RF and RM heads allow the cutting units to rotate at angles from 45° (internal) to 20° (external). The blade is driven by an oleo-pneumatic cylinder with output speed regulator and quick return.

Thanks to a horizontal clamping system with double cylinder and vertical, the perfect clamping of any type of profile is ensured. The pneumatic protections isolate the operating units during the cutting phase, ensuring excellent protection and ease of use of the machine. 550 TSE and 600 TSE are latest-generation machines that can be easily integrated into the production cycle with remarkable ease of use thanks to the 15" touch screen monitor on Windows 10 platform, which allows all cutting operations to be easily programmed.

Both can be equipped with an industrial label printer that allows identification and association with the relevant job.



BLADE TILTING





CTE600 | CTE500



AL PVC

CTE600 | CTE500

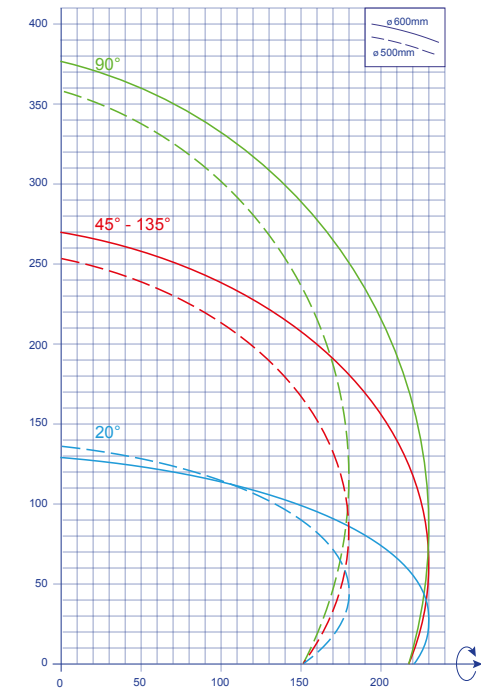
CTE600 and CTE500 are double-head cutting machines with controlled axes with blades of Ø 600 mm and 500 mm respectively.

The machine consists of three main structures, a sturdy electro-welded steel base where the fixed cutting unit is secured and a mobile cutting unit that slides along the electronically positioned base (X-axis).

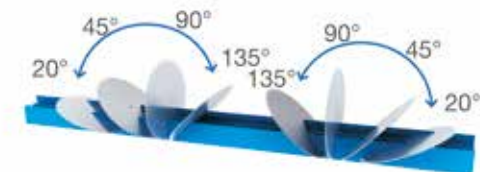
The rotary axes of both RF and RM heads allow the cutting units to rotate at angles from 45° (internal) to 20° (external). The blade is driven by an oleo-pneumatic cylinder with output speed regulator and quick return. Thanks to a horizontal clamping system with double cylinder and vertical, the perfect clamping of any type of profile is ensured.

Local pneumatic drop-down guards isolate the operating units during the cutting phase, ensuring excellent protection and practicality in the use of the machine. The CTE 600 and CTE500 are latest-generation machines that can be easily integrated into the production cycle with remarkable ease of use thanks to the 15" touch screen monitor on Windows 10 platform, which allows all cutting operations to be easily programmed.

The machine can be equipped with an industrial label printer that allows identification and association with the relevant job.



BLADE TILTING





500TS | 500D2K



AL PVC

500 TS | 500 D2K

500 TS and 500 D2K are automatic double-head cutting machines with pneumatic rotation of the heads, blade diameter 520mm.

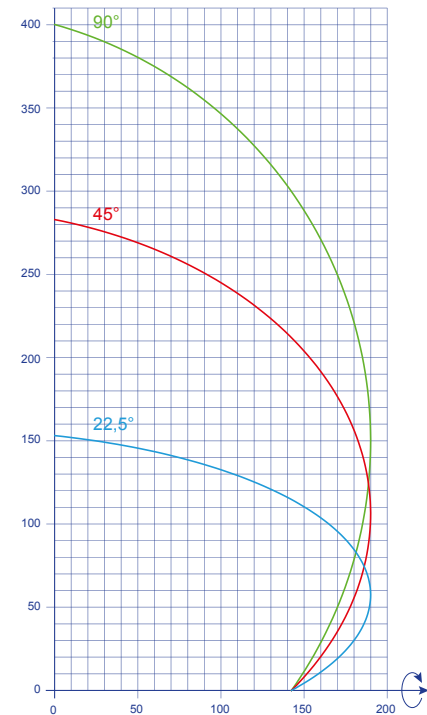
the machines are composed of three main structures, a sturdy electro-welded steel base where the fixed cutting unit is secured and a mobile cutting unit that slides along the electronically positioned base (X-axis).

The rotation of the heads around the horizontal axis takes place through pneumatic cylinders. The angles that can be obtained are from 90° to 22°30' external. The intermediate angles are achieved by means of a special manually adjustable stop. The blade feed is driven by an oleo-pneumatic cylinder with exit speed regulator and quick return

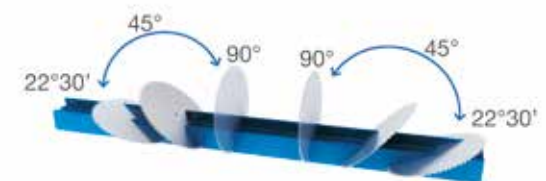
Thanks to a horizontal clamping system with double cylinder and vertical, the perfect clamping of any type of profile is ensured. Local pneumatic drop-down guards isolate the operating units during the cutting phase, ensuring excellent protection and practicality in the use of the machine. 500 TS and 500 D2K are latest-generation machines that can be easily integrated into the production cycle thanks to the touch screen man/machine interfaces and allow all cutting operations to be easily programmed.

The 500TS comes with a 15" touch screen on Windows 10 platform. The 500D2K has a 7" touch screen on Windows Embedded platform.

The machines can be equipped with an industrial label printer for identification and association with the relevant job.



BLADE TILTING





402 IP | 403 IP



AL PVC

402 IP | 403 IP

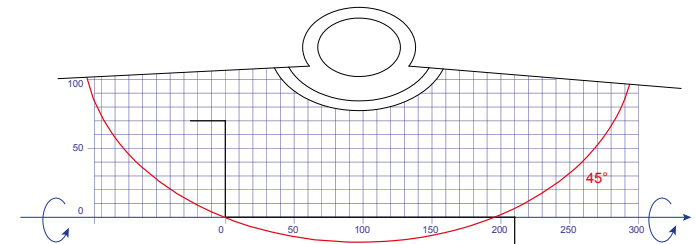
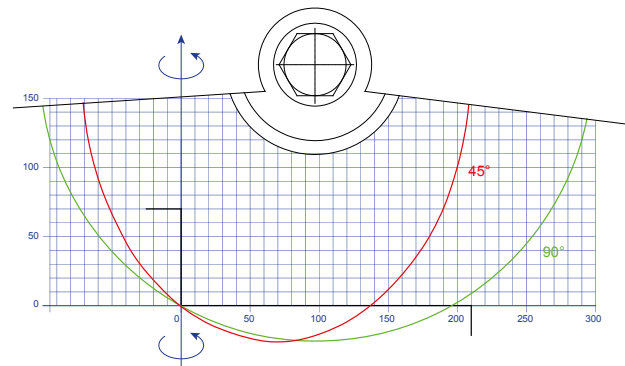
402 IP and 403 IP are double-head pendulum cutting machines with downward blade movement.

These machines are characterized by a combined blade movement that integrates the vertical rotation of the table from -45° to $+45^\circ$ manual and a horizontal tilting from 90° to 45° external.

The horizontal and vertical clamping system ensures perfect clamping of the profile. The cutting units with $\varnothing 400$ mm blade are driven by pneumatic cylinders, there are two working lengths, 3.5 m and 5 m.

In the 402 IP version, the moving head is manually operated, the working length is managed by a metric scale.

In the 403 IP version, the moving head has a controlled axis and gives the possibility to manage working dimensions and profile data storage.





SINGLE-HEAD CUTTING MACHINES

Single-head cutting machines have been designed for cutting PVC and/or aluminium profiles and similar materials.

These series of cut-off saws are made up of various models, each different from the other in terms of cutting system and blade diameter, up to 620 mm. These features, combined with the solidly incorporated structure, make it possible to make precision cuts on profiles of various sizes.



| | |
|---------------|----|
| SH50 | 58 |
| SH62 | 59 |
| R55 – RE55 | 60 |
| 40MP | 61 |
| BS772 | 62 |
| BS773 – BS774 | 63 |



SH 50



AL PVC

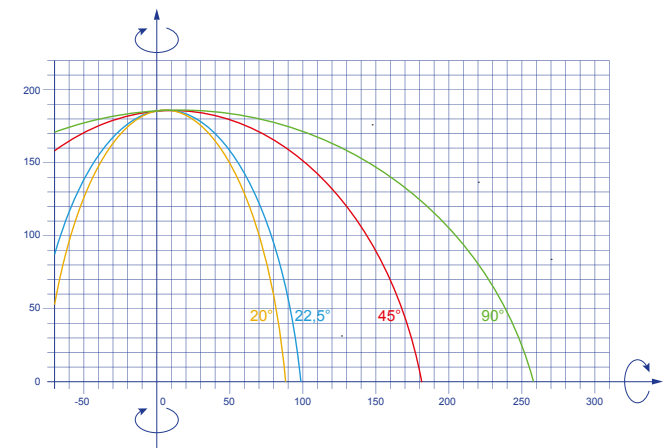
SINGLE-HEAD CUTTING MACHINES

SH50 is a single head, rising saw with a 500 mm blade.

The profile table rotates manually with angles ranging from $\pm 22.5^\circ$ and is equipped with 5 fixed angle positions. Angle reading for setting intermediate degrees is ensured by a graduated scale directly on the cutting table, optional digital display.

The robust steel structure makes it ideal for industrial cutting thanks to a blade motor with 4Hp power and spray lubrication. The blade rise is managed by a hydro-pneumatic cylinder, thanks to a precision adjustment device it optimizes the blade exit speed according to the type of profile to be cut.

Profile clamping is guaranteed by 2 vertical cylinders with a high/low pressure system, which can optionally become 4 with 2 horizontal cylinders. The optional list is completed by a laser pointer that helps position the profile on the cutting area.





SH 62



AL PVC

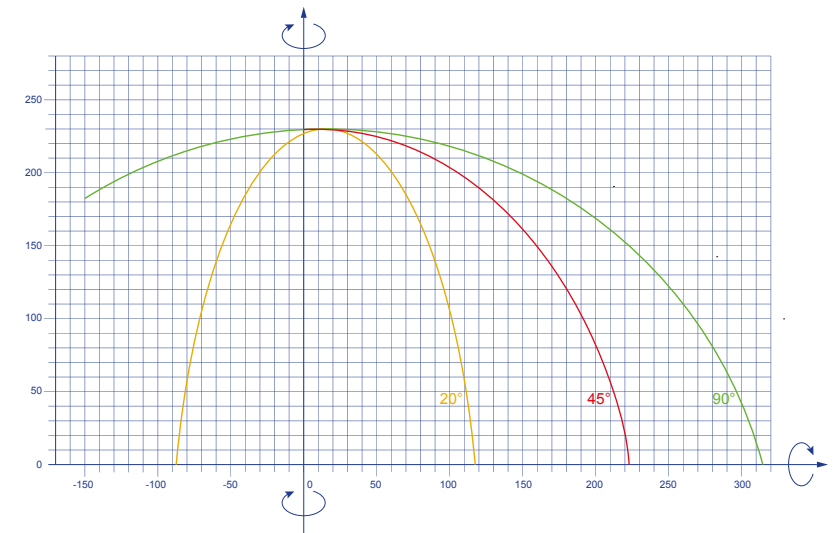
SINGLE-HEAD CUTTING MACHINES

The SH62 is a single head rising saw with a d.620mm blade.

The profile table rotates manually with angles ranging from $\pm 22.5^\circ$ and is equipped with 7 fixed angle positions. Angle reading for setting intermediate degrees is provided by a digital readout.

The robust steel structure makes it optimal for industrial cutting thanks to a blade motor with 4Hp power and spray lubrication. The blade rise is managed by a hydro-pneumatic cylinder, thanks to a precision adjustment device that optimizes the blade exit speed according to the type of profile to be cut.

Profile clamping is guaranteed by 2 vertical cylinders with a high/low pressure system, which can optionally become 4 with 2 horizontal cylinders. The optional list is completed by a laser pointer that helps position the profile on the cutting area.





R55 | RE55



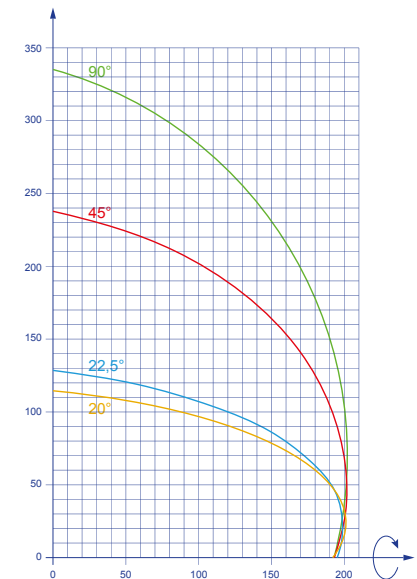
AL PVC

SINGLE-HEAD CUTTING MACHINES

The 55 series are single-head frontal saws with a blade \varnothing 550 mm (4HP blade motor) . The two versions have different head-rotation systems.

On the R55 the inclination of the cutting unit is pneumatic with fixed angles at 20°, 45°, 90° right and left sides. The intermediate angles are managed manually by means of a degree scale and the dimension is shown directly on the digital display. On the RE55, the inclination of the cutting unit is electronically controlled by a linear drive that guarantees very high positioning accuracy. In this way we can manage any cutting angle in the range of +/- 20°. In this version, the cutting angles are entered via a 7" Touch screen operator panel.

R55 and RE55 are equipped with horizontal clamps for correct profile clamping, which can optionally become 4 with 2 vertical cylinders. Spray blade lubrication and integral protection of the cutting unit with pneumatic movement.





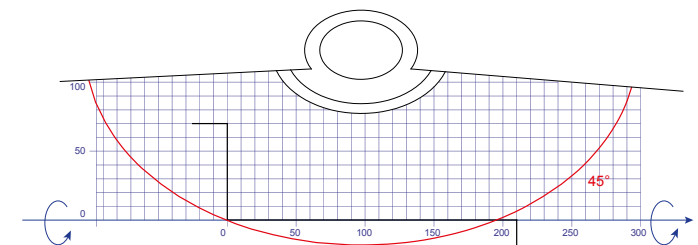
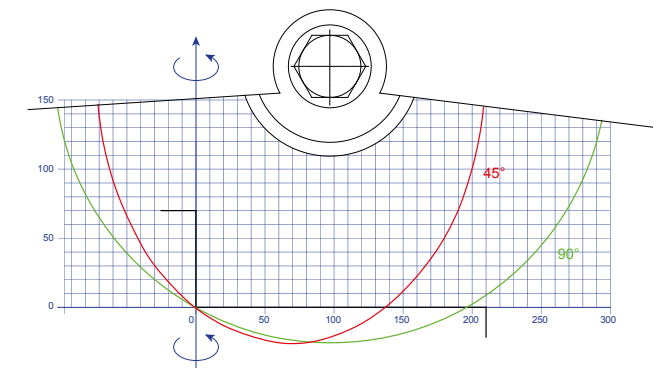
40 MP



AL PVC

40 MP is a single-head pendulum saw with downward movement of the \varnothing 400 mm blade.

The profile support table rotates manually at angles ranging from $\pm 45^\circ$, manual lateral tilting of the head ranges from 0° to 45° external. 40MP is equipped with horizontal clamping cylinders for correct profile clamping, spray blade lubrication and mechanical protection of the cutting zone.





BS 772



AL

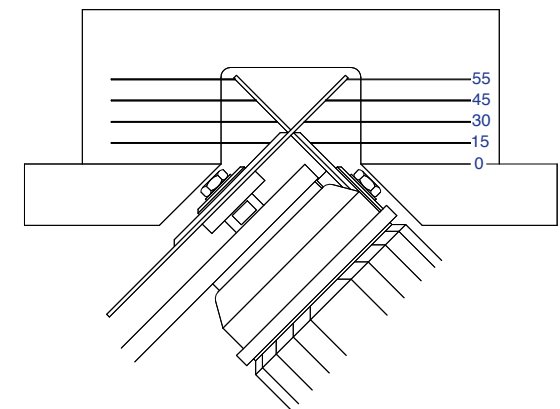
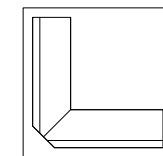
PVC

SINGLE-HEAD CUTTING MACHINES

BS 772 is a semi-automatic cut-off machine for cutting PVC glazing beads.

The cutting system consists of two pairs of blades arranged at 45°. The 225 mm blade performs the cutting of the glazing bead, the 103 mm blade performs the internal beveling for hooking the glazing bead.

The blade carriage is driven by a pneumatic cylinder, the profiles are clamped by two pairs of vertical clamps. BS 772 is equipped with a glass simulation system for two profiles with 12-position revolver stop and adjustment of vertical clamps with 6-position revolver stop.





BS 773 | BS 774



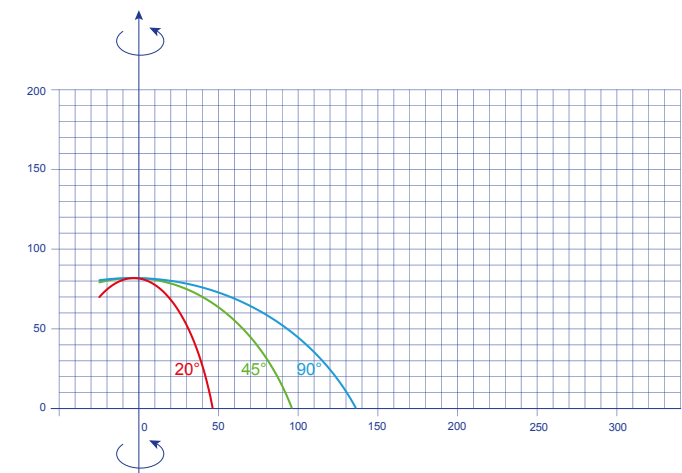
AL PVC

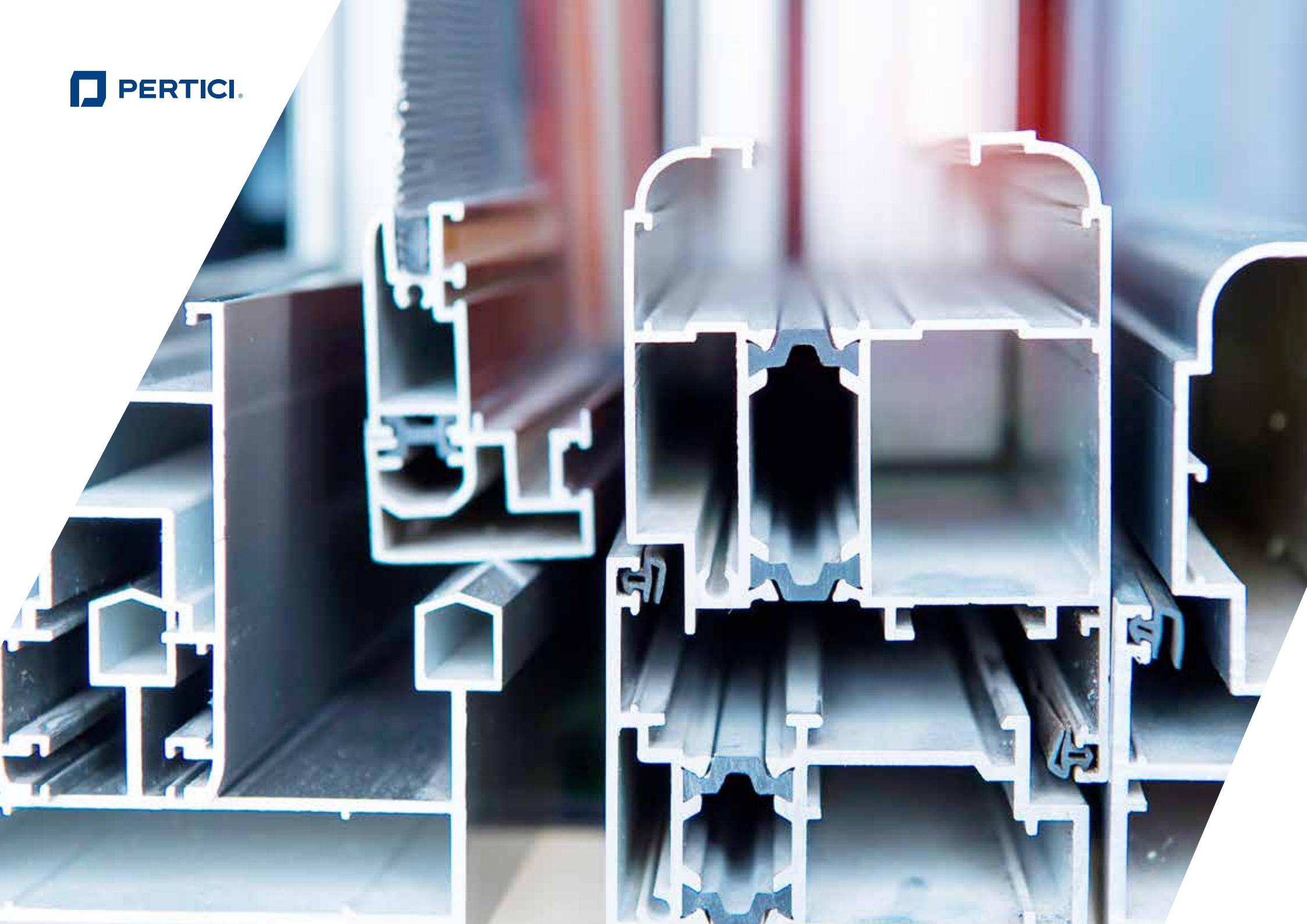
BS 773 and BS 774 are systems that integrate a mitre saw with variable cutting angle combined with either an electronic measuring stop or a gripping system that transforms the profile support into a pusher.

The cut-off machine has a rising blade, the positioning of the rotary table is managed by the numerical control and varies between 20° and 160°.

On the BS 773 and BS 774 with a 300 mm cutting blade, the mechanical structure is specifically designed for cutting PVC and aluminium glazing beads, equipped with a quick-adjusting template system and a system that allows all profiles in a range to be processed without having to change the tooling.

The profile support bench is made of robust aluminium profiles that integrate the carriage sliding system. The positioning of the stop or pusher is managed by the numerical control with feedback from the magnetic strip with a maximum error of +/-0.1 mm. The man/machine interface is managed by a 7" colour touch screen operator panel based on Windows CE. The table has a width of 220 mm, and a length of 3000 mm.





LENGTH STOPS AND ROLLER CONVEYORS



| | |
|-----------|----|
| VISUAL RF | 66 |
| VISUAL EM | 66 |
| ROLLER | 67 |

VISUAL RF



Visual RF is an electronic and automatic outfeed length stop, if combined with a cut-off machine it allows the precise positioning of PVC and aluminium profiles or bars.

The profile support is constructed from robust aluminium extrusions that integrate the sliding rail of the carriage. The positioning of the stop is carried out by a stepper motor integrated in the carriage and managed by an electronic control unit.

Thanks to the magnetic strip, it allows a positioning accuracy of 0.1 mm and enables the stop to operate with high speed and precision. The table has a width of 220 mm, with four versions in lengths of 3, 4, 5 and 6 metres.

VISUAL EM



Visual EM is a manual measuring stop, outfeed side; the positioning of the zero stop is adjusted by a handwheel with a digital display.

The measuring is ensured by a magnetic scale with decimal precision.

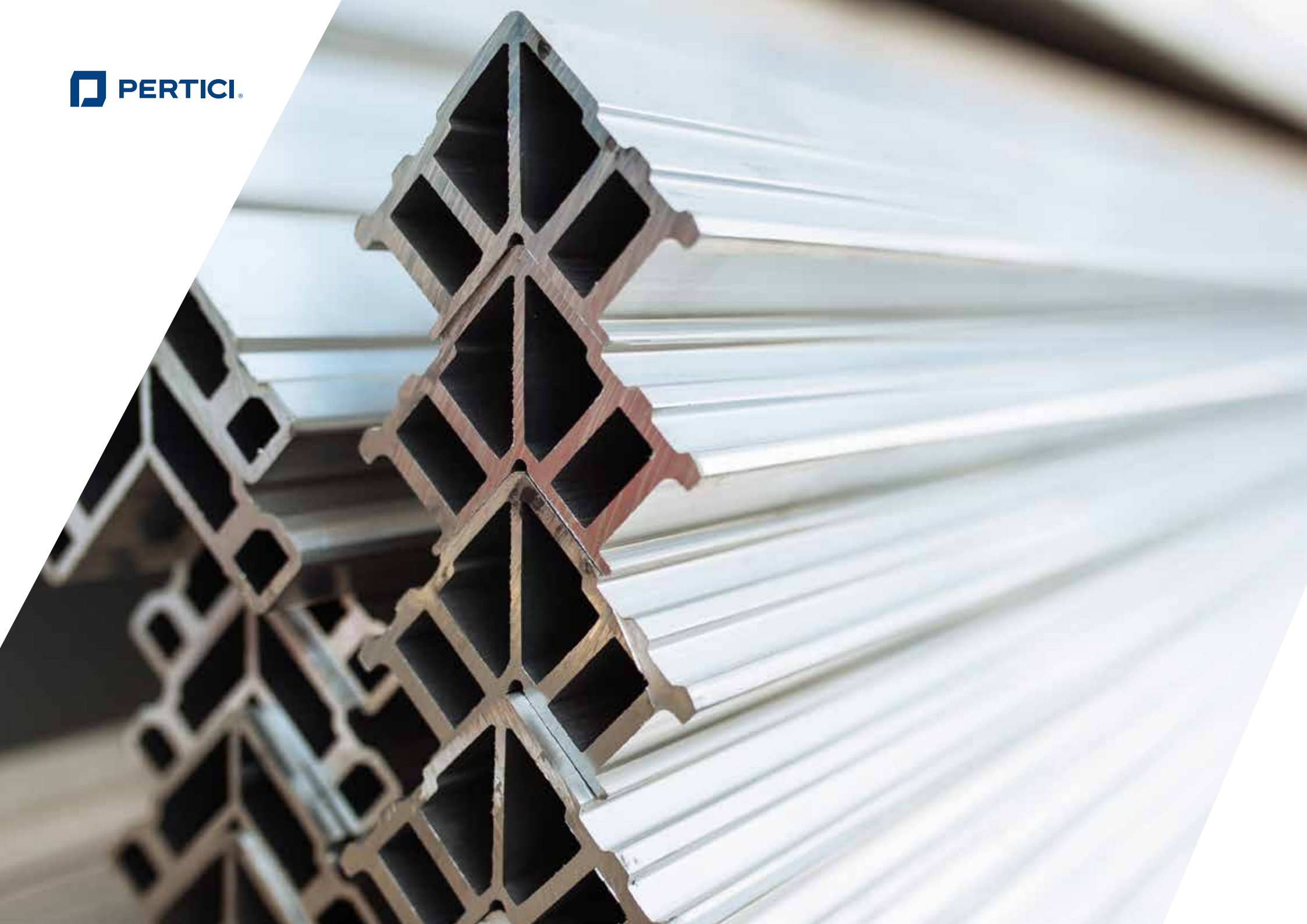
Equipped with horizontal and vertical rollers and height-adjustable feet. The table has a width of 220 mm, with four versions in lengths of 3, 4, 5 and 6 metres.

ROLLER



Roller is a loading roller conveyor with horizontal and vertical rollers for secure profile support.

Extruded aluminum structure and adjustable feet. The support surface is 220 mm wide, with four versions in lengths of 3, 4, 5, 6 metres.



COPY ROUTERS

END MILLING

CRIMPING MACHINES



| | | | |
|--------|----|--------|----|
| CR105 | 70 | ML142 | 77 |
| CR100 | 71 | WSA | 78 |
| CR106A | 72 | RF3000 | 79 |
| CR110 | 73 | HP600 | 80 |
| ML123 | 74 | HP700 | 81 |
| ML124 | 75 | HP780 | 82 |
| ML200 | 76 | | |



CR 105



AL PVC

Single head copy router with manual control, head translation movement with indirect lever.

Axis movement on ball-bearing bars and bushes guarantees smoothness and precision over time. Pneumatic horizontal clamps with low pressure device for operator safety.

Longitudinal and transversal stops referred to metric rods and adjustable depth stop ensure quick positioning. Possibility of through machining without turning the workpiece. Manually controlled touch probe with 3-diameter tool tip. Pneumatic tool lubrication by microneedle (emulsified oil).

| TECHNICAL DATA | CR 105 |
|--------------------------|-------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 0.75 kW |
| Spindle speed | 12.000 giri/min. |
| X - Y - Z Axis stroke | 260 - 120 - 130 mm |
| Clamp capacity (bxh) | 150x200 mm |
| Max cutter diameter | 10 mm |
| Tracer tip diameter | 6 - 8 - 10 mm |
| Weight | 110 kg |



CR 100



AL PVC

Hand-operated single-head copy router , head translation movement with indirect lever.

Large working height capacity. Axis movement on on ball-bearing bars and bushes guarantees smoothness and precision over time. Horizontal pneumatic clamps with low pressure device for operator safety.

Longitudinal and transversal stops referred to metric rods and depth stop with 6 adjustable positions ensure quick positioning. Possibility of through machining without turning the workpiece. Manually operated touch probe with 3-diameter tool tip. Pneumatic tool lubrication by microneedle (emulsified oil).

| TECHNICAL DATA | CR 100 |
|--------------------------|-------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 0.75 kW |
| Spindle speed | 12.000 rpm |
| X - Y - Z Axis stroke | 310 - 120 - 175 mm |
| Clamp capacity (bxh) | 175x230 mm |
| Max cutter diameter | 10 mm |
| Tracer tip diameter | 5 - 8 - 10 mm |
| Weight | 125 kg |



CR 106A



AL PVC

Hand-operated single-head copy router, head translation movement with indirect lever and large height travel.

Axis movement on ball bearing bars and bushes guarantees smoothness and precision over time. Equipped with a 3-point drilling unit for machining handle-holes bolts with pneumatic control and hydro-pneumatic drive for machining aluminium and steel-reinforced PVC. Horizontal pneumatic clamps with low pressure device for operator safety.

Adjustable depth stop, longitudinal and transversal stops referred to metric rods. Possibility of through machining without turning the workpiece. Hand-operated touch probe and 3-diameter drill in axis with the tool. Pneumatic tool lubrication by microneedle (emulsified oil).

| TECHNICAL DATA | CR 106A |
|-----------------------------|-------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 0.75 kW |
| Spindle speed | 12.000 giri/min. |
| X - Y - Z Axis stroke | 310 - 120 - 175 mm |
| Clamp capacity (bxh) | 175x230 mm |
| Max cutter diameter | 10 mm |
| Tracer tip diameters | 5 - 8 - 10 mm |
| Three-phase bit motor power | 1.1 kW |
| Bit spindle speed | 900 giri/min. |
| Bit centre distance | 21.5 mm |
| Adjustable bit height | 15...65 mm |
| Weight | 185 kg |



CR 110



AL PVC

Single-head copy router with manual control, pneumatic locking of the head downward movement, and head translation through an indirect lever.

The movement of axes on bars and ball-bearing bushings ensures smoothness and precision over time. The clamp table rotation system allows the quick rotation of the workpiece by 90° and all intermediate angles without unlocking the clamps. This device speeds up and makes more precise the machining operations to be carried out on two faces of the workpiece. By performing through-feed operations, up to 4 faces can be worked on without unclamping the workpiece.

Pneumatic horizontal and vertical clamps with low-pressure device for operator safety. Unlocking of descent with pneumatic control on the handle. Longitudinal and transverse stops referenced to metric rods. The pneumatic probe with 6 adjustable memories, pneumatic translation, and a tip with 3 diameters aligned with the tool allows for quick and precise positioning of the machine. Spindle locking button for tool change. Adjustable PVC clamps jaws without the use of spanners. Pneumatic tool lubrication with micro-mist (emulsified oil).

| TECHNICAL DATA | CR 110 |
|---------------------------|-------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 0.35 / 0.45 kW |
| Double Spindle speed | 6.000 / 12.000 rpm |
| X - Y - Z Axis stroke | 360 - 120 - 175 mm |
| Clamp capacity (bxh) | 200x200 mm |
| Max cutter diameter | 10 mm |
| Tilting of clamping table | 0 / 90 degrees |
| Tracer tip diameters | 5 - 8 - 10 mm |
| Weight | 185 kg |



ML 123



AL

PVC

Horizontal end milling machine with manual feed. Pneumatically operated quick change of cutter unit.

It performs out-of-square milling from -45° to $+45^{\circ}$. Integral work zone protection. Scratch-proof work table. Feed movement on recirculating ball bearing guides and pads guaranteeing smoothness and precision over time. The self-braking motor and pneumatic horizontal and vertical clamps with low pressure device place the machine at the highest level of operator safety.

The revolver depth stop with 6 adjustable positions and pneumatic micro-mist (emulsified oil) tool lubrication speed up the work cycle. The integrated cutter unit magazine and conveyed chip evacuation make the machine clean and tidy.

| TECHNICAL DATA | ML 123 |
|--------------------------|-----------------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 1.1 kW |
| Spindle speed | 2.850 rpm |
| X axis stroke | 300 mm |
| Clamp Capacity (bxh) | 200x120 mm |
| Max cutter diameter | 160 mm |
| Cutter holder | \varnothing 27/32 mm - L 135 mm |
| Variable milling angle | -45° ... $+45^{\circ}$ |
| Weight | 125 kg |



ML 124



AL PVC

Horizontal end-milling machine with manual or automatic feed in 'A' version.

High tool rotation speed improves machining quality on painted and out-of-square profiles. Performs out-of-square milling from -45° to $+45^{\circ}$. Quick change of cutter unit with pneumatic control. Scratch-proof work table. Integral work zone protection with wide internal visibility. Feed movement on recirculating ball bearing guides and pads guarantees smoothness and precision over time. Feed speed adjustment is hydro-pneumatic in the "A" version and the workpiece clamping system without approach stroke.

The horizontal and vertical clamps with low pressure device place the machine at the highest level of operator safety. The revolver depth stop with 6 adjustable positions and the pneumatic micro-mist lubrication (emulsified oil) speed up the work cycle. The integrated cutter unit magazine and conveyed chip evacuation make the machine clean and tidy.

| TECHNICAL DATA | ML 124 |
|--------------------------|--|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 1.5 kW |
| Spindle speed | 6.000 RPM |
| X axis stroke | 320 mm |
| Clamp capacity (bxh) | 200x120 mm |
| Max cutter diameter | 180 mm |
| Cutter holder | $\varnothing 27/32\text{mm}$ - L 160mm |
| Variable milling angle | -45° ... $+45^{\circ}$ |
| Weight | 180-190 kg |



ML 200



AL

PVC

Horizontal end milling machine with automatic feed and work cycle.

The high speed of tool rotation, adjustable with an electronic variator and displayed on a digital LED display, improves the quality of machining on painted and out-of-square profiles. Performs out-of-square milling from -45° to $+45^{\circ}$. Quick change of cutter unit with pneumatic control. Scratch-proof work table. Integral soundproofed and fully enclosed work area with wide internal visibility. Feed movement on recirculating ball bearing guides and pads guarantees smoothness and precision over time.

The self-tilting stop cancels contact between stop and workpiece during feed. The feed speed adjustment is hydro-pneumatic and the workpiece clamping system without approach stroke. The revolver depth stop with 6 adjustable positions, impulse tool lubrication (full oil) and clamps table cleaning air blow speed up the work cycle. The integrated cutter unit magazine, the removable swarf collection drawer and the provision for fume extraction make the machine tidy and clean. The pneumatically operated soundproof tunnel (90° milling only) reduces the noise emitted to about 75 dB.

TECHNICAL DATA

ML 200

| | |
|--------------------------|---------------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 2.2 kW |
| Spindle speed | 4.000...7.000 rpm |
| X axis stroke | 350 mm |
| Clamp capacity (bxh) | 200x120 mm |
| Max cutter Diameter | 200 mm |
| Cutter holder | \varnothing 27/32mm - L 160mm |
| Variable milling angle | -45° ... $+45^{\circ}$ |
| Weight | 260-300 kg |



ML 142



The ML 142 model is a manual milling machine for making ventilation and water drainage slots on PVC profiles.

It is equipped with three working units, an oblique unit that can be inclined by up to 60° degrees, a horizontal unit and a vertical unit. The three working units are independent of each other, are operated with a lever, and allow free milling of the profile in the longitudinal direction.

TECHNICAL DATA

ML 142

| | |
|---------------------------|------------------|
| Single-phase power supply | 220 Volt - 50 Hz |
| Motor power | 3 x 0.4 kW |
| Motor rotation speed | 18.000 rpm |
| On board milling cutter | 3x Ø 5mm |
| Air consumption | 3 NI/' |
| Weight | 102 kg |

AL

PVC



WSA



AL

PVC

The WSA model is a milling machine for making ventilation and water drainage slots on PVC profiles, with an automatic cycle.

It is equipped with three working units, two of which can work simultaneously on two profile faces. The oblique motor, which can be inclined from 30 to 60 degrees, can automatically move to the right or left, according to the operator's needs, simply by selecting a button.

The three high-frequency motors eliminate any form of maintenance. The work cycle is managed by a PLC, which allows rapid processing. No adjustments are required to change from sash to frame machining of the same series of profiles, however, when changing series the adjustments are easy and intuitive.

TECHNICAL DATA

WSA

| | |
|---------------------------|------------------|
| Single-phase power supply | 220 Volt - 50 Hz |
| Motor power | 3 x 0.4 kW |
| Motor rotation speed | 18.000 giri/min. |
| On board milling cutter | 3x Ø 5mm |
| Air consumption | 3 NI/ |
| Weight | 112 kg |



RF 3000



AL PVC

The RF 3000 is a machine designed to trim PVC and aluminium frames and profiles in a single step, leaving the workpiece fixed on the workbench.

The operator can in fact process large frames in total autonomy and safety. Normally placed at the end of the welding and cleaning process, the trimming machine is suitable for both small and large production and can also be used for hardware assembly operations, quality control etc.

This model features an automatic combined action profile clamping system that ensures perfect positioning of the frame. The positioning of the cutting measurement is managed by a manual handwheel (optional with automatic positioning) equipped with a decimal numeric indicator. Blade feed is ensured by a geared motor with pinion/rack transmission (optionally with inverter to manage blade feed speed). The cycle is activated automatically once the clamps are closed, the frame locked and the two start buttons pressed.

| TECHNICAL DATA | RF 3000 |
|--------------------------|-------------------------|
| Three-phase power supply | 380/400 Volt - 50/60 Hz |
| Three-phase motor power | 1.5 kW |
| Spindle speed | 2.800 rpm |
| Max diameter blade | 300 mm |
| Max cutting stroke | 3.000 mm |
| Air pressure | 6-8 bar |
| Dimensions (WxDxH) | 3.960x2.000x1.300 mm |
| Weight | 460 kg |



HP 600



AL

PVC

The HP600 is a hydraulic crimping machine for aluminium profiles:

: its cast iron and steel construction makes it robust and reliable, guaranteeing crimping quality over time. The crimping heads are controlled by a single mechanical control, ensuring synchronisation of movements.

It is equipped with a hydraulic clamping wedge that ensures maximum hold during the crimping operation. The easy adjustment of the knife units makes profile change fast.

| TECHNICAL DATA | HP 600 |
|-------------------------|-----------------|
| Maximum crimping force | 3500 Kgp |
| Maximum crimping height | 120 mm |
| Nominal pressure | 7 bar |
| Dimensions (WxDxH) | 850x1250x800 mm |
| Weight | 300 Kg |



HP 700



AL PVC

The HP700 is an oleodynamic crimping machine for aluminium profiles.

Its cast iron and steel construction makes it robust and reliable, guaranteeing crimping quality over time. Adjustment of the crimping heads and reference fork is simplified. The knife units are equipped with quick release and magnets to prevent them from falling off.

The digital knife position display is available as an option. The HP700 is ideal for those looking for ease, flexibility and high performance.

| TECHNICAL DATA | HP 700 |
|-------------------------|-----------------|
| Maximum crimping force | 3500 Kgp |
| Maximum crimping height | 120 mm |
| Nominal pressure | 7 bar |
| Dimensions (WxDxH) | 900x1250x950 mm |
| Weight | 480 Kg |



HP 780



AL

PVC

The HP780 is an oleodynamic crimping machine for aluminium profiles.

Its cast iron and steel construction makes it robust and reliable, guaranteeing crimping quality over time.

Adjustment of the crimping heads and reference fork is simplified. Very high profiles up to 180 mm can be crimped.

The knife units are equipped with quick release and magnets to prevent them from falling off.

The HP780 is ideal for those looking for high performance and larger working ranges.

TECHNICAL DATA

HP 780

| | |
|-------------------------|-----------------|
| Maximum crimping force | 3500 Kgp |
| Maximum crimping height | 180 mm |
| Nominal pressure | 7 bar |
| Dimensions (WxDxH) | 900x1250x950 mm |
| Weight | 480 Kg |



WELDING MACHINES CORNER CLEANERS SCREWDRIVERS



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WM2



AL

PVC

WM2

Automatic two-head welding machine with fixed head at variable angles from 40° to 180° and movable head with fixed 90° angle.

WM2 is available in a length of 3500 mm, both heads are equipped with heated knives, fusion plate with automatic temperature control via digital thermoregulator and standard limitation thickness at 0.2 mm.

The fusion depth is 3 mm on each welded side. WM2 can be equipped with counter-blocks (optional) and can process all types of standard, acrylic and coated profiles. The entire welding cycle is controlled by a PLC which manages heating, melting, and cooling times.





WM1



Automatic single-head welding machine for 90° and variable angles from 40° to 180°.

WM1 is equipped with heated knives, fusion plate with automatic temperature control via digital thermoregulator and standard limitation thickness of 0.2 mm. The melt depth is 3 mm on each welded side.

WM1 can be equipped with counter-blocks (optional) and can process all types of standard, acrylic and coated profiles. The entire welding cycle is controlled by a PLC which manages heating, melting, and cooling times.

AL

PVC



CM 1S



The CM 1S automatic cleaning machine carries out the cleaning of the PVC corner weld seam through the combination of a cutter unit and two knives for the top and bottom of the frame.

The suitably shaped cutter units are equipped with quick change device to facilitate the size change-over operation. The knives fit the surface of the profile thanks to a self-levelling system.

The entire work cycle is coordinated by an internal PLC that manages the clamping of the welded frame and starts the cleaning cycle. CM 1S is equipped with two useful arms to support and manage frame rotation. The machine, suitably configured with the necessary tools, can process all types of standard, acrylic and coated profiles.

AL

PVC



ASD 30



AL PVC

Semi-automatic screwdriver with automatic screw feed for fixing the reinforcement for PVC profiles.

A foot pedal control starts the profile clamping and screwing. The machine body is mounted on a metal structure equipped with an infeed and an outfeed roller conveyor.



ASSEMBLY BENCHES AND TROLLEYS



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BL 3002



The BL 3002 is a dedicated workbench for hardware assembly.

The structure is well dimensioned and allows large sashes to be processed. The sash slides on special scratch-resistant guides and the clamping system is self-centering.

As standard, the BL 3002 includes hardware measuring stops and a screwdriver with automatic screw feeder. Hardware cutting shear is optional.

GLZ 4000



The GLZ 4000 is a vertical bench for PVC

windows suitable for fitting glass in the window frame and inspecting the window frames, recreating the conditions of use.

It works with a self-centering system operated by pneumatic cylinders that move two clamping bars on the frame to be glazed. It consists of a solid steel frame with 4 levelling feet. The hard anti-friction PVC support surface ensures great smoothness of the frame, facilitating its movement. A sturdy roller conveyor at the base allows the frame to be moved horizontally. In addition, the rear opening locking bars facilitates the operation of moving the frame to the storage stations. The bench is also available with height adjustment (optional) to ensure maximum ergonomics when working with any type of frame.

The GLZ 4000 comes in a version with a width of 3,000 mm and a height of 2,650 mm.

BL 300



Frame assembly bench

- The worktop, variable in size in both length and width consists of six aluminium bars rubber-coated on the support side.
- 4 spirals (length 7 m) complete with fittings.
- 6 containers.
- 4 quick couplings for compressed air.

OPTIONS

- Pneumatic screwdriver.
- Pneumatic drill.

RUVE 3000



Vertical roller conveyor

RUVE 3000 is a vertical roller conveyor 3mt long, for the transfer between different assembly stations of sashes and frames or finished windows and doors. It consists of a solid steel frame, with the possibility of height adjustment via 6 levelling feet.

The horizontal support surface consists of 20 steel rollers with a width of 400 mm.

On the vertical side, support is provided by no less than 4 anti-scratch rubber roller guides with a diameter of 50 mm that offer excellent support for both heavy and small window frames.

IRON BUSH



Trolley for horizontal profiles

- 5 housings
- PVC-coated support surfaces.
- Four wheels for easy movement of the trolley, two of which are fitted with brakes.
- Dimensions (WxDxH): 1,600x900x1,800 mm.
- Weight: 60 kg.
- Capacity: 450 kg.

IRON END



Trolley for finished elements

- PVC-coated support surfaces.
- Four wheels, two of which have brakes.
- Dimensions (WxDxH): 2,000x1,100x1,800 mm.
- Weight: 150 kg.
- Capacity: 1,000 kg.

IRON CAR



Trolley for vertical profiles

- 10 housings.
- PVC-coated support surfaces.
- Four wheels to facilitate trolley movement, two of which are fitted with brakes.
- Dimensions (WxDxH): 1,200x900x1,800 mm.
- Weight: 65 kg.
- Capacity: 450 kg.

IRON WORTH



Trolley for completed windows

- PVC-coated supporting surfaces.
- Knob to facilitate trolley movement, on four wheels, two of which are fitted with brakes.
- Dimensions (WxDxH): 1,650x1,200x1,800 mm.
- Weight: 74 kg.
- Capacity: 450 kg.

IRON READY



Trolley for finished windows

- PVC-coated supporting surfaces.
- Four wheels, two of which have brakes.
- Dimensions (WxDxH): 1,700x900x1,800 mm.
- Weight: 95 kg.
- Capacity: 450 kg.

IRON GASKETS



Trolley for gaskets

- 6 removable reels.
- Maximum reel diameter 550 mm.
- Quick reel change.
- Four wheels, two of which are fitted with brakes.
- Dimensions (LxWxH): 870x870x1,800 mm.
- Weight: 30 kg.
- Capacity: 150 kg.

IRON STRONG



Trolley for vertical profiles

- 8 housings
- Four wheels to facilitate trolley movement, two of which are equipped with brakes.
- Dimensions (WxDxH): 900x600x1,350 mm.
- Weight: 50 kg.
- Capacity: 400 kg.

IRON CLEVER



Hardware trolley

- 12 housings
- PVC-coated surfaces.
- Four wheels to facilitate trolley movement, two of which are equipped with brakes.
- Dimensions (WxDxH): 1,000x700x950 mm.
- Weight: 50 kg.
- Capacity: 300 kg.



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via della città 41/43 | 50052 Certaldo (FI - Italy)

VAT: IT 06289200484

General Requests: info@pertici.it

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