Selco WN 610 4500x4500

Panel saw

	QUANTITY
L8454570	1

Selco WN 6

Single line panel sizing centre with fast and accurate numerical controlled, pusher with grippers and manual panel infeed on front tables of machine

This machine requires one operator excluding the infeed and outfeed operations of the material being used.

Machine base structure
The machine base comprises two elements, main base and secondary base, which are connected by two side uprights. This bridge structure can counteract the forces exerted by the pressure beam and the weight of the material to cut.
The machine main base, covered by an international patent, consists of a monobloc heavy duty normalized frame structure and strong supports assuring its perfect level and stability.
The guideways of saw carriage are ground and hardened and assure extreme durability of the guiding system and its precision (the guideways come with 10-year BIESSE warranty).

Saw carriage
The saw carriage, with its normalized steel rigid structure, supports and guides the main saw blade and the scoring saw blade with extreme accuracy.
Tools (scoring and main saw blade) are raised by brushless motor and ball screws. This system grants a faster cutting cycle and a high precision saw blade projection (+/- 0,01 mm).
Through the Digiset function the electronic adjustment is performed by the numerical control. The numerical control allows storage of unlimited vertical/horizontal blade settings (scoring and main saw blade). In this way, when a saw blade set is fitted, its setting values can be called up rapidly on the control and machining operations can start right away.

The extremely fast and safe saw blade replacement is obtained by means of the Quick Change BIESSE system covered by an international patent.
The saw carriage is driven by an A.C. brushless servomotor with digital technology for a perfect positioning (transmission by rack and pinion), always under direct monitoring of the numerical control. In this way it is possible to reduce the number of strokes and optimise machining times.
Movement is transmitted by a helical-toothed rack and pinion system that grants precise movements and it avoids any maintenance.
Adjustment of the saw carriage speed of advance is managed automatically by the numerical control, and manually from the control panel by means of the command provided. In alternative the operator can reduce it from the control panel using the manual override.

Side squaring device

Side alignment is carried out by an aligner which intervenes on the cut line and pushes the material against the square fence. Being integrated in the saw carriage structure, the positioning is extremely fast and precise, the pushing force is infinitely adjustable on the control board and it can be related to the different materials to be sized.
With this system it is possible to perfectly align even very thin and/or flexible panels, reducing cycle time.

Pressure beam

The pressure beam, which is driven by two pneumatic cylinders, guarantees strong and uniform clamping of the panels throughout the cutting cycle, including final edge trimming operations. The hold down pressure of the pressure beam is electronically adjustable.
To guarantee that the pressure beam remains parallel to the worktable, and therefore to ensure even clamping even in the case of small panels, a rack and pinion drive is provided.
To adapt the action of the pressure bar both to long pieces (e.g. during rip cutting of panels) and short ones (e.g. during cross cutting of bars), pressure is automatically adjusted.
The motorized pressure beam option allows the cutting of pressure sensitive materials.
The lower side of the pressure beam has a special rubber coating that protects the panel's surface and allows uniform pressure to be applied to the panels.
To reduce the cycle time, the pressure beam stroke is actively controlled relative to the stack.
The front part of the pressure bar is fitted with an independent sector safety barrier, made of transparent material (flap), to allow the operator to view the inside of the machine while restricting access to the cutting line. The rotary movement of the flap allows the cut material to be ejected but prevents the machine operator from having to insert his hands onto the cutting line.
As a further safety device, an emergency barrier is also fitted on the presser, stopping the machining cycle when triggered.

Pusher carriage

The powerful and heavy-duty pusher carriage for the positioning of boards, runs along hardened and rectified steel round guides fitted on heavily dimensioned steel beams. The extremely precise racks and pinions, (millesimal tolerance) for motion transmission, are ground and hardened, therefore assuring accurate positioning and long-lasting life.
The pusher carriage is driven by an A.C. brushless servomotor with digital technology for accurate positioning, always under direct monitoring of the numerical control.
Positioning of the pusher carriage is always under direct monitoring of the machine control, which uses an independent electro-magnetic detector. This device avoids any kind of mechanical play and due to a contactless application, efficiency is guaranteed through time. Carriage positioning accuracy of ± 0,1 mm for the whole stroke.
In EC Countries, the pusher carriage speed of advance is restricted to 25 m/min by law.
The pusher is fitted with independent floating grippers, to avoid any pressure between the bottom surface of the book boards and the supporting table of the machine. The upper locking arm is covered with a layer of vulcanised rubber to prevent marking the top surface of the book boards. The surface of the grippers in contact with the panels comprises aluminium stops which can be trimmed during testing to guarantee perfect alignment with the cutting line. The grippers clamping force is manually adjustable from the front panel.
It is possible to size sub-formats of any size, except for the dimensions of the remaining material held in the grippers for the cut of the last part. Such dimensions must be bigger than 40 mm trim included (70 mm with double presser option).

The position of the first gripper allows to collect a strip with a minimum width of 55 mm.
At the end of every longitudinal and crosscut cycle, the pusher ejects the rear trim to the operator side of the cutting line. This increases the machine efficiency by allowing the operator to begin the next cutting cycle before removing the trims. Also, placing the trims on the operator side of the cut line allows for the removal of these trims without crossing the cut line.

Supporting stations

The table sliding the material under the pusher carriage comprises independent idle rollers, housed inside extruded aluminium elements, to avoid any friction with delicate surfaces of panels.
The table of the machine base is covered with machined and calibrated H.P.L. (high pressure laminate) for easy sliding of material.
The optional device “air cushion on the cutting line” dramatically reduces the risk or marking delicate surfaces.
The front section of the machine is equipped with a rounded air table coated with scratchproof material to prevent the sectioned material from being damaged and to ensure easy handling. Additional tables are available as optional, and the configuration will be defined each time according to working requirements.

Energy saving

The beam saw is equipped with a smart “green” management system. That when enabled via a control button, allows the reduction of the acceleration/deceleration ramps of both the pusher and saw carriage whenever low production is required and it is advantageous to activate the system. The beam saw also automatically assumes an idle state after a certain period of inactivity.
When selected, the presence on an inverter for the main blade motor (opt.) allows an efficient reduction in energy consumption. As well as the absorbed power being significantly reduced during saw blade idle times.

PC Numerical control

The basic version of the machine includes a PC with the following features:

- ☑ 21" analogue flat panel colour monitor (wide).
- ☑ Alphanumeric keyboard.
- ☑ Mouse.
- ☑ Ethernet PCI card.
- ☑ Intel microprocessor.
- ☑ Windows Operating system in one of the following languages: Italian/English/French/German/Spanish.

The use of a commercial PC to control the machine gives: maximum flexibility of use, simultaneous run of multiple functions, the ability to use different application software (optimiser, etc.), integration with the company software network, etc.
Since the personal computer controls the machine processes BIESSE does not allow the installation of additional non-authorized software, under penalty of losing warranty.
The following are the main functions of the control:

- ☑ Cutting patterns
  The control can manage complex cutting patterns (comprising longitudinal cuts, transversal cuts, pre-cuts, single or multiple cuts of levels three and four) with graphic simulation of all operations.
- ☑ Lists
  By running a list it is possible to machine all the cutting patterns in that list in cascade.
- ☑ Manual cuts
  Using the manual cuts page it is possible to set a series of cutting operations on the numerical control with ease and send them for immediate running.
- ☑ Simulation
  During machining of the cutting patterns it is possible to display real time graphic simulation of the panel sizing phases, indicating the sizes of cuts.
- ☑ Diagnostics
  In the event of a problem of any kind within the machine, or of inappropriate use of the various numerical control pages, a message is displayed on the monitor indicating the cause of the problem.

- Online help
  It is possible to access the help page from any other page on the control. Basically speaking, the whole of the numerical control operating manual can be found on the various pages of the numerical control software itself.
- Maintenance
  For the main parts of the machine, the optimum number of hours between one maintenance operation and the next is indicated. A warning message is displayed each time a maintenance operation is required.
- Statistics
  Every type of event is recorded (date and time). It is possible to process the recorded data, so as to obtain various types of information.
- Units of measurement
  It is possible to work both in millimetres and in decimal inches.
- Parameters
  By adjusting the machine parameters it is possible to customise functions with respect to the standard configuration, so as to meet the needs of the client. The following are examples of some of these parameters:
  - Table of saw blade carriage speeds according to the book boards size and amount of trims.
  - Machining of cutting patterns according to the number and position of grippers.
  - Automatic management of trims.
  - Pick-up position for the adjustable pusher.

The numerical control hardware allows storage of an almost unlimited number of diagrams, lists and sequences in the resident memory.
Further optional software applications allow optimisation of cutting patterns, management of machine-side label printout and more detailed processing of statistics information.

The machine requires fixing to the ground with appropriate mechanical or chemical anchors (about 150 mm depth).

Machinable materials

The panel saw, in accordance with ISO EN 19085-1/19085-2, indicates the following materials as workable materials:

- Wood and its derivatives:
  - Solid wood, plywood, blockboard, blockboard, multilayer, laminated, honeycomb, chipboard, OSB, MDF or similar.
- Plasterboard or fibre-reinforced plasterboard.
- Cardboard.
- Composite panels with a mineral matrix, in which a matrix (continuous, homogeneous phase) and reinforcement (dispersed phase, powders, fibres) can be identified.
- Mineral matrix panels, silicate panels (e.g. calcium silicate panels for REI walls or insulation).
- Composite materials with polymer matrix and thermoplastic, thermosetting, elastomeric reinforced materials.
- Composite materials with polyurethane matrix or mineral materials covered with aluminum foil.
- Composite panels made from the above materials.

Materials not explicitly provided for in the above list, unless added to ISO EN 19085-2 by subsequent amendments or additions, may not be processed by the panel saw.
The workability of the following materials is always excluded:

- Aluminum sheets or plates of any shape or thickness.
- Ferrous material of any shape or thickness.

Selco WN 610 / 4500 x 4500

Main technical features

Maximum length of cut	4500	mm
Maximum pusher stroke	4500	mm
Maximum saw blade projection	95	mm
Maximum gripper opening	90	mm
Height of work table	985	mm

Machine configuration with

- ☑ Main saw blade motor power 15.0 kW (20 HP).
- ☑ Scoring saw blade motor power 2.2 kW (3 HP).
- ☑ Motorized blades raising with Brushless motors and ball screws system.
- ☑ Controlled pressure beam opening.
- ☑ Digiset for electronic scoring saw blade adjustment with the main saw blade.
- ☑ Quick Change system for both main and scoring saw blade in front squaring area.
- ☑ Exclusion of scoring saw blade from the cycle through panel push-button.
- ☑ Brushless motor for saw carriage movement - speed 1-160 m/min.
- ☑ Brushless motor for pusher movement - max speed 90 m/min*.
- ☑ Side aligner integrated in the saw carriage structure (0 mm ÷ 4200 mm).
- ☑ Panel measurement system for manual cuts.
- ☑ Automatic lubrication.
- ☑ Safety guards and covers in compliance with current regulations.
- ☑ N. 1 Main saw blade diameter 380 mm.
- ☑ N. 1 Scoring saw blade diameter 200 mm (conical tooth).
- ☑ N. 7 Pneumatic grippers on pusher beam.
- ☑ N. 1 Air table 2050 x 620 mm with round shaped profile.
- ☑ N. 1 Air generator for max. 6 air tables.
- ☑ N. 10 Roller modules on pusher table.
- ☑ N. 1 PC control unit complete with keyboard, mouse, flat panel monitor and Windows operating system.

* In EU Countries, Switzerland and Liechtenstein the rip pusher feed speed is limited to 25 m/min.

The optimal height of the book boards to be cut as well as the optimal cutting speed depend on the nature of material, on the finish required and on the quality and wear and tear of tools.

Dust suction

N. 1 main suction hood	180	mm
N. 3 top suction hoods on cutting line	100	mm
N. 1 suction hood at square fence	100	mm
Necessary min. air speed at suction hoods	26	m/sec
Necessary air flow	5320	m^3/h

The machine is equipped with a predisposition (NO contact) for synchronized starting of the saw blade with the opening of the main suction system valve (not supplied).

Power Supply

The user must provide for proper connection to his own power supply, using suitable protective devices and cables of a size suited to the values indicated in the rating plate on the machine's electrical cabinet. The maximum three-phase voltage fluctuation must not exceed +/- 10% of the rated voltage.

- ☑ Maximum power for basic machine 26 kW at a working voltage of 380 V/50 Hz;
- ☑ Connection to the main power supply in the electrical cabinet, saw blade change side.

Operational temperature

The operational temperature must be between the following values:

- ☑ Min. temperature: +5°C
- ☑ Max temperature: +35°C

In case of higher temperature it is required an air conditioning device for the electrical cabinet (option on demand).

Pneumatic supply

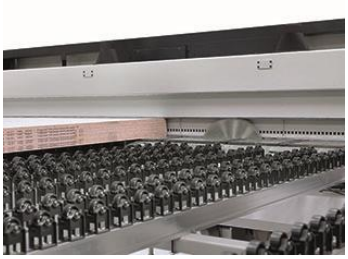
The machine is equipped with a filter-regulator-lubricator unit (FRL) to which the compressed air supply pipe must be fitted.

Min. working pressure	6	bar
Average air consumption for basic cycle	150	Nl/min
Minimum pipe diameter	Ø19	(3/4")

Machine optional equipment

L5003475 1

Double pressure beam made up of independent elements. This structure guarantees a perfect hold down during every cut cycle. The dual structure eliminates the traditional cut-outs for the grippers, provides uniform pressure and an optimal dust extraction. In fact, being independent the cutting channel is closed improving the dust extraction when small trim cuts are performed (BIESSE recommends the use of suction optimization automatic system).



L5104714 1

Device for machining grooves on the panel using the main saw blade. The depth and width adjustment are done directly from the control. In case of multiple grooves, is possible to enable the execution of the groove also during the return stroke of the saw carriage, reducing the processing time significantly.

L5005425 2

Additional double finger pneumatic gripper to fit on the pusher to move panels. The aluminium front stops on the grippers are trimmed during the test run and represent a reference point perfectly parallel to the cutting axis.

L5029505 2

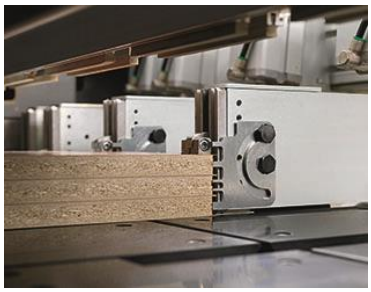
Additional roller module with wheels.

L5006501 1

Cutting line closing device to avoid rip trim dropping.
It is recommended to have the automatic safety device detecting the saw blade flexion.
The device is activated even in manual mode.

L5104471 1

Kit of collet fingers for cutting veneered panels with a thickness range of 12.7-16-18-19-25-50 mm and projecting edges. Each collet is fitted with a stop, mounted on the side, that may be easily disassembled by turning it of 90°. Its use is very simple since it is possible to modify automatically the position of the pushing device by pressing a control key.
The maximum projection of the material is equal to 10 mm, whereas the maximum quantity of overlapped panels that may be cut is linked to the thickness of the single panel. Only front loading.



L5036350 1

Suction optimization automatic system. All extraction hoods are equipped with pneumatic cut-off valves. The opening/closure of such valves is actuated automatically by the machine depending on the requirement of the cutting pattern. The closure of the valves avoids a useless loss of suction power.
Efficiency of the machine's dust extraction system depends on the correct dimensioning of the main dust extraction system (by the customer). It is not recommended for "long" chips.

L5068419 1

Laser beam to clearly show the cutting line and make manual positioning of the panels to be sized easier.
The laser beam is activated from the NC using a specific switch.

L5100120 1

TRACKING LIGHT Led help system for the operator. Thanks to a dynamic LED strip located at the front of the machine, the operator sees which action he has to take in real time, without the need to follow the simulation. In this way the operator's job is faster and more efficient, but above all any errors are avoided.

L5026237 1

Continuous Backup (Backup image disk generation on secondary hard disk drive). Creation of restore points of the machine configuration after unexpected events (viruses, PC fault) or accidentally modified parameters.

L5016425 1

Air conditioning device for the electrical cabinet. Recommended in environments with temperatures of above 40°C.

L5026234 1

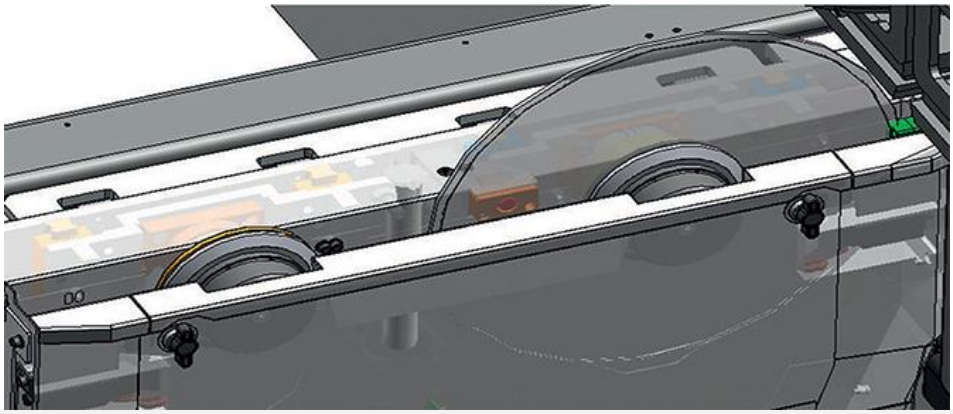
Push button for remote control start cycle, complete with emergency stop button. It can be positioned next to the second or third air table from the square fence.

L5100117 1

21" Touch screen monitor

L5016435 1

Automatic safety device detecting and preventing the saw blade flexion for single line panel sizing machines, equipped with a sensor which monitors the deflexion directly on the saw blade and a device that monitors the RPM on the blade spindle.



L5016449 1

Inverter to adjust the main saw blade revolutions, with motor power up to 22 kW (30 HP) - 380 V/50 Hz.
It allows to find the best combination between the rotation and feed speeds, so as to obtain the best cutting quality for the different types of materials. The frequency values may be set directly on the control panel and - when combined with the "OSI Plus Interface" optional - they may be defined in a different way according to each specific material.
The frequencies range isn't unlimited, therefore the rotation speeds required must be communicated to BIESSE's staff who will provide the most suitable settings.

L5016447 1

Main saw blade cooling and lubrication, by micro-nebuliser, complete with pump and tank.
This unit is enabled directly on the control by pressing a button and is activated only with the blade up.
The quantity of micro-sprays may be modified through an interface parameter and - when combined with the "OSI Plus Interface" optional - it may be defined in a different way according to each specific material.
It is recommended to combine it with the "Inverter for the main saw blade revolution adjustment" optional.
It does not include the set of specific blades to cut non wood materials.

L5004425 1

Replacement of the main saw blade motor, available in the standard configuration, with one of 18 kW / 50 Hz (25 HP)

Machine software options

L5036302 1

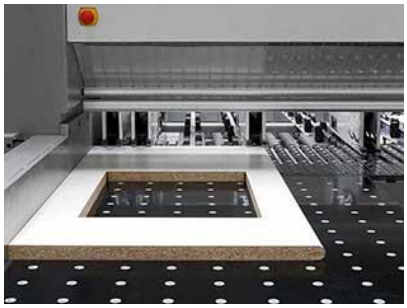
Quick Opti software for the optimization of cutting patterns directly on the machine.
For each optimization can be entered:

- ☑ Not more than 2 sizes of panels.
- ☑ Not more than 40 sub-formats with 2 descriptions available for each sub-format.
- ☑ Not more than 50 panels can be machined for each sub-format.
- ☑ Not more than 1000 panels can be machined.

The software automatically creates the cutting patters and the work list.

L5036303 1

Kit used to edit and perform "Window cutting". Patterns can be stored on the control.



L5036315 1

OSI Interface Plus Version
Compared to the Standard version, the Plus version is provided with a series of additional operations allowing the increase of the interface and machine potential:

- ☑ Order management. This allows joining several work lists in a single order.
- ☑ Navigation through tree. Thanks to a tree similar to that of Windows Resources Manager, it is possible to move within the various environments and machining programs in an extremely fast and practical way.
- ☑ Advanced simulation. Possibility to choose among different views of the machine simulation.
- ☑ Sequence mode. From the sequence page it is possible to set and execute various cut sequences; a window inside the page allows viewing how the set sequence has been structured. Furthermore, the material required to execute the sequence is shown.
- ☑ “Macro” functions for sequences. The two “macro” functions make cutting of re-usable workpieces extremely easy: the first function sets the sizes and quantity of the required pieces and the control determines the minimum panel dimensions needed, whereas the second function sets the sizes of the whole panel and the dimensions of the required piece, and the control sets automatically the cycle in order to obtain the maximum quantity.
- ☑ “Macro” functions for grooving to be carried out within the sequences. When the optional device for grooving is fitted, a series of very useful “macro” functions is available for this application.
- ☑ “Macro” function for pattern editor. This allows the increase of a maximum pre-set value for each, single cut piece, thus avoiding the execution of trim cuts and therefore reducing drastically the cycle times.
- ☑ Advanced statistics elaboration. This allows the execution of machine statistics elaborations for the operators, blades, machining operations, worklists and PLC messages. Then, the processed data may be exported into text files for subsequent processing with external software or they may be simply filed.
- ☑ Panel and drops stock. This allows the management of unlimited quantity of different materials.
- ☑ Technological parameter control system. A set of parameters may be linked to each machining operation or to each material (e.g. the cutting speed, the peripheral blade speed, if any, the max. height of the book boards, etc.). This set will then be used, with specific values, any time that machining operation is recalled or that the relevant material is machined.
- ☑ Management of unstrained cuts on the boards. Thanks to some parameters it is possible to define middlephase cuts for the execution of strips which will be later inserted again in the machine to be cut both lengthwise and crosswise.

Unloading systems

L5105248 1

Replacement of the 2050 x 650 mm rounded air cushion unloading table with a 2050 x 850 mm table equipped with front wheels.

L5006250	3

Rounded air cushion unloading table, size 2050 x 620 mm.

L5105245	1

Roller unit at the front side of rectangular unloading tables.

L5006261	1

Transfer device for the second and third air cushion unloading table. It is advisable to do not use any extension.
Planarity between tables along their stroke is subjected to the ground accuracy level of the factory.
BIESSE recommends the use of a steel laminated strip leveled and incorporated in the ground.

Electrical optional equipment

L5018050	1

Transformer for voltages different from 380/400/415 V - 50/60 Hz.

Label printing

L5036308	1

OS-Labelling. Text and graphic creation on the label, such as parts drawing printed on label at the machine
Allows real time printing of labels for the cut pieces, also inserting various types of bar code (39, 128, EAN8, EAN13, PDF417, DataMatrix, QRCode) used to connect with other machinery for manufacturing processes after cutting.
The supplied LEdit software allows to customize the label layout. An optimizer is required.
BIESSE guarantees the functioning and the technical support only with the following Zebra printers: 2746e, TLP 2844-Z, GK420t, S4M, ZT230T3E.
The label printer and its support stand are not included.

L5060421	1

Electronic label printer directly on the machine, with printing by thermal transfer (with ribbon) or direct thermal contact.
This model in the printing phase lifts the edge of the label from the module, facilitating the operator in detaching it, and rewinds the module in the lower part.
Diagnostic messages (such as: “paper finished, tape finished, printer not connected”, etc.) are displayed on the LCD display. Technical features:

- ☑ Ability to print barcodes.
- ☑ Label width: 19.4 mm - max 104 mm.
- ☑ Label length: min 15 mm - max 991 mm (non-continuous format).
- ☑ Graphic resolution: 203 dpi/300 dpi.
- ☑ Maximum print speed: 152 mm per second.
- ☑ Maximum label roll diameter: 203 mm.
- ☑ Maximum ribbon roll diameter: 81.3 mm.
- ☑ Standard memory: 4 MB DRAM.
- ☑ Operating temperature: from 5 to 40°C.
- ☑ Automatic calibration.

Correct printing operation is guaranteed by using original Zebra labels and ribbons.

L5064415	1

Label printer support stand

Software for downloading from other optimizers

L5036316	1

XML LINK Software to import data from files in XML format (upon BIESSE specifications).
The data transmission may be carried out through:

- ☑ USB Pen Drive.
- ☑ Computerized network (charged to the customer).

This software needs customer’s file testing to ensure the functionality.

Iot SOPHIA

7550042	1

SOPHIA - IoT Connection

SOPHIA is the IIoT platform (Industrial Internet of Things) which aims to generate greater value for the customer through the connection of the machine and the collection and analysis of processing data. A project that fits fully into the digital transformation movement that is characterizing the fourth industrial revolution.

SOPHIA detects, verifies, points out and resolves problems encountered by the user during the use of the machine, as well as plans, on the basis of the data provided, maintenance operations/technical interventions and spare parts supply.
Specifically, it includes:

- ☑ Permanent connection of the machine to service centers.
- ☑ Team dedicated to the diagnostic monitoring of the single machine.
- ☑ Mobile App with continuous monitoring of the status and performance of the machine.

SERVICES DETAILS

Remote Diagnostics

The Biesse service, through the control panel, continuously monitors the machine in operation. The constant flow of data provides and historicizes every significant event during the entire period of activity of the machine.

SOPHIA IoT provides a bidirectional communication between the end user and the service, thus ensuring the shortest reaction time.

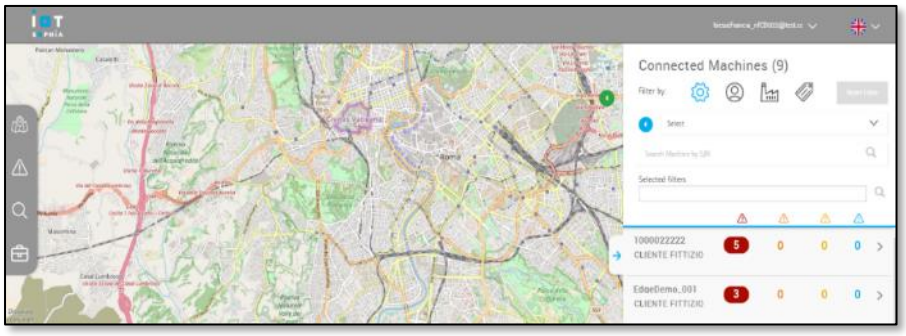
The data is transmitted via Internet, encrypted and certified, to our cloud platform and made available to customer service for remote assistance.

A faster and more efficient service:

SOPHIA IoT optimizes intervention times and increases their effectiveness.

SOPHIA IoT automatically recognizes the most common causes of machine downtime and immediately activates the reference service.

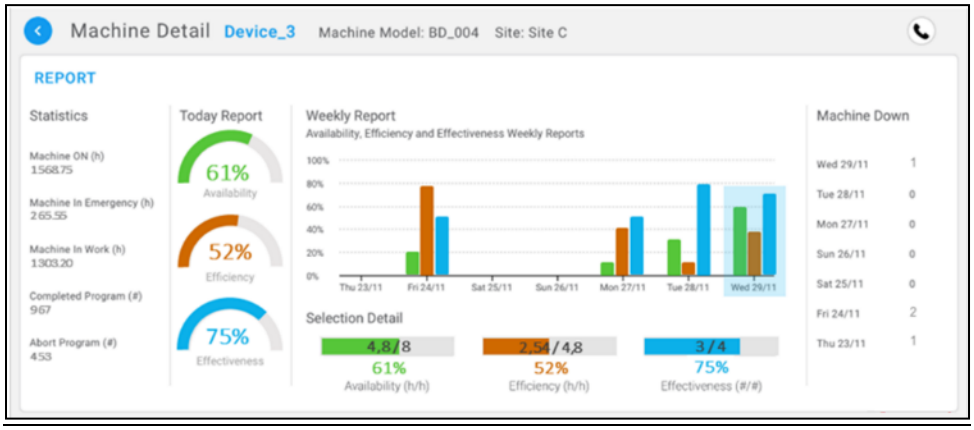
SOPHIA IoT is based on a constantly evolving dynamic architecture. This guarantees a constant increase in performance.



Mobile APP:

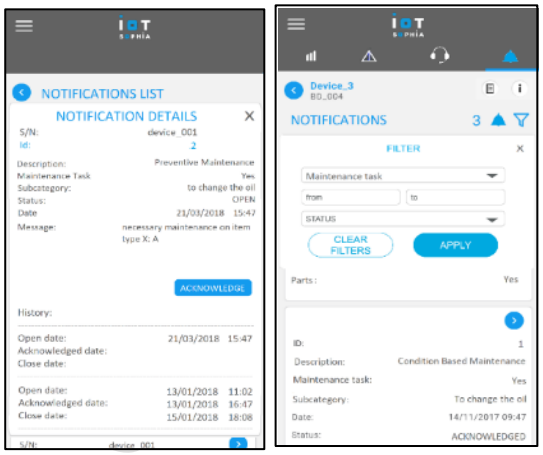
All SOPHIA IoT Biesse technology in a simple app!

☑ Performance indicators and Statistics: monitoring of machine performance on the basis of three fundamental indicators: Availability, Efficiency and Effectiveness. The indicators are viewable both in real time and as aggregation of historical data, in order to have a temporal and detailed view of the machine. The statistics show the main operating data of the machine: hours of ignition and automatic, downtime, etc.

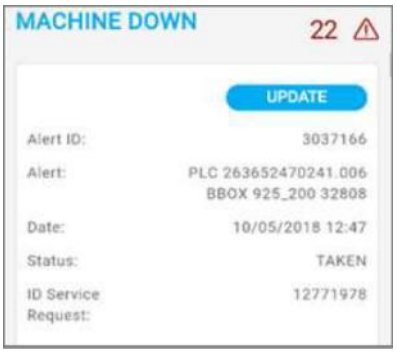


☑ Advanced indicators: indicators specific to the type of machine, with the possibility to select the indicator of interest, the period of analysis and the level of aggregation desired (month, day, hour or half hour).

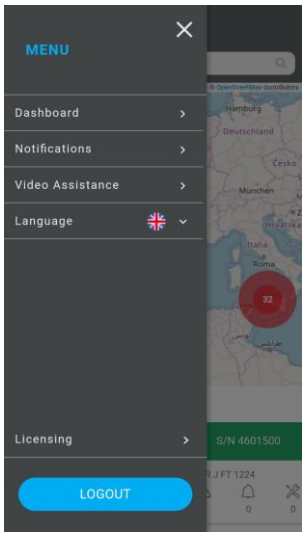
☑ Notifications in the app: push notification system for production and maintenance management. The notifications in question can be sent at the beginning of an event, or independently when the end of the useful life of a component or a maintenance expiry approaches (preventive maintenance). For each notification it is possible to consult and / or modify its status, declaring to have read the notification itself.

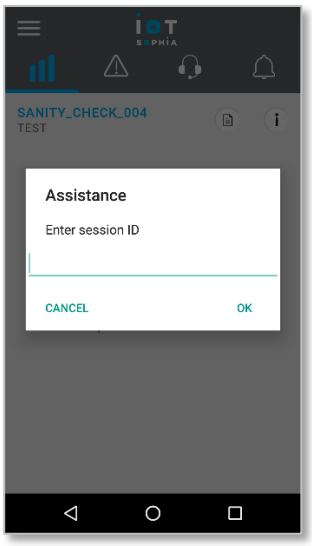


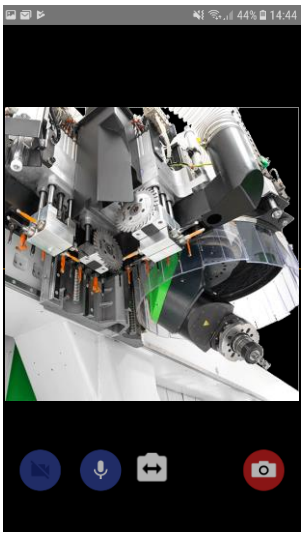
☑ Assistance requests and machine downtime: real-time tracking of service requests and machine down events. For each event it is possible to monitor, facilitate and make the resolution process effective by attaching documents, comments, photos or videos.



☑ Video Assistance: ability to communicate in streaming, chat, take photos and record videos, share documents in order to make the resolution process faster and more effective







☑ Technical Documentation: access to the complete technical documentation of the machine (manuals, diagrams, exploded view and spare parts list) in the SOPHIA Parts application, and the possibility to download the documents, so as to have access also in offline mode.

The SOPHIA IoT app is accessible, via compatible mobile devices, with a non-exclusive and non-transferable license, subject to the conditions to be accepted on first use.
The SOPHIA services are available in Italian, English, French, German, Spanish, Russian, Chinese.
The SOPHIA services are provided to the Purchaser for a period of 12 months from the moment they are activated (or 12 months from the purchase of the Machine) and are automatically renewed for a fee at the price list of SOPHIA package, unless buyer's cancellation takes place within 30 days before the end of the service.
The price for renewals may vary depending on market requirements or correlation with changes in production costs, staffing or auxiliary services, subject to any legislative provisions with impact on sales prices.

DATA MANAGEMENT
Technical data and information related to SOPHIA services can be collected and used by Biesse to perform its performance, and be used in aggregate and statistical form to supply, improve and develop, in general, products / services Biesse technologies.

PRE-INSTALLED SOFTWARE
The terms of use of the BIESSE Software (including those functional to the "Sophia" Services) are detailed in the applicable sales conditions. The Software, pre-installed and / or made available are licensed without exclusivity and will be usable only for Machines purchased, excluding any transfer right or sublicense. The Software Property, and any rights not expressly granted, are and will remain of the property of BIESSE (and / or its software vendors).
The costs of physical connection and the costs of connectivity are charged to the Purchaser.

The SOPHIA IoT platform requires:
- Internet connection,
- Online registration for service, above, as specified in the separate user manual and/or document supplied to Buyer.

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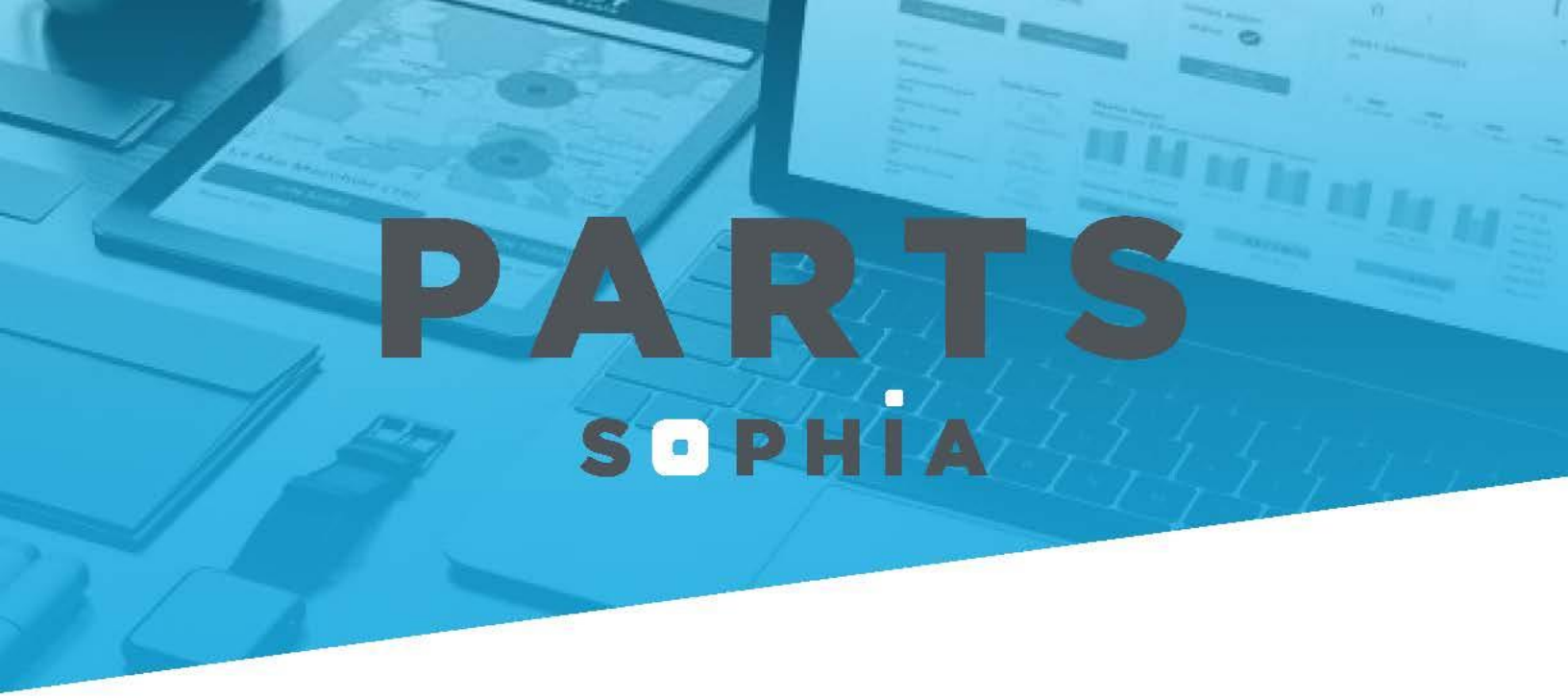
Passive system for reducing electrostatic charges.

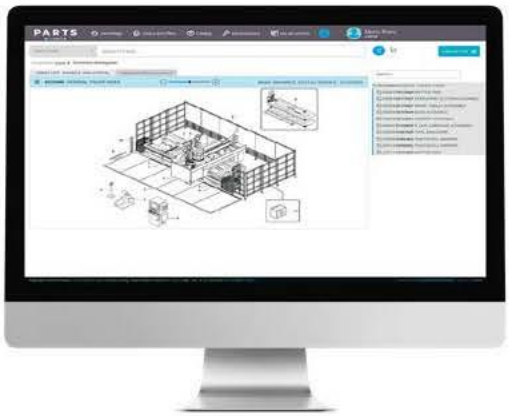


PARTS SOPHIA

Dear Customer,

Take advantage of PARTS SOPHIA, our new online spare parts portal reserved for Biesse and Intermac customers.

Registration is easy, so take 90 seconds and do it now:



- **Visit PARTS SOPHIA Portal Registration: https://parts.biessegroup.com/LoginPage.aspx**
- **Click REGISTRATION and COMPLETE customer contact information**
- **Accept terms/conditions and hit SEND**

PARTS SOPHIA allows you to purchase parts, check availability and track purchases online 24/7 – and registered users can download the free App on Apple App Store (for iOS) and Google Play Store (for Android). Access PARTS SOPHIA on all your mobile devices, easily navigate by machine serial number and shop for parts in a way you've never experienced before!

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Register today! For more information, contact Gregory Bell at gregory.bell@biesseamerica.com or 704 357 3131 ext. 1089

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