

BIESSE ROVER B FT 1536 (original specs)

Serial # 1000010084

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ROVER B FT 1536
Numerically controlled machining centres ROVER B FT

TECHNICAL SPECIFICATIONS:

SINGLE Z AXIS AND DOUBLE Z AXIS WITH PNEUMATIC STROKE VERSION

Maximum axes speed X - Y - Z	85 - 85 - 20	m/min
Z axis stroke	384	mm
Z axis piece passage	180	mm
Z axis piece passage with sweeper arm	120	mm

DOUBLE Z AXIS CONTROLLED BY AN INDEPENDENT AXIS VERSION

Maximum axes speed X - Y - Z	85 - 85 - 20	m/min
Z axis stroke	405	mm
Z axis piece passage	200	mm
Z axis piece passage with sweeper arm	120	mm

5 AXES VERSION

Maximum axes speed X - Y - Z	85 - 85 - 35	m/min
Z axis stroke	515	mm
Z axis piece passage	200	mm
Z axis piece passage with sweeper arm	120	mm

* The technical data shall be verified on detailed layout according to the operating units chosen on the machine

NUMERICALLY CONTROLLED MACHINING CENTER ROVER B FT 1536

FT worktable dimension: X=3765mm; Y=1560mm

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Uninterruptible Power Supply unit (UPS) for the machine PC

In case of a power outage the unit allows to operate the PC for 5 to 10 minutes based on working conditions in order to save data.

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Controls on remote keyboard

Keyboard controlling the main functions available for work area set-up, operating unit tooling and tool changers tooling

The remote keyboard has an ergonomic shape, an easy-to-read display and is equipped with a magnetic device for its positioning on the panel support handles or the control cabinet.

It includes:

- Emergency push-button
- 2 potentiometers
- Membrane keys to access the menus available on the display

3 programmable keys allow the immediate access to the most used functions

It allows the operator to:

- Reset the axes
- Move the axes in manual mode
- Adjust the axes speed by means of a potentiometer
- Control the vertical movement of the spindles of the boring unit for tooling purposes
- Control the vertical movement of the dust extraction hood during the work phases, for the visual control of all the operations being performed on the test panel
- Display all information relating to the work area set-up: panel supports positioning dimensions along the X axis, sliding bases positioning dimensions along the Y axis, type of vacuum module positioned on each sliding base with the respective orientation
- Check the state of input and output signals
- Activate the belt for the removal of chips, if present
- Perform tool change operations.

* If present, the selectors for the selection of the locking areas are not enabled

7000205

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Automatic lubrication system

At each set time interval, adjustable in the numerical control, the pump automatically sends the lubricant to the machine moving parts (linear guides and bearings, recirculating ball screws), with no machine downtime and no operator's intervention.

When the quantity of lubricant in the tank reaches the minimum, a warning message appears on the NC screen.

7022306

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1

X axes linear guides seal cover strips - Size 1536 and 1836

Protects the X axes linear guides and bearings from the intrusion of abrasive dust which compromises the proper functionality over time.

7570062

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

Safety devices

7022072

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1

Upgrade to EC compliant safety systems for Rover B FT 1536

For machine with loading/unloading.

Upgrade to the safety systems required by the EC norms.

Inclusive of:

- Repositioning of the safety fence and photocells barrier to a greater distance from any moving part
- Additional hardware control unit for safety systems
- Safety fence access control with automatic gates locking and anti-panic system
- Dynamic control of tool's rotation and unlocking
- EC declaration of conformity

Working table

7350920

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Reference stops and origins for RIGHT area (does not include pendular machining)

Allows executing programs with panel's reference side on the right

Inclusive of:

- 2 rear stops for RIGHT area
- 3 front stops for RIGHT area
- 2 RIGHT side stops
- Supporting column for RIGHT origin program start
- Foot pedal for RIGHT origins vacuum locking activation

The additional stops, with pneumatic lowering, create 2 additional origins for the correct reference of panels. The stops are automatically raised based on origin selection.

The pieces to be executed on the right origins are locked by pressing the pedal placed near the area to be activated.

* For single machine requires the increment of 7 sensors for the detection of lowered stops, if selected

* For machine with automatic loading and unloading system (Sweeping Arm) includes the increment of 6 or 8 sensors for the detection of lowered stops

7350862

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12 zones Multizone vacuum system

The FT working table is divided into zones, each of which is activated independently by the NC, granting the best vacuum optimization.

It allows the locking of panels with different dimensions minimizing vacuum dispersion, without any operator intervention.

*Requires the reference stops and origins for RH area

Vacuum system and devices for vacuum locking

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7300999

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2

300 m3/h rotary claws vacuum pump

Oil-Free operation through non-contacting claws which grants high efficiency without the need of lubrication.

Rotary claws pumps maintain a constant efficiency over-time and it doesn't require expensive maintenance services.

Flow rate:

- 360 m3/h at 60Hz

Cells and prearrangements

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Flow 1
Front Loading
Flow from Left to Right
Determines the workflow of the machine and the disposition of the selected automatic loading and unloading systems.
* Requires the reference stops and origins for RH area
* For size 1564 allows the configuration with Sweeping arm for panel unloading and spoilboard cleaning

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Automatic Loading and Unloading System with NC positioning axis (Sweeping Arm + Loading Vacuum cups)
Inclusive of:

- Sweeping arm for panel unloading and spoilboard cleaning
- Loading Vacuum cups system with blowing double circuit for transparent panels
- Linear reference stops for piece containment during unloading cycle
- Sensors for the detection of lowered stops
- Pneumatic vertical movement of the safety strips
- Dust collection for panel's bottom side positioned at the end of the worktable
- Prearrangement for Scissor Lift, Loading tables and Lifting table
- Prearrangement for Loading stations type A and B
- Prearrangement for Unloading belt

The loading vacuum cups system is capable to pick a pre-aligned panel from the Scissor Lift, Loading tables or Lifting table, and position it automatically on a machine origin for a correct processing.

The unit is made vacuum cups along the Y axis with automatic activation based on panel's dimension.

It is possible to automatically load up to 3 panels with three consecutive single loading cycles.

The Sweeping Arm can automatically unload the processed panel on the Unloading belt positioned beside the machine.

The positioning of the Sweeping arm is automatically calculated based on the spoilboard thickness avoiding any operator's manual intervention.

Simultaneously to the unloading operation, the Sweeping Arm is capable to clean the spoilboard, allowing the loading of the next panel without performing any manual cleaning operation.

The linear reference stops act as a guide for the worked pieces and avoid any part to fall from the table during unloading operations

At the end of the worktable, an automatically activated dust collection port, positioned at panel's bottom side, grants a better cleaning of the finished components.

If the unloading belt is NOT purchased together with the machine, an additional button pad with 2-hands control to ensure the safety of the operator during the unloading cycle is provided.

The system is not designed to load/unload gloss and/or delicate material without any possible scratching, to reduce the possibility to damage those kind of panels we suggest to use the blowing unit for air flotation table which anyway doesn't grant to completely avoid the problem.

The NC positioned Sweeping Arm can also be programmed to execute cleaning cycles on the top face of the worked panel making it essential if the machine is integrated with external automatic loading and unloading system cells.

Technical specifications:

- Thickness of single panel unloading: from 3 to 50mm
- Maximum thickness of multiple panels loading: 20mm

- Maximum thickness of multiple panels unloading: 60mm
- Spoilboard thickness: from 8 to 25mm
- Maximum unloading weight: 200Kg
- Minimum loadable Y axis dimension of the panel: 800mm

* Requires Conf. 1 or 2 to determine the workflow

7200275

NR

1

Loading station type B - Size 1536

Compatible with:

Conf. 1 - Front Loading - Workflow from Left to Right

Conf. 4 - Rear Loading - Workflow from Right to Left

Inclusive of:

- Loading station with automatic alignment along X and Y
- Machine Connection frame with MDF table
- Additional safety fences and photocells kit
- Prearrangement for automatic adhesive label printing and application system

The loading station with automatic alignment along X and Y is capable of correctly position the top panel of the stack and eventually perform the application of adhesive labels.

The panel alignment and labels application operations are performed in hidden time while the machine is already processing the previously loaded panel.

Since the panel is aligned along X and Y, the machine loading operation is performed in a single movement, with a consequent cycle time reduction.

The additional safety devices for the Loading Station allow to perform stack loading with the forklift in safety, while the machine is working.

*Requires Conf. 1 or 4 to determine the workflow

*Not compatible with thin panels below 9mm and/or transpiring panels

*Scissor Lift, Loading tables and Lifting table NOT included

*Requires the Automatic Loading and Unloading System

The standard factory specifications of the Biesse NBC loading system are not for processing porous materials, such as raw MDF without any lamination.

For processing porous materials (non-laminated, raw MDF, etc.), the standard vacuum and suction system on the standard Biesse NBC machine must be modified (option not included). Buyer shall advise of porous material at the time of purchase to ensure the proper modifications to the machine are completed during machine installation.

7200263

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System for the loading of thin panels and thin transpiring panels for Loading station type B

Inclusive of:

- Automatic pressure regulation system for thin material alignment
- Installation of vacuum cups for panel's alignment with a double circuit for thin and thin transpiring panels detachment and loading

A 2 pressure levels system with automatic activation based on panel's thickness allows to align thin and thick panels without any manual setup.

The vacuum cups for panel's alignment allow the loading of panels with a thickness lower than 9mm.

The vacuum cups with a double circuit grant transpiring panels detachment and avoid any accidental loading of multiple panels.

- * Minimum loadable panel thickness 3mm
- * The unloading of thin pieces or panels with thickness between 3 and 9 mm requires the upgrade for NC positioned Sweeping Arm
- * Requires the Loading station type B

7200322

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Automatic adhesive label printing and application system with 0-90° rotation for Loading station type B

Inclusive of Label Printer and Label application device.

The printer, mounted on the Y axis of the Loading station type B, applies labels in hidden time while the machine is processing the previously labelled panel.

The system is capable to process labels information generated through BiesseNest or an external software (approved by Biesse) and apply adhesive labels in the programmed position to avoid any damage during the routing operation.

The labels layout and contained information can be customized through the supplied software.

Technical specifications:

- Minimum label dimension = 50x50mm
- Maximum label dimension = 100x100mm
- Printer resolution = 200dpi

*Requires the Loading station type B

7200352

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Outfeed Belt Conveyor - Size 1536

Outfeed belt conveyor length 4410mm

Inclusive of:

- Supporting frame in electrowelded metal structural work
- Motorized unloading belt controlled by the machine's N.C.
- Safety devices

The Outfeed Belt Conveyor can receive the nested components from the machine and move them outside the working area, dramatically reducing the idle time between the execution of a program and the following one and therefore increasing machine's productivity.

During the unloading cycle the belt is moved to reduce friction and prevent panel's drag. At the end of the conveyor belt, a photocell stops the movement when the panels reach the end.

The Outfeed Belt Conveyor is accessible from 3 sides for an easy and ergonomic unloading operation; furthermore it is possible to manually activate the belt's movement through a pedal until the remaining panels reaches the photocell allowing performing the unloading operation completely from the far end of the belt conveyor.

Combined with the Automatic Loading and Unloading system, the Outfeed Belt Conveyor allows the machine to perform the loading and unloading operations simultaneously, increasing cell's productivity.

* Maximum unloadable panel 3765mm

* It includes the brackets for pieces and off-cuts containment

* NOT compatible with the Rollers Hold-Down Unit

* Requires the Automatic unloading system (Sweeping Arm) or the Automatic Loading and Unloading System (Sweeping Arm + Loading Vacuum cups)

7200344

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1

Auxiliary working station for nesting pattern visualization and adhesive labels printing with manual labels application

Inclusive of:

- Label printer

- ✓ 17" Touch-screen monitor
- ✓ Mouse and Keyboard
- ✓ Dedicated Personal Computer

The auxiliary working station is positioned beside the machine in case of stand-alone machine or beside the Unloading Belt Conveyor and automatically shows the just produced nesting pattern. The station has a dedicated PC working in sync with the data of the main machine PC: this allows its use in all possible configurations of single machine or in a nesting cell with automatic labeling providing the maximum configurability.

The operator by selecting the desired piece on the touch screen can print the corresponding label; at the same time, in order to avoid re-printing of the same label, the color of the piece on the screen changes.

Technical specifications:

Minimum label dimension = 50x50mm

- ✓ Maximum label dimension = 100x100mm
- ✓ Printer resolution = 200dpi

* Compatible with stand-alone or nesting cell machines even with the automatic adhesive label printing and application system

7200284

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1

Dust collection system for Outfeed belt conveyor

The dust collection system for Outfeed belt conveyor includes 2 dust collection ports of which one positioned on the conveyor belt top side, and one positioned at the end of the conveyor belt.

The top dust collection port clean the panel's top face and inside the grooves generated by the machining, the dust collection port positioned at the end of the Outfeed belt conveyor collects the dust left on the conveyor and avoids accumulation on the ground.

The dust collection system is automatically activated when the Outfeed belt conveyor is moving.

* Requires the Outfeed belt conveyor

Integration with Winstore 3d k1 or 3d k2

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Integration of the nesting cell with Winstore 3D K1 or 3D K2 automatic storage

It provides the electrical connection and the software interfacing with an external Supervisor.

Inclusive of:

- Input / output additional modules able to manage the exchange signals with the Winstore K1 or K2 storage
- Electronic card for external supervisor interfacing
- Adaptation of the emergency electrical line with any emergency contact of plant access point devices
- Modified electrical equipment and related cables of connection with Winstore electrical equipment

* Requires the machine configured as nesting cell with type B loading system

* Requires EC regulations

* Requires the remote console

* Requires electrospindle with liquid cooling or 5-axes operating unit, where available

* It does not include the supervisor

* Requires the Fixed loading table or the Fixed loading table with belt conveyors or the Scissor Lift with table made of stratified phenolic and chain conveyors

* Includes the adjustment of the safety fences of the nesting cell in line with the plant layout

7300212

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1

Fixed loading table - Size 1531 / 1536

Table made of stratified phenolic, with fixed height from the ground for the deposit of a sheet of material with max thickness 60 mm.

* The aligning, the automatic labelling and the loading of the sheet on the machine require the devices provided for operating in the cell

* Includes the supporting frame in electrowelded metal structural work

* Requires the Loading station type B

Operating Unit

7212840

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13.2kW (17.7HP) electrospindle with HSK F63 coupling, air cooled

Technical Specifications:

- 11 kW (14.7 HP) from 12,000 to 15,000 rpm in S1 duty
- 13.2 kW (17.7 HP) from 12,000 to 15,000 rpm in S6 duty
- Ceramic bearings
- Rh and Lh rotation
- Rotation speed from 1,000 to 24,000 rpm N.C. programmable

It is included a dust extraction hood with 6 different positions in Z controlled by the N.C.; the position is automatically set based on tool's length or manually programmed by the operator.

The dust extraction gate is automatically closed when the electrospindle is not working.

*Requires at least one automatic tool changer magazine or Pick-Up, where available

7550008

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1

Presetter for the measurement of the tool length with diameter up to 130mm

Digital device for tool length measurement by contact plate

The device checks the tool length and updates the values in the tool schedule of Numerical Control.

The diameter of the contact plate is 130mm.

We recommend the use of the blowing device for the cleaning of the reading surface.

The measurable lengths (min/max) must be verified on the specific layout.

*Includes a special tool holder for the device setting.

7210090

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1

Prearrangement for the assembly of a 360° rotation interpolating unit (C axis)

It includes all the wiring to the electrical cabinet.

It allows reducing machine downtime for the installation of this unit on a machine already at customer's premises.

7212017

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1

Blowing unit with 4 nozzles for electrospindle

The unit is made of 4 manually adjustable nozzles, positioned every 90°, capable of blowing compressed air during machining operations and increase dust collection efficiency.

The nozzles are installed on the dust collection hood and therefore close to the processed panel for maximum effectiveness.

The unit is strongly suggested for nesting applications.

In machines with multiple electrospindles the slot has to be specified.

*Requires ISO or HSK electrospindle

*Incompatible with Operating Unit with 5 Interpolating Axis

7212179

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1

Additional Z axis carriage for front operating units, controlled by an independent axis

This carriage can fit the boring unit, multifunction unit or both.

The N.C. controls the descent of the carriage, which is performed by means of a Brushless motor and a ball screw.

The boring unit or the multifunction unit are fixed directly to the front Z carriage, which vertical movement is controlled by an independent Z axis, resulting in increased productivity.

* Retrofit NOT possible

* In presence of the Operating unit with 5 interpolating axes is NOT compatible with the multifunction units

* It does NOT allow the subsequent retrofit of a boring head or front operating units

7200424

NR

1

BHC42 Boring Head with automatic lubrication

Working unit which can be equipped with 42 independent tools for single and multiple borings on the top face of the panel.

The spindles have a RH/LH alternated rotation and are driven by precision helical ground teeth gears which grants minimum noise emission and maximum machining accuracy.

The solution with independent sleeve, whereby each spindle runs with the entire support including the bearings, gives the maximum rigidity to the system making it optimal even for heavy duty application (i.e. acoustic panels).

The unit is equipped with an automatic lubrication system: at each time interval, programmable through the numerical control, a pump automatically sends the lubricant to the boring head, with no machine downtime and no operator's intervention.

The boring head can also be connected to the cooling system eventually installed on the machine.

The unit is composed of 42 vertical independent spindle with a pitch of 32mm (22 spindles along X axis on 2 rows of 17 and 5, 20 spindles along Y axis on 2 rows of 15 and 5).

The spindles are driven by 2 inverter controlled motors (motor power 1.7 kW at 2800 rpm - 3 kW at 8000 rpm): the spindles rotation speed is programmable up to 8000 rpm to perform fast drilling cycles and reduce machining time.

Furthermore it is possible to program the correct rotation speed based on the tool and material to be processed.

The boring head is equipped with a dedicated dust collection hood which is automatically activated when the unit is in operation.

* Requires the additional Z carriage controlled by an independent axis

* NOT compatible with the multifunction units

* On Rover B FT is compatible with the 5-axes operating unit only in configuration 3C

Tool-carriers for automatic tool change

7291170

NR

1

8 positions Revolver Toolchanger, positioned on the Y axis carriage

Onboard of the Y axis carriage, allows to store up to 8 tools always available on each position of the machine and to perform a tool change while the machine is executing other operations which not involve the electrospindle, in example drilling cycles, reducing the overall cycle time and therefore increasing productivity.

Technical specifications:

- Wheelbase between grippers: 113 mm
- Maximum loadable tools: 8 with 110 mm maximum diameter
- Loadable aggregates: refer to the toolchanger layout
- Maximum tool diameter: refer to the toolchanger layout
- Maximum tool length: refer to the toolchanger layout
- Maximum weight of a tool or aggregate inclusive of the tool: 7.5 Kg
- Maximum total weight: 32 Kg

* NOT compatible with the operating unit with 5 interpolating axes

* NOT compatible with HSK E40 electrospindle

Software

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7530392

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BSolid

The software package running in Windows environment allows designing the final product, defining its machining, defining working table set-up, simulating the part machining on the 3D machine model and generating the machine needed programs.

It provides the following functionalities:

- 2D CAD environment complete of:
 - Commands for geometries and text designing on planes and 2D faces complete with the typical tools for design (lines, polylines, arcs, circles, ellipses,) and for design modifications (move, rotate, scale, and mirror.)
 - Dimensioning tools
 - Design of custom vertical, inclined and curved faces starting from designed geometries
 - Fully parametric mode (capability to hook objects to the piece with formulas and conditions)
- General file management tools (copy, paste, undo / redo) and design visualization tools (zoom, view rotation, orthogonal view on customized faces) always available
- DXF, CIX and BPP file import
- Commands for routing, boring and cuts design on horizontal, vertical, inclined and curved faces with the capability to work on these faces in a 2D simplified way (therefore the 4 axis machining)
- Commands for 2D simple pockets design (such as slots on the piece)
- Program design "Wizard": innovative command for the automatic creation of programs based on rules of automatic association between geometry and tools
- Independent management of multiple machines
- Management of 5 axis machining only in positioning
- Management of probing cycles
- Customized macro creation

- ✓ 3D work piece simulation with visualization of material removal
- ✓ Tool management environment complete of:
 - ✓ Custom tool design (routers, drill-bits, saw blades and their 3D shape)
 - ✓ Definition and tooling of aggregates (either price list available as generics)
 - ✓ Chip deflector design
 - ✓ Tool copy and search
 - ✓ Definition of chip deflectors
 - ✓ Copy and search for tools (routers, drill-bits and saw blade), aggregates and chip deflectors
 - ✓ Working sequence definition
 - ✓ Environment for rule definition of automatic machining
- ✓ Machine tool changer 3D graphic environment: it allows to equip or take off the machine tool changers with tool, aggregate or chip deflectors immediately showing and checking their dimensions
- ✓ Working table 3D graphic environment including:
 - ✓ Current machine real and faithful 3D model view
 - ✓ Vacuum modules and clamps stock management
 - ✓ Realistic movement of working tables and carriages
 - ✓ Working table semi-automatic positioning and its configuration parameters
(This command is an aid and does not replace the machine tooling, as it has limitations. Therefore you should always run a simulation of the program on the machine before running it)
- ✓ Realistic simulation of work piece on the machine worktable able to:
 - ✓ Simulate the real machine dynamics without actually run the machine itself
 - ✓ Simulate in 3D graphics the part machining with material removal view
 - ✓ Check any kind of collision between all machine components: tools, electrospindles, aggregates, working tables, carriages, vacuum modules, Uniclamp modules and working piece anticipating every possible mistake on the actual process (warning: it doesn't exist any type of control on the actual working table set-up, the kind and position of each locking support are borne by the operator)
 - ✓ Calculate the work piece execution real time on the machine

* Recommended requirements of the PC for installation in office:

- ✓ PC Intel Core I5 or I7
- ✓ At least 8 GB RAM
- ✓ Windows 7 64 bit Operating System
- ✓ nVidia OpenGL Accelerated Graphic Card with at least 1 GB RAM
- ✓ Resolution 1440x900 with 16M colors
- ✓ At least 10 GB of free space on the Hard Disk

7530409

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bNest - Software module for nesting process applications

bNest allows to create nesting projects including the item list with related quantities to be produced and the list of boards to be used with the target of minimize the used material and the machining timings. The optimization process result is a list of bSolid programs (.bSolid) containing all the machining of parts positioned inside the used boards.

It includes the following features:

Environment for manual nesting project creation

- ✓ It's possible to add or take items off an existing nesting project, optimize or delete them, check the nesting optimized cut layouts

Data import from ERP or external design application

- A standard solution as spreadsheet file (.csv format) is used in order to keep easy the data exchange between software applications
- The imported data will be used for production and labelling as well
- The import rules are configurable thus they can easily adapt to customer needs

Item, board and material management

- Dedicated environments where the operator can edit, check and fix all the information of parts, boards and materials
- The item registry describes the item properties (dimensions, material, program, parameters)
- The material registry lists all usable materials. The material registry can be filled in also with a data import from the company ERP system (through .csv files)
- bNest will automatically split the list of processable items in groups according material, thickness and grain.

Supported formats

- It's possible to import the following file formats : bSolid, cix, bpp, cid, dxf (in the bNest compatible format)

Free-shape nesting

- The nesting of free-form shape is supported

Integration with bSolid

- It's possible to create items directly in the bSolid Cad-Cam environment joining each designed program with the materials defined by the operator
- It allows opening the nesting results when the operator needs to edit, simulate or get the machining cycles times.

Off-cuts crumbling

- Using specific parameters it's possible to break the cut-off parts in order to simplify their offloading by the operator.

Cleaning cycles

- It's possible to add to the nesting results one or more cleaning cycles using the sweeping arm

Labelling:

- Automatic management of label applier or manual label printing with dedicated touch-screen device
- Only for automatic management, it's possible to automatically optimize the label positions in order to avoid any label scratch or damage during the router machining

* It requires the automatic adhesive label printing and application system or the auxiliary working station for adhesive labels visualization and printing

Manual management of re-usable material:

- ✓ Manual definition of re-usable parts (dimensions, material, grain and thickness)
- ✓ Manual integration of available re-usable parts for their use in any nesting projects

Automatic management of re-usable material:

- ✓ bNest provides the automatic definition of the material not used in the nesting layouts(re-usable part creation) and the labelling of re-usable defined parts (using a dedicated label editor)

* It requires the dedicated module for re-usable part management

Machining sequence

- ✓ the machining are listed in the right order able to minimize both the tool-changers and the machine movements leaving as last the through machining for optimize the vacuum part locking
- ✓ It's possible to create machining sequence in order to separate the parts from the smallest to the widest ones

Project report:

- ✓ On each project it's possible to see statistic information as quantity of used boards and used material percentage

* It requires bSolid

* The Nesting optimization is not compatible with bSolid programs containing curved faces, 3D surfaces and relative processing programmed with "3 axes machining" and "5 axes machining" modules (roughing, finishing with 3 axes and 5 axes), 3D engraving

7530428

NR

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Module for re-usable material management with bNest

The module increases the bNest functionalities adding the following automatic features:

- Definition of the minimum material size to be considered re-usable waste material
- Re-usable waste material labeling according a dedicated label editor
- Software interface to modify/delete the identified re-usable waste material
- Recovery of re-usable waste parts by placing them in the re-usable waste registry of bNest

These features are guaranteed even in the presence of an external line Supervisor.

* It requires bSolid

* It requires bNest

7530213

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Additional license for bSolid

It allows the installation and the use of bSolid on 1 additional PC station.

* It includes 1 hardware USB key for software activation

* It requires the bSolid software

7530214

NR

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Extra license for a single additional bSolid module.

It allows the installation and the use of one or more additional bSolid modules on 1 PC station enabled by the extra key included in the bSolid additional license.

* Quantity depending from the quantity of additional modules selected

* It requires the additional license for bSolid

7530219

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Additional license for re-usable material management with bNest

It enables all the functionalities of the module for re-usable waste management of bNest on an additional bNest license

*It requires the module for re-usable material management with bNest

*Maximum quantity 1