Conturex

It’s getting warmer

Hurricanes, floods and periods of extreme heat or cold have come and gone repeatedly over the history of the earth. Whereas isolated events of nature occurred in the past, today we are increasingly dealing with global changes caused by humans. Climate change is not just a thing of the future; it is now generally accepted that it is occurring at present.

For 150 years, industrialized countries in particular have been warming the earth by burning oil, coal and gas. In our mod-er-ate climate zones, the change is occurring slowly and almost imperceptibly. We frequently do not even notice it, and when we do, we are unaware of the consequences. In other regions of the world, climate change is having a more drastic effect on humans and animals. In the Sahara, dry periods are becoming increasingly longer, animals are dying of thirst, and nothing grows anymore in the barren soil. Latin America is becoming increasingly plagued by major floods. Tropical hurricanes are destroying houses in North America. Destructive tornadoes are becoming more frequent.

To prevent additional catastrophes, the emission of climate changing greenhouse gases needs to be significantly reduced. Industrial countries that are historically responsible for climate change must do significantly more.

Whoever wants to move the world first needs to move himself

Socrates

Protection of the climate is without doubt the greatest task that will confront humans over the coming decades. A great deal needs to be discussed and negotiated about the reduction of CO_2 emissions. Climate and global changes are topics that attract a great deal of attention. Especially storms and catastrophes attract significant media coverage. National and international climate conferences are held and a great deal is said about protecting the climate.

But talk alone is cheap. To prevent worse things from happening, action is needed. Leaving it to the politicians is the easy way out. Each of us is responsible for a clean and intact environment. Independent of our job, surroundings and place of residence.

With wood into the future

Wood is a renewable resource that does not affect climate and makes us all breathe easier. While they are growing, trees store large amount of carbon dioxide and incorporate it in their structure. The more wood that grows and is processed into objects of value such as windows, the more CO_2 is taken out of the environment. This is good for our climate. The CO_2 remains captured until the window comes to the end of its lifecycle and is thermally recycled. In addition to its positive environmental properties, wood is one is the most desirable materials that we have due to its natural, warm and attractive appearance. Wood is also an outstanding material because of its thermal insulation properties. 1 cm of wood provides as much insulation as 10 cm of brick.

Good for the environment and attractive to the eyes.

Windows, doors and the environment

Windows supply building interiors with daylight, refresh air and keep out negative environmental influences. The considerations that go into design are correspondingly varied. For construction and installation, factors affecting building design, safety, hygiene, psychology and finances need to be taken into consideration.

Energy savings and environmental protection are the greatest consideration. Heat needs to remain within the building. Sunlight needs to be enjoyed. Bright rooms with large windows are in great demand. Windows made of wood are able to satisfy all the requirements.

Bottom left: Passive solar house
Bottom middle: Historical windows
Bottom right: Window elements let in a great deal of sunlight

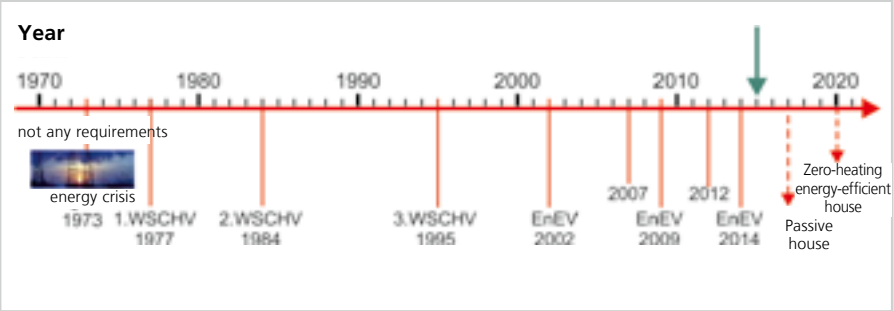




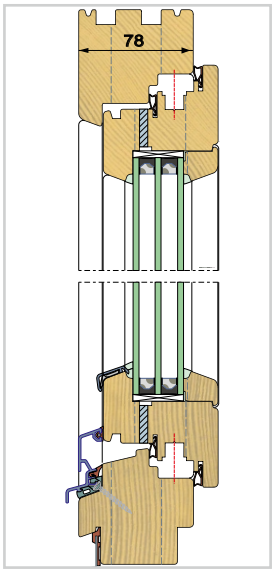
Flexibility for the future

Comprising an average of 25-30% of the shell of the building, windows play a substantial role in saving energy. The introduction of statutory minimum thermal resistance levels was therefore an important step. Producers of windows and doors are directly affected. Energy-efficient products are required, and the lifecycle of window systems is rapidly shrinking. In the future, window manufacturers will only be able to survive if they can react flexibly to rapid change.

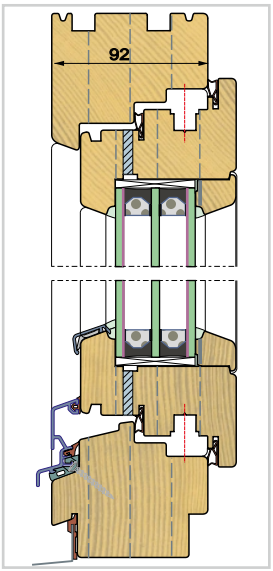
The WEINIG Conturex CNC center shows how an open system works which can make you a winner in this competition.



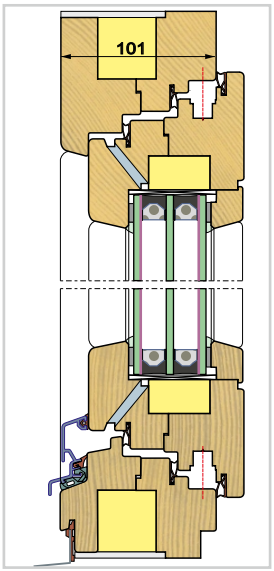
Energy savings in Germany required by law
(WSCHV= Thermal Installation Ordinance/
EnEV= Energy Savings Ordinance)



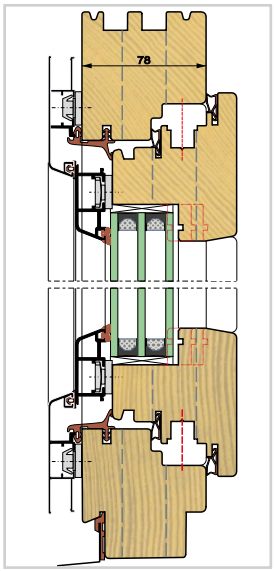
IV 78 energy-saving windows



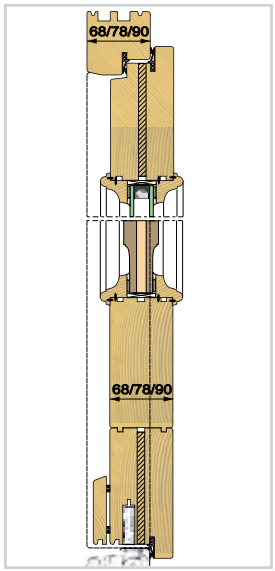
IV 92 energy-saving windows



IV 101 passivhouse



IV 78 timber-aluminum windows



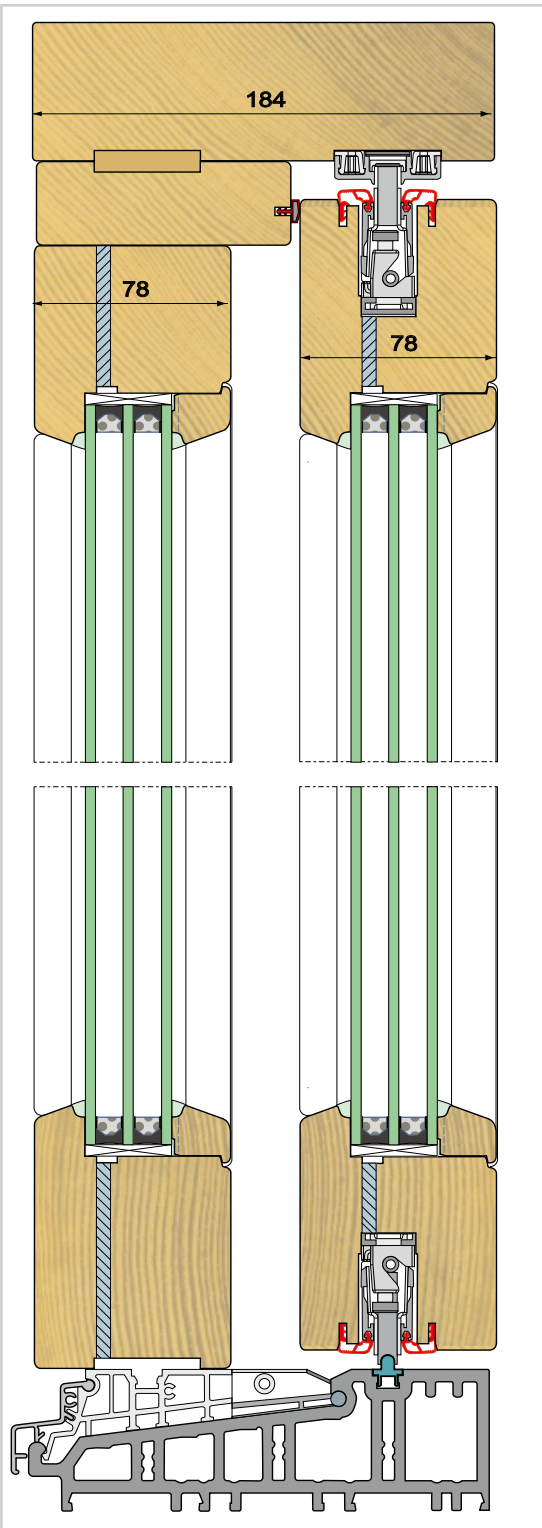
IV 101 single-rebate doors

All risks under controll

What are the consequences of the strong dynamic developments in the window and door industry? Everybody talks about terms as IV78, IV92, triple
pane, low energy and passive thermal houses are in everybody's mouth. People who invested in a rigid production system are risking their future. Hesitate, and you may miss the train. Maximum flexibility is essential. With the Conturex CNC profile center, WEINIG provides an intelligent response to this need.

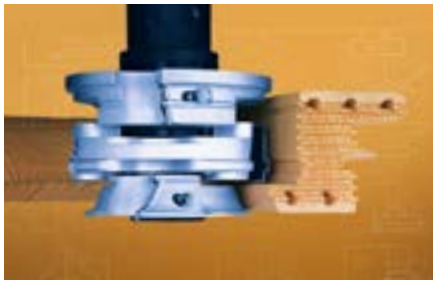
The primary advantage is independence from restrictive lengths and a limited number of tools. Whereas earlier systems had a fixed configuration that could only be changed with a great deal of effort, the modular Conturex leaves all options open.

This intelligent design allows you to make all necessary modifications to window systems.

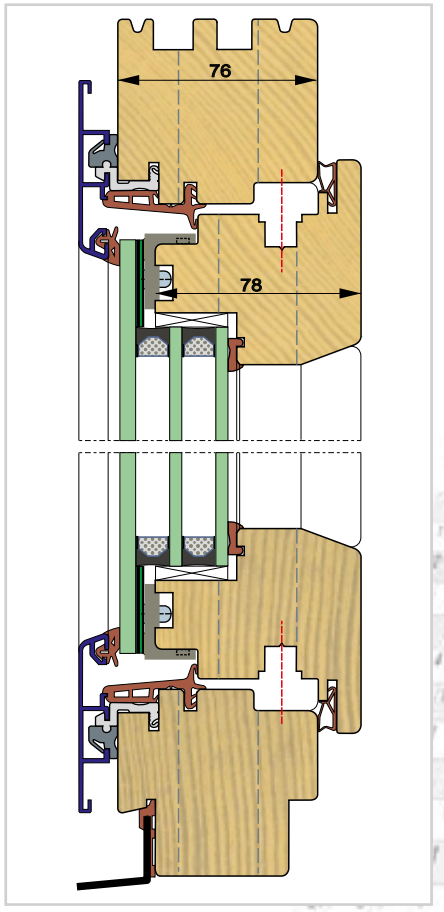


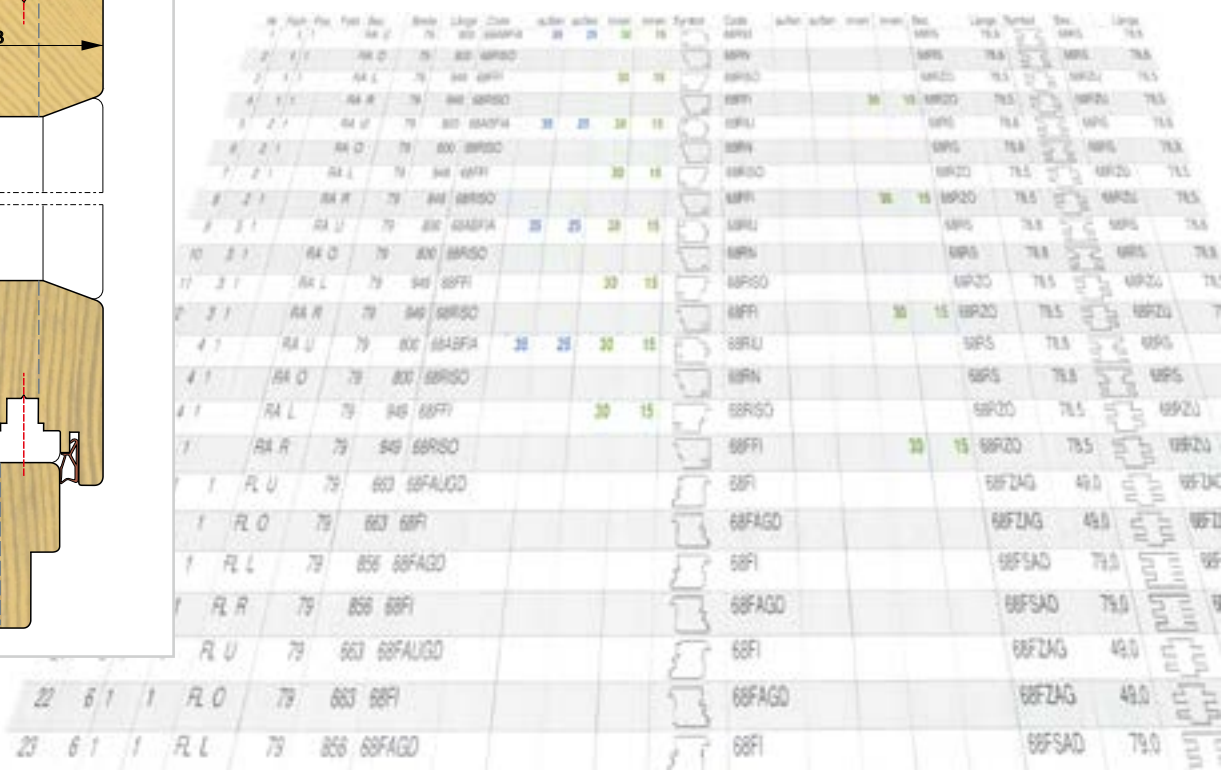
sliding door elements
IV78 system

Long-term planning through system variety



No other production technology is as adaptable as the WEINIG Conturex. The customer orders new tools, creates master data in the window construction program, creates the profiles in the WEINIG program and any window system can be produced in just a short period of time. The innovative spindle system with its processing units that work simultaneously and independently on both sides of the solid portal offers a high level of performance. Up to four processing units are on one portal. By dividing the tools into complete tools for systems that are used frequently and split tools for less frequently required systems, capacity can be precisely adapted to requirements. This is economical and allows the production of a nearly unlimited number of window and door systems with above- average productivity and quality.





Powerful building components from natural wood

WEINIG in Germany is the high-tech company for solid wood processing. The newest production system by WEINIG is called Conturex and can create the following:

Window
- Inward-opening windows
- Outward-opening window
- Single-glazed window
- Double-glazed window
- Casement window
- Insulated glass window
- Thermally insulated window
- Passive solar window
- Sound insulation window
- Safety window
- Fire protection window
- Avalanche protection window
- Flood protection window
- Horizontally pivoted sash window
- Reversible window
- Lift and slide window
- Parallel sliding window
- Vertical sliding window
- Historical windows
- Arched window
- Window doors
- Window elements
- Window moulding
- Window sills
- Folding shutters
- Wood roller shutters
- Subframe
- Multi-lite frame

House doors
- Trend
- Harmony
- Design
- Rustic
- Classic
- Style
- fire protected

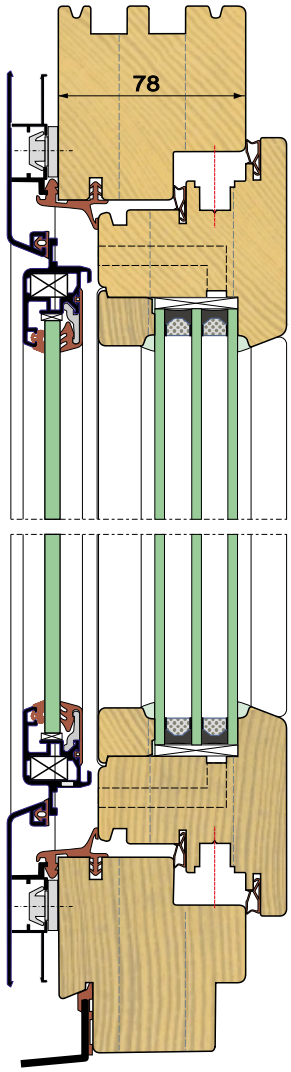
Wood/aluminum window systems

Interior doors
- Block casing
- Doorframes

Wintergarden
Wooden house construction

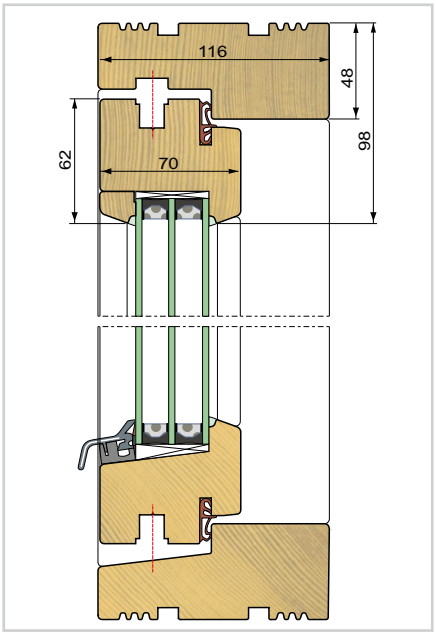
Special parts
- wooden toys
- playground equipment
- wooden furniture
- frame construction

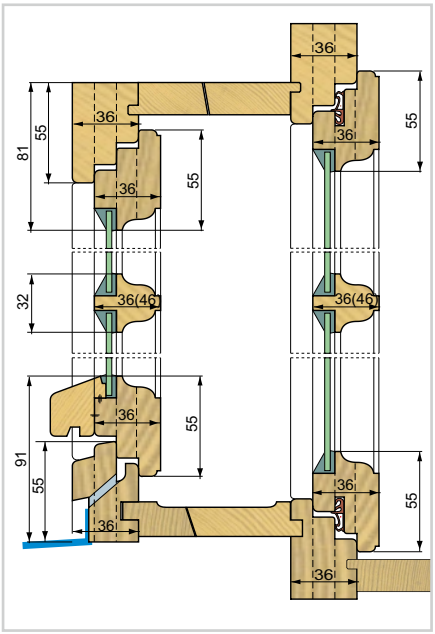
Technology that adapts to your tasks – and not the other way around



Every model of the Conturex series is tailored to a specific user and performance profile. When you start using Conturex technology, you have a solution that is adapted to the needs of your market. If your needs change, the system can change as well. The modular design offers almost limitless flexibility in conjunction with the multifaceted attachments. New tools, different aggregates, the AlphaCAM program or the stepwise expansion of new window systems allows you to easily adapt to new situations and help you take on new markets.

The system can manufacture any national and international window such as the IV78, IV92, sound insulation windows, wood/aluminum windows, any type of door and much, much more. The system can grow with your demands, and you can therefore bank on it in the future.





Top:
wood/aluminium double-glazed window
Right:
Danish window
Far right:
Historic casement window

Produce profitably

With the Conturex, you switch from producing parts with several machines to integrated production with a single system. This allows you to focus on one machine and substantially reduces the amount of associated computer time. The conventional transport paths between different machines are eliminated. This keeps the parts from becoming damaged and soiled which can lead to expensive reprocessing. In addition, a substantial amount of energy is saved since the unit is responsible for complete processing: With Conturex, only the heads that are needed actually operate.

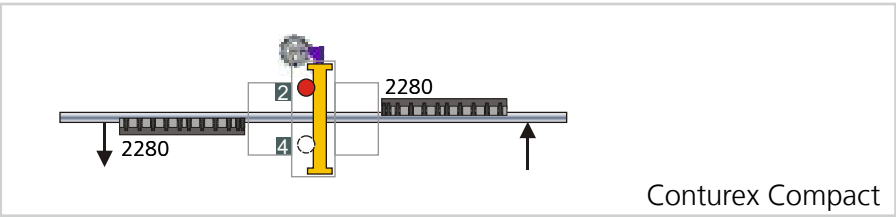
In addition, there are unique innovations such as a recovery unit and a mature energy management. All workpieces are produced with a superior quality and without set up time.

Many companies still manufacture like this ...

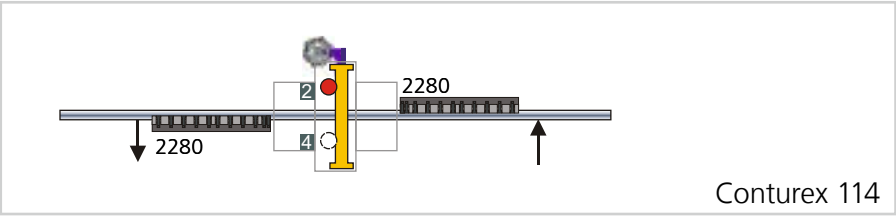
... manufacture profitably with the WEINIG Conturex. A Conturex unit replaces up to 6 conventional machines.

Able to take on every task – the range of features

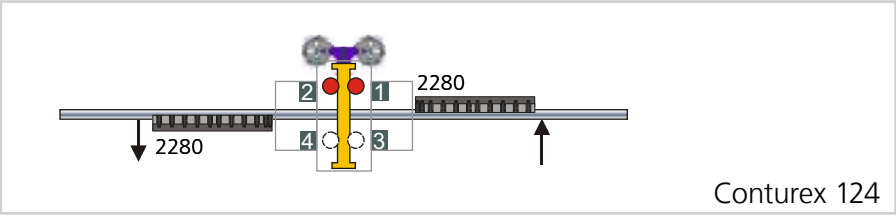
The Conturex is available in different performance classes. The Conturex Compact to Conturex 226 are available depending on the requirements. By offering comprehensive, professional advice and discussions with our window specialists, we will provide you with the most economical solution.



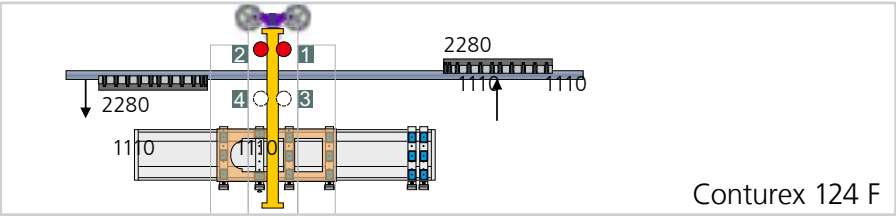
Conturex Compact



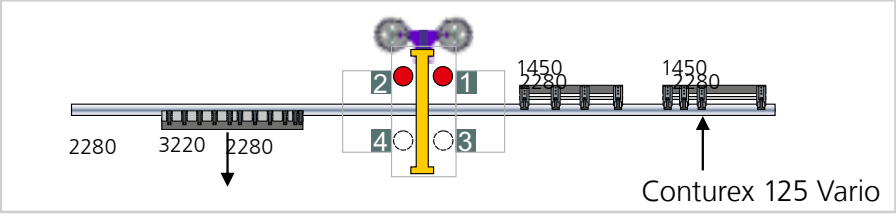
Conturex 114



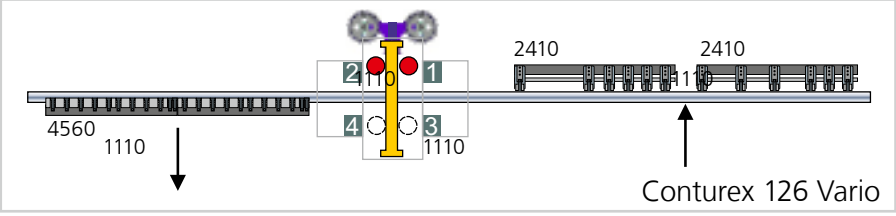
Conturex 124



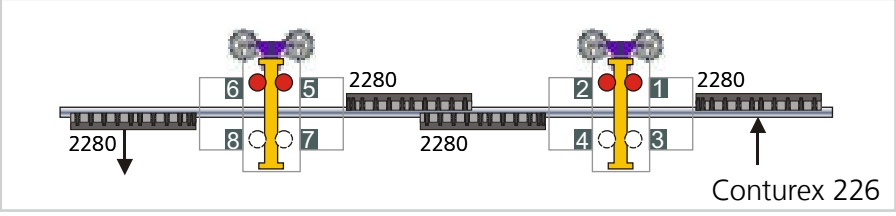
Conturex 124 F



Conturex 125 Vario



Conturex 126 Vario



Conturex 226

Flexible – even with the materials used

All of the types of wood and materials that are approved for doors and windows can be machined on the Conturex. An increasing number of doors and windows are produced from modified woods in response to more stringent heat transfer coefficients for windows and outside components. By means of various treatments, domestic wood can reach levels of durability that are comparable with tropical wood.

Since the processing parameters such as feed, speed and machining variables such as chips removal can be adapted to the respective material, plastics or composites can be processed in addition to solid wood. These materials and combinations of materials would overtax conventional machines. But not the Conturex. Another reason why the unit will retain its value.

Complete processing – Compressed processes

The Conturex not only takes over the jobs of several machines, it also produces parts in a single pass. Maximum precision, full automation and high flexibility. By compressing the processes, intermediate storage, handling and set up times are eliminated. The savings of these costs of handling are substantial.

The multi-product capability opens a host of possibilities. The unit can also efficiently manufacture products that are not related to windows and doors. Such as hinged shutters, casings and furniture and frame parts.

Processes
Sawing, grooves, milling, profiles, machining faces, counter-milling, drilling, dowel holes and dowel patterns, notching, engraving, slitting, creating tenons, countersinking, milling mechanical connections, milling fittings, processing fittings, lock casings, door handles, pockets, subsurface machining, grinding

- Angled parts are standard
- Rebate joints
- Arc segments

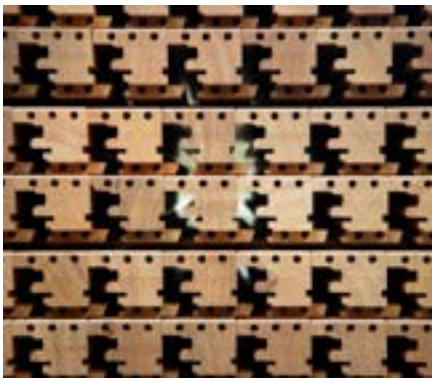
Intelligent, profile-independent, tailored to fittings

WEINIG helped popularize the expression **framewise production.** Without any sorting, the required parts are always produced in the sequence that they are needed for further processing. This advantageous principle was also retained with the Conturex that produces all workpieces in a single pass. Once the last part of a frame is produced, all parts are transported together the next production phase independent of the number of parts and the sorting of the parts. The operator can subsequently treat or glue the parts.

Chaotic production with an RFID transponder (data chip) or barcode is also new. Instead of feeding the parts according to the production list in a specific sequence, the parts can be fed to the machine randomly. The Conturex nevertheless knows which steps are to follow. This method makes life much easier for the operators and eliminates a source of errors.

In every production method, the operator will receive the first part in a very short time. Conventional **series production** is of course another option.

Accommodating fittings and such required tasks such as door handles, corner bearings, lock casings, band holes, as well as notched holes for locking elements are always created in the same processing cycle by the Conturex. Templates can be eliminated when **mounting fittings.**



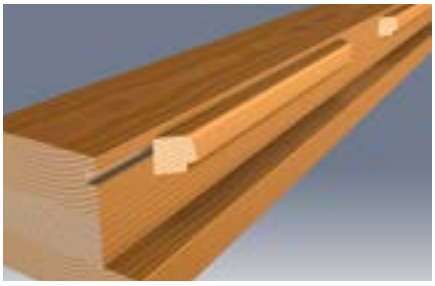
Any type of corner connection is possible – even future ones

The Conturex is supremely flexible in regard to corner connections. You can choose between mortise and tenon joints, dowel connections and mechanical corner joint and circular tenoncorner joint. The maximum tool diameter of 340 mm and tool weight up to 12 kg enable slice and tenontools joints to be created with exquisite precision. With a maximum slot depth of 140 mm, this technique can also be used for doors and complex window design. The different corner joints can be altered, converted or enhanced at any time. WEINIG therefore offers a comprehensive machining solution adapted to your product series and tailored to your customers.

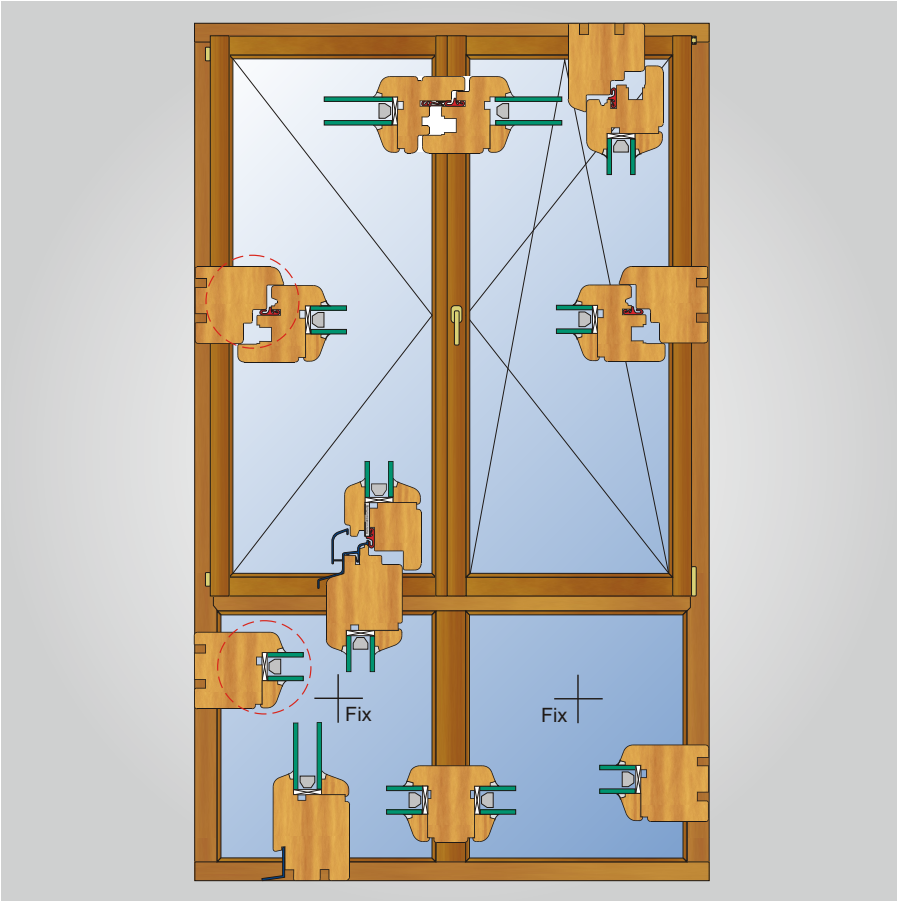
Innovation included

Increasing customer demands, new products and shorter delivery times require a production technique that is both, flexieble and efficient. With its unique flexibility, the Conturex can also perform extreme production tasks for example in element construction.

With mullion and transoms, rebate joints save the time-consuming insertion of gleazing beads and offer a visually attractive solution. Two differ-ent profiles can be created in the same piece of wood.

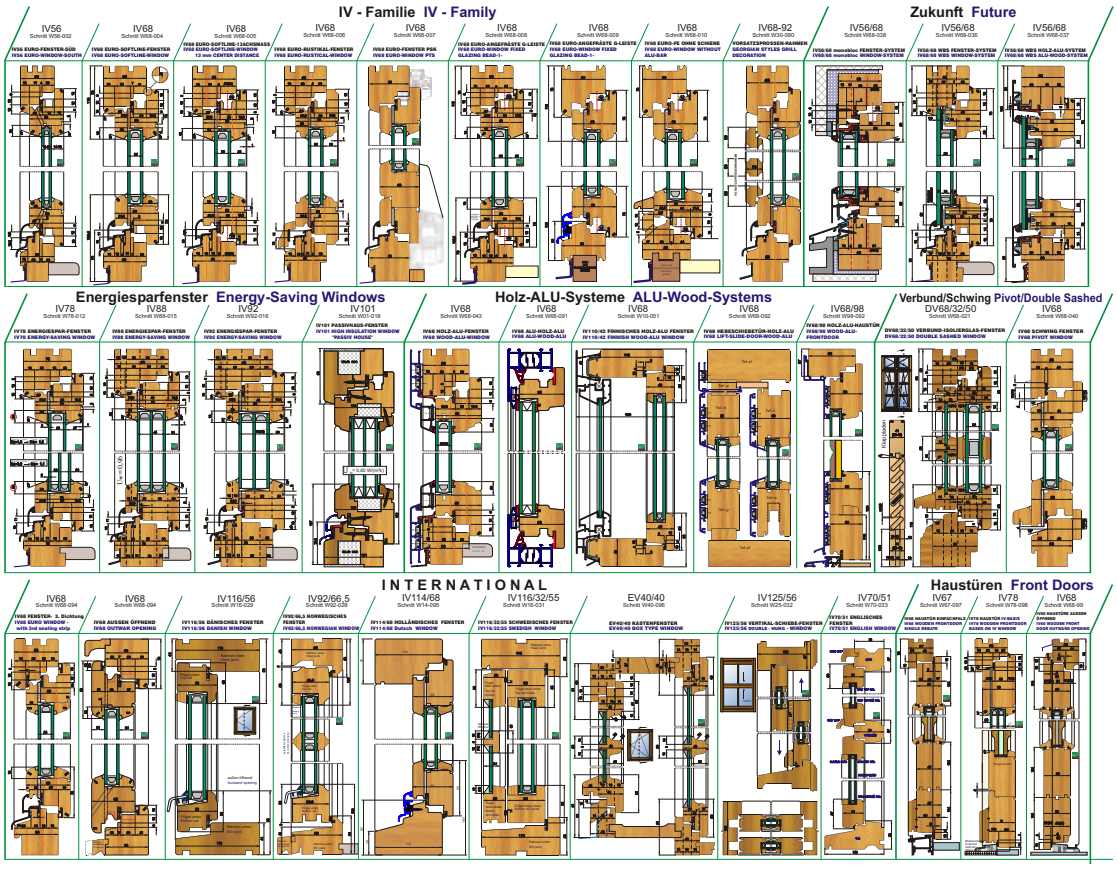


Various solutions are available for the creation of glazing beads. Miters in the glazing beads, support grooves and tightly clamped strips are also possible.



Consultation and complete service

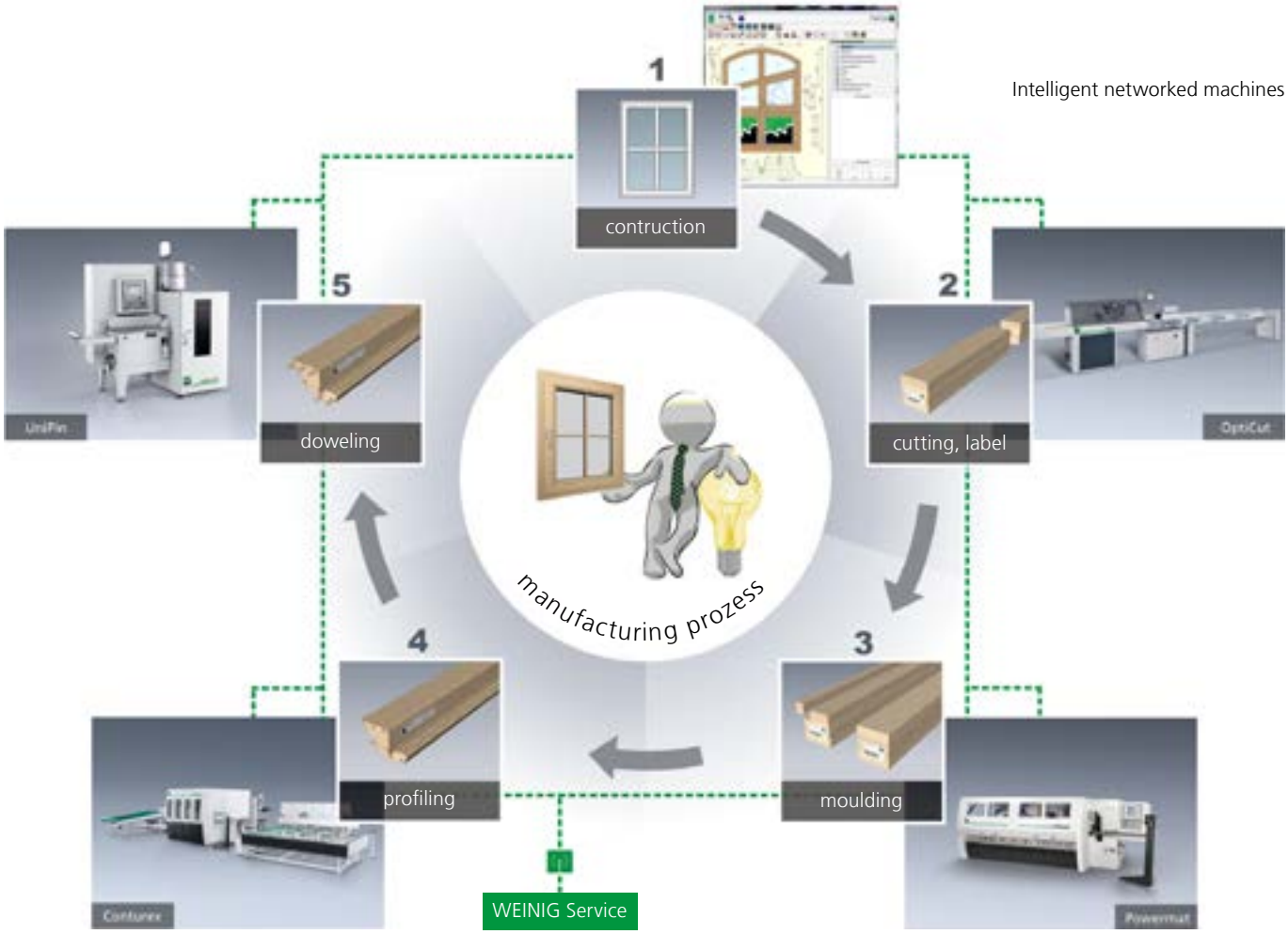
The WEINIG product line for windows is internationally unique. A permanent team of highly-experienced, specialists for wooden window daily to create customer-specific solutions. They monitor and evaluate new national and international developments and trends. From planing to initial milling and profiling the strips to finish processing. WEINIG customers have the complete range of the team's expertise at their disposal. Whether in consultation before and after purchasing, for service tasks or implementing complex projects, the Window Division is your reliable partner.



Window and door versions

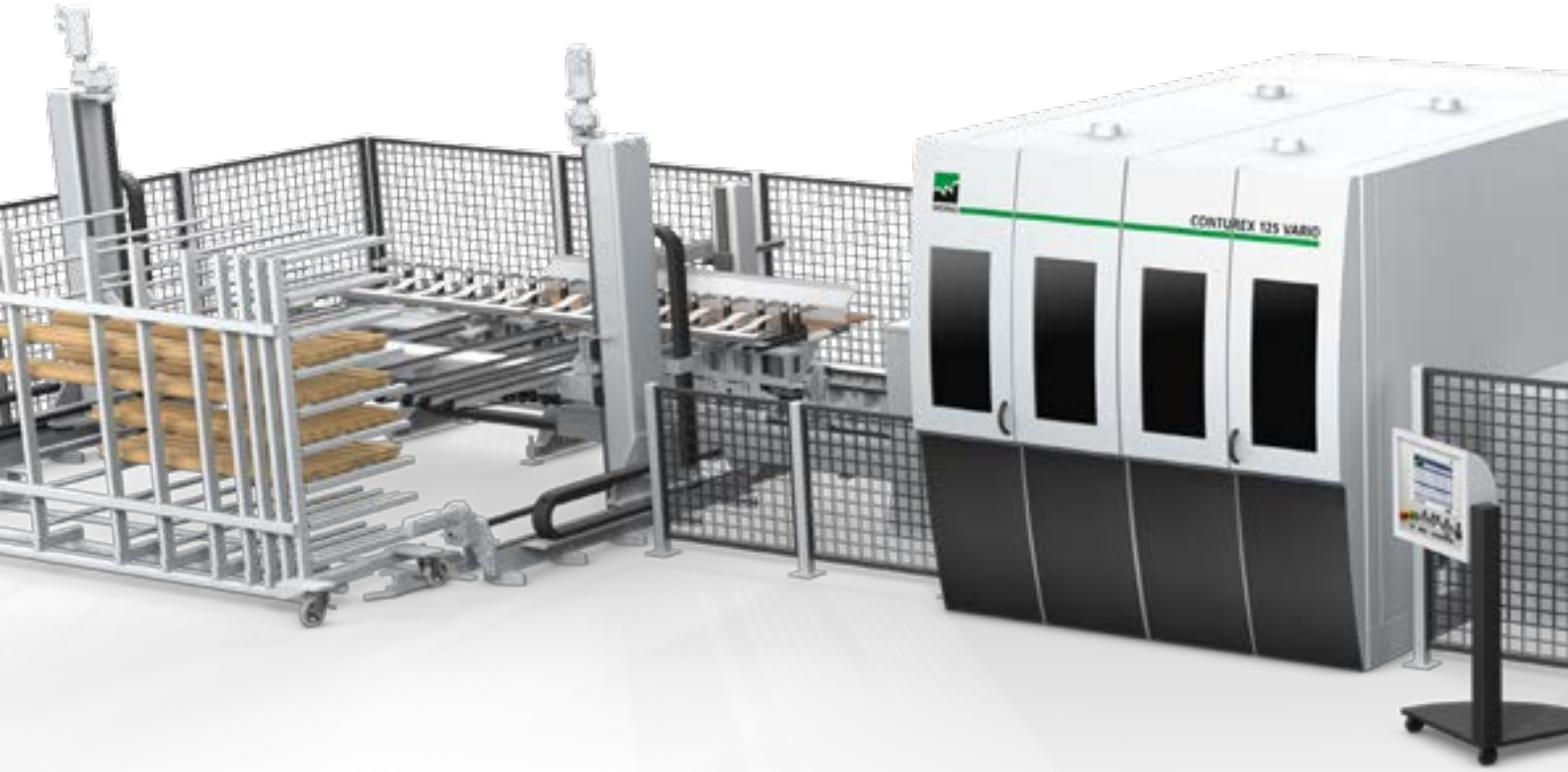
Product integrity -
The networked window production

From the expertise for the whole process, WEINIG has developed a modular control concept. The continuity of all hard and software components is guaranteed.
With this product integrity, the creation of the cutting lists for the cutting saw is also contained as well as the production planning for the moulder including the production of bars. The integral control concept extends over the process planning and the construction of the window elements up to gluing the individual parts. Due to the uniform communication the manufacturing process becomes substantially more efficient.

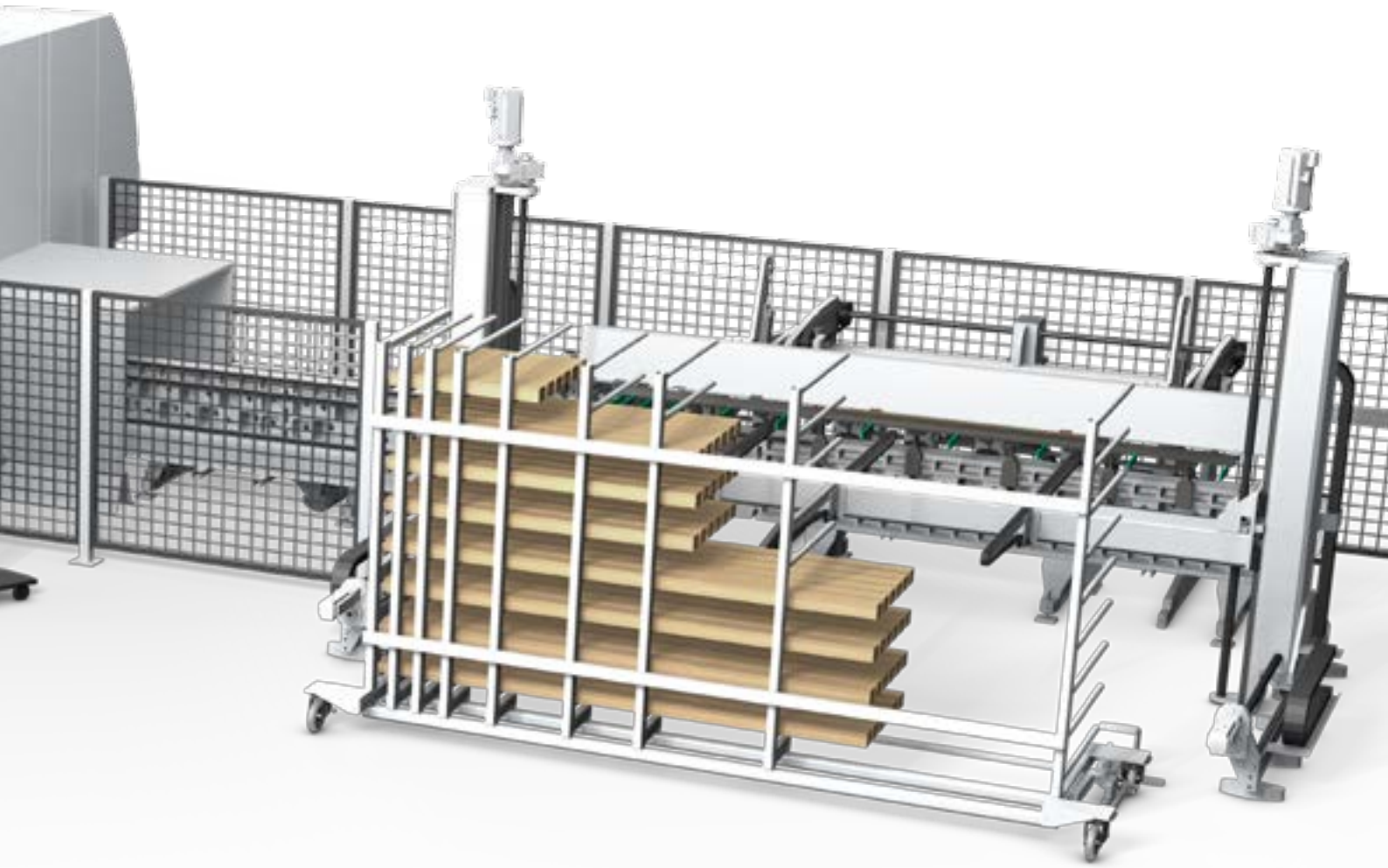


Intelligent networked machines

Window production – it‘s never been easier



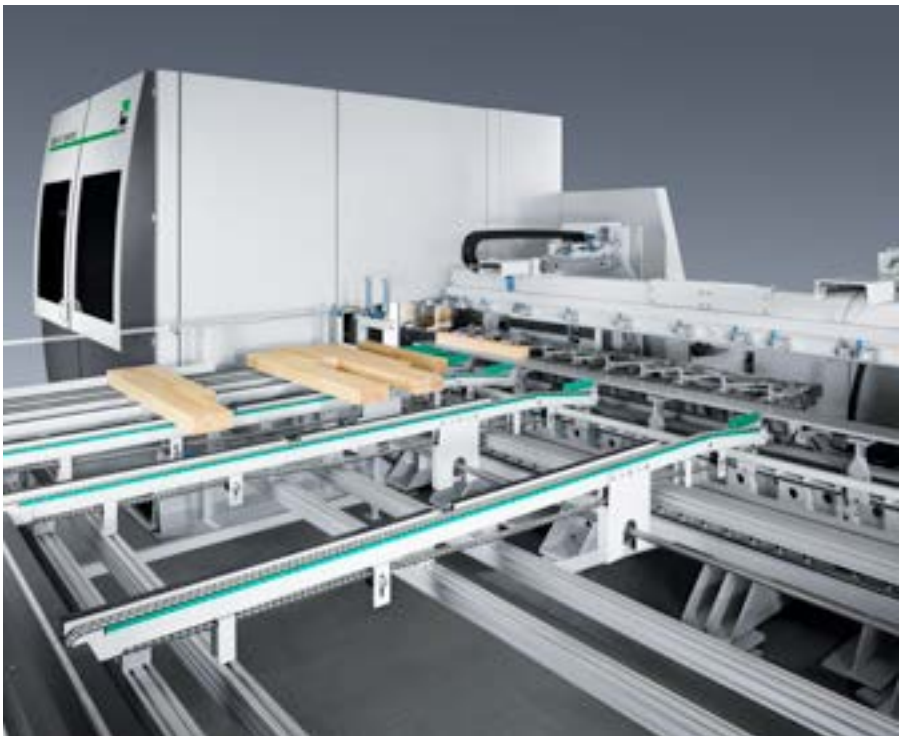
The Conturex enables window and door parts to be manufactured with just a few personnel. Infeed, machining and outfeed are completely automatic. The machine operator only has to ensure that the mechanized infeed buffer is supplied with workpieces. Since the individual door and window parts are completely finished on all sides, they can be supplied for surface treatment or for gluing directly after being machined on the Conturex.



Conturex offers a homogenous and continuous flow of workpieces – from the infeed of parts, to complete processing, to the ejection of parts. This process is completely independent of the dimensions of the workpieces and the type of processing.

- Automated infeed buffer
- Complete processing of parts
- Automated outfeed buffer
- For parts with any dimensions
- For any type of processing
- The same workpieces do not need to be combined
- Intelligent and completely open processing of parts

Low personnel production



Complete automation is available in various levels.

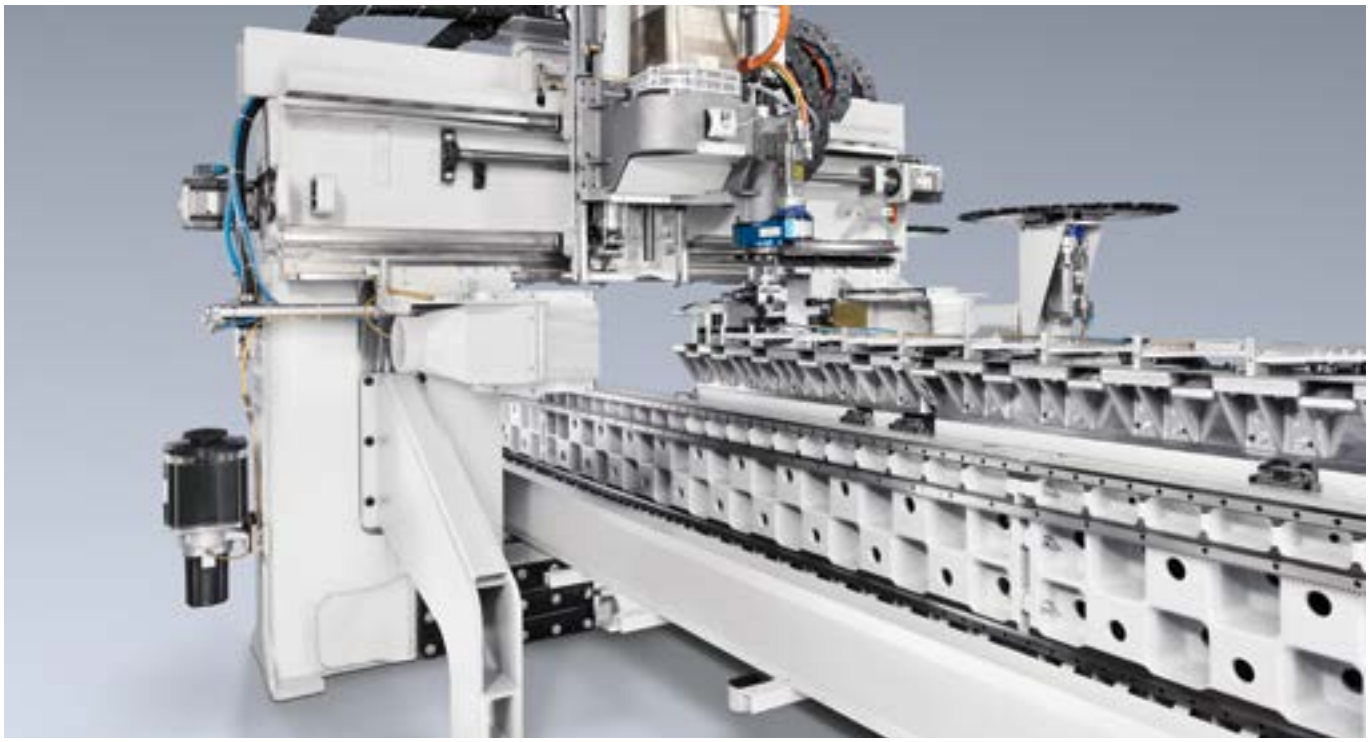
- „Unmanned" operation
- Production during off-hours
- Extended shifts
- A variety of options for infeed and outfeed
- Between 30 and 240 minutes in the parts buffer
- Safe and reliable supply
- Outfeed belt to prevent subsequent damage
- Linkage with other production units

The Conturex offers a range of options for feeding and removing door and window parts. The customer's wishes and different special arrangements in the production area can be taken into consideration. The optional height-adjusted cross conveyor allows large amounts of parts to be stored on shelved trolleys.

Depending on the type of automation and degree of processing, the Conturex can function independently for up to 4 hours. The operator only has to spend about 20% of his time with the actual machine. For the majority of the time, he can address other tasks in the production process.

Due to the limited number of personnel required, the machine can also operate during breaks and after shifts.

Low-vibration construction – for optimum quality



The requirements for processing wood are more complex than for other materials. Types of wood that are difficult to mill quickly generate oscillations and vibrations which impair the surface quality.

This is not true of the Conturex. The extremely stable portal design with it's superior rigidity prevents tipping torque. By decoupling the X-axis, which was transferred to the PowerGrip table, any vibrations are absorbed. Precise ball screws and stable linear guide systems deliver outstanding positioning and track precision even at high feed speeds.

This yields optimum surfaces of even complex milling geometries.

The design of the Conturex was specially conceived for the solid wood processing and delivers superior workpiece quality.

- No tilting torque
- Extremely low vibration
- Large weight capacity on both sides
- Up to four aggregate places

Always fightly gripped – the patented WEINIG PowerGrip clamping table

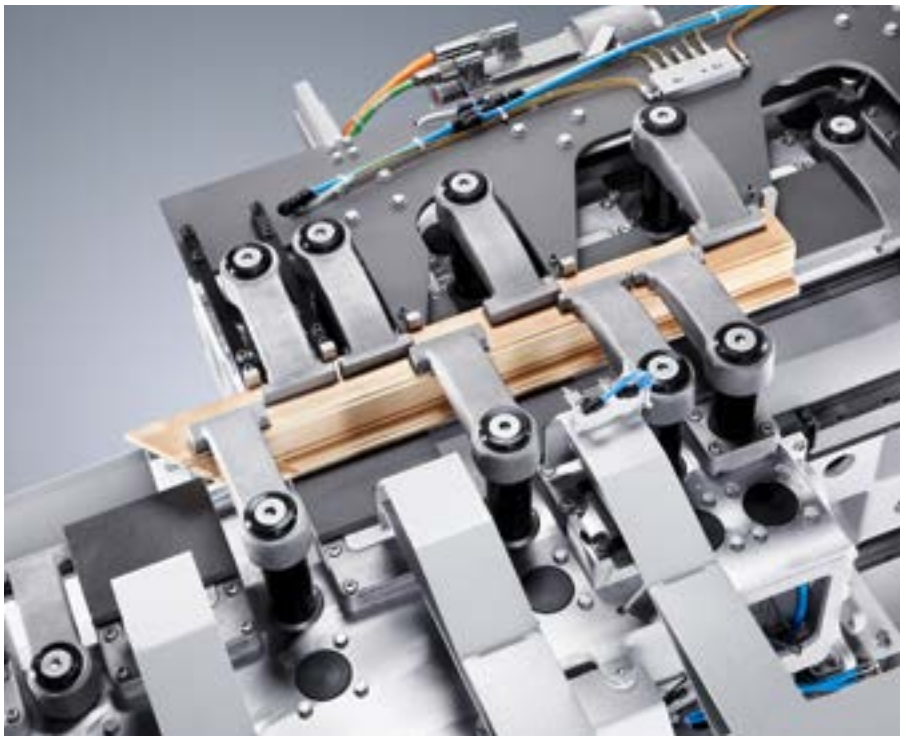
Depending on the machine type, two or three or four clamping tables allow any conceivable profile to be milled at any place in the wooden parts.

- independent and intelligent combination of the clamping-tables
- high flexibility due to efficiently optimized processes
- advantageous double-piece processing
- When the part is transferred, the reference dimensions of the workpiece are retained
- The parts are pushed off when they are transferred
- complete machining of single pieces

Major machining that for example is the case when processing solid wood generates significant cut resistance. The workpiece must be firmly clamped without damaging the surface of the workpiece.

The PowerGrip or the VarioPowerGrip clamping table imitates the function of a human hand. When transferring workpieces, the patented clamping tables offer consistent precision with exact, gentle clamping of the workpiece at the right location.
With the Conturex, the workpiece is clamped and only released when all of the tasks are complete. The sometimes complex workflows are, according to table type, optimized and greatly contribute to the flexibility required these days. Parts that are difficult to process can be reliably incorporated and machined. The PowerGrip offers sensational advantages in production such as no set-up time and absolute position precision.

U-axis, alignment and plausibility



Conturex automatically determines the depth for clamping the workpiece and transmits it to the table via the WEINIG **U-axis.** This enables absolutely reliable production independent of the component width. Completely different dimensions of unsorted workpieces can be sequentially produced.

All workpieces are **aligned** on the clamping table during infeed. For long parts that are curved, this enhances the precision of the subsequent machining processes.

A **plausibility check** has to be performed befor a workpiece is released to be machined. If a predefined deviation is exceeded, the operation is stopped. This prevents collisions and keeps the wrong part from being processed.

The interaction of the PowerGrip clamping table, the U-axis, workpiece measurement and alignment of the parts ensures superior process reliability.

- Specific clamping depths
- Independent of the component width
- Collision monitoring
- Automated workpiece measurement
- Prevention of defective parts
- Alignment of curved parts

Left: Workpiece transfer from table 1 to table 2
Right: VarioPowerGrip clamping table

Sophisticated aggregate technology – dual spindles for synchroniced machining

The extensive range of different types of aggregates allows the Conturex to be precisely tailored to your needs and products. This maximizes performance.

- 20/30 kW (S1/S6) main spindle 3, 4 or 5-axis technology
- 5-axis unit (17 kW) with PRO-Torque spindle, mechanical brake for the rotation axis (A/C) with separate tool changer
- horizontal / vertical milling spindle 7,5 kW
- WEINIG manufactures the spindles

The Conturex has at its disposal a wide range of high quality drilling, sawing, and milling units. Primarily air-cooled, long-lasting 20/30 kW main units are employed. Indirect drive protects the motor in critical situations.

Thanks to the independent axis, two main spindles can work simultaneously. This opens up a whole new range of possible uses. Chipremoval with simultaneous finish profiling or tool splitting enhance the productivity of the manufacturing steps. Horizontal and vertical milling units can be obtained for lock mortising, pockets and ventila-tion and drain slots. The WEINIG universal spindle and the different 5-axis units ensure a complete flexibility. Any sawing, drilling and profiling application can be mastered.

Left: Main unit
Middle: 5-axis unit (31 KW)
Top right: 5-axis unit (17 kW)
Bottom right: Milling unit

MBK – multi-spindle drilling head
For maximum performance

Performance is substantially enhanced with the MBK1 or MBK2 multi-spindle drill heads. Preparation for fittings such as door handles, corner hinges, scissor bearings, dowel holes, lock casings, pilot holes as well as notched holes for locking elements are particularly effective. The multi-spindle drill head works independently from the main spindle.

Drill adapters with multiple drills are available for horizontal drilling and milling. Door handles and corner and scissor bearings can be drilled vertically in a single cycle which saves time. Two additional drills for different drilling diameters can be adjusted separately or together.

The MBK multi-spindle drilling head can perform a wide range of tasks for fittings. It replaces an entire series of individual gearboxes, and eliminates a substantial amount of tool changing time.

- MBK multi-spindle drilling heads with up to 17 drills
- Horizontal rows of holes for transoms, mullions and glazing bars
- Up to three holes in one cycle
- Door handle holes in a single step
- Corner and scissor bearing holes in a single step
- MBK2 with additional vertical 7.5 kW milling spindle

Powerful angle heads – flexible use

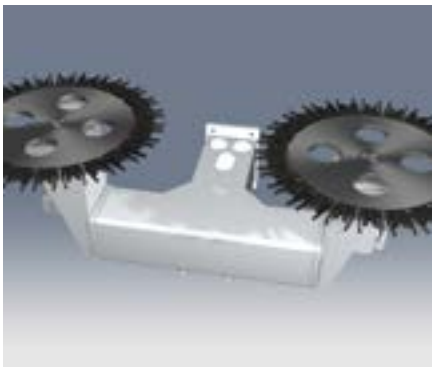
If needed, any procedure can be made available using the angle head. Additional heads offer flexibility, and they are profitable even for a low number of angle heads.

- Angle head with multiple drills
- Drilling and milling at different angles
- Subsurface milling
- Corner cuts
- Sawing angle head

The highly precise and standardized HSK 63F tool interface allows you to use all of the angle head for any requirement on the Conturex. The angle heads are highly suitable for complex processes. They can create holes at different angles, corner cuts, multiple milling cuts for folding shutter slats, series of holes, lock mortise milling, pocket milling or compound cuts.

Additional special angle heads can be used to solve any specific problem and even extreme application problems. All angle heads can be retrofitted at a later time.

Completely disconnected from spindle lengths and number of tools



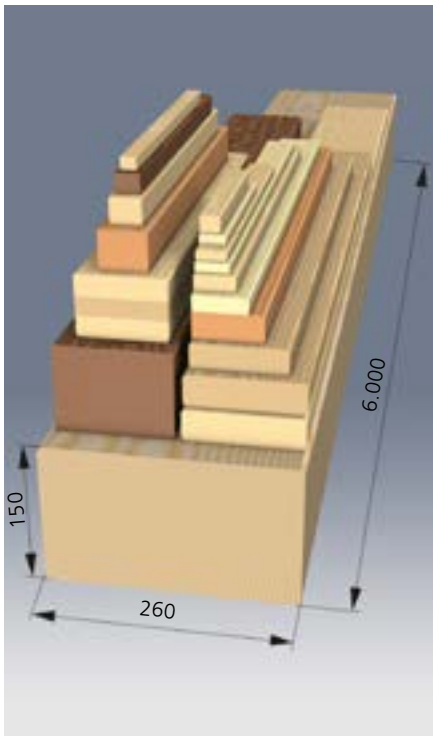
Conventional window systems have fixed designs. The design determines the window systems that can be created. With the modular Conturex, the situation is completely reversed. This is made possible by a nearly unlimited number of tool slots and arber lengths up to 290 mm.

All of the required tools are available on the tool holders for direct access by the main units. Depending on the expansion level, 30 to 104 slots are available. The external magazine allows 90 to 390 tool slots to be accessed. Several tool sets can be placed on a single arber, given the high spindle grip. This also increases the number of tools and substantially reduces exchange times.

The Conturex has an almost unlimited number of tool slots. The window or door systems can be easily modified and expanded. The tools can be incorporated in a monitoring system.

- Large tool holders with direct access to 30 to 104 slots
- External holders with up to 390 tool slots
- The holders are nested since the tools are removed horizontally
- Several tools can be placed on one arber
- RFID tool identification system

Various basic datas and dimensions



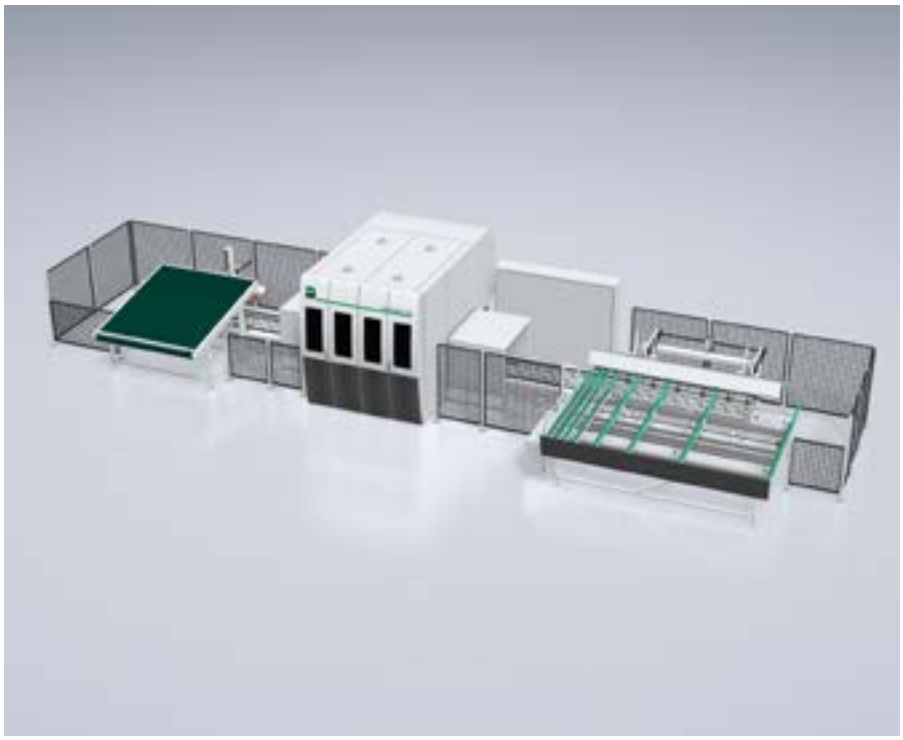
The dimensions of the wood parts reveal that the machine is specially designed for construction elements. The complete production process from joining corners to profiling parts to creating holes for fittings can be accommodated.

- Min./max. width 40 - 260 mm
- Min./max. thickness 25 - 150 mm
- Min./max. length 140 - 6,000 mm
- All six sides can be machined
- 290 mm arber length
- Tool weight: 12 kg (incl. arber)
- 340 mm maximum tool diameter
- Slot depth up to 140 mm

The Conturex system offers maximum flexibility. Any conceivable type of machining is possible for workpiece widths of 40 to 260 mm, thicknesses up to 150 mm, and lengths up to 6 meters. The Coturex system can therefore be used for building of wintergarden, historical sash bars, folding shutters, house sections, facade and door elements or mullion and transom elements.

The substantial dimensions correspond to the hardware design. The Conturex can hold tools weighing 12 kg per main spindle. Heavy mortise and tenon tools can be positioned with a maximum diameter of 340 mm.

Safety concept including tool maintenance



New standards are also set in the field safety and in the improved dust and noise protection. For that, all Conturex models obtain a fully enclosed shell. The controlled dust extraction directly adjacent to the workpiece is unique in the market.

Very important is also the care and maintenance of the valuable window tools. They are automatically taken from the external tool magazine and cleaned. This process is carried out without personnel and is independent from the machining units. The heated ultrasonic bath provides an ideal cleaning and drying. The result is the preservation of the initial balance quality, a longer lifetime behavior and an exact chip removal. Due to this, the bearing and the guides of the spindles are prevented from damages and wear. The costs decrease and the surface quality rises. This is certainly a profitable option to be considered.

The cutting-edge Conturex machining center offers maximum safety, dust protection and noise protection. The automatic tool cleaning device works automatically without an operator. The tools remain clean and free of resin and that means a reduction of wear.
As a result, this increases the durability of the tools and improves the surface quality.

- complete shell aroung the processing area, no endargement of personnel
- direct dust extraction
- noise protection is environmental protection
- heated ultrasonic bath
- preservation of the initial balance quality
- increased durability of the tools
- cleaning without manual intervention

Sophisticated control technology

The valuable CNC control anticipates future standards and offers a complete system for the medium-size and high performance range.

- Completely digitized Siemens control
- Completely digitized Siemens drive package
- Industrial PC
- Graphical user interface
- TFT color display with touchscreen
- Remote diagnosis via internet with integrated firewall
- Network connections
- Country-specific adaptation
- Low power consumption

As with any computer, the machine control only provides top performance and reliability when the components are well harmonized with each other. The experienced WEINIG team of software specialists have modules that meet every requirement for integrating the Conturex into your production processes. The tested 840D SL numerical control by the market leader Siemens is used in the Conturex. The installed control unit communicates with the WEINIG Nexus interface and the WEINIG user interface. This important element executes all the movements of all the axis. The user-friendly interface makes it even easier to operate the machine. Linking of various Windows-based data can be easily performed in various ways.

Monitor production with „WSDS“

With the advancing digitalization the linking of software and services becomes more and more important. The Weinig standard data set “WSDS” is the platform for linked technology and embrases all Weinig machines actively. Starting with site measuring, data collection and design in window production programme, stock organization, optimized cutting, calibration with production of mouldings, complete production of single pieces or even driving in and gluing dowels functions perfectly. With “Nexus”, the operating system of the Conturex, all interfaces are taken care of. A macro editor for special forms or applications via CAD/CAM systems is available as well as remote maintenance of the line via internet. The modern slim production results in high flexibility and quick access to the desired information.

With its structured design, the Weinig software Nexus guarantees quick results and safe communication. The Weinig standard data set “WSDS” provides a consistant platform for the exchange of data.

- Highly flexible production process
- All Weinig machines actively integrated
- „WSDS“ – Weinig standard data set
- Macro editor
- Machine diagnosis
- Paperless production

Project support and training – we won't leave you standing in the rain

WEINIG will coordinate your Conturex project. You can concentrate on branch-related programs and start operation quickly.

- Project assistance
- Coordination with people participating in the process
- Interface with all conventional software suppliers
- Transferring the window and door profiles
- Testrun of machine and main profiles
- Nexus training
- Independently create profiles for other windows systems
- Nexus in the local language

We want you to quickly and efficiently familiarize yourself with your Conturex. We will therefore assist you with your project from the very beginning. If desired, WEINIG will contact the suppliers of branch-related software and tools. Our specialists will check the available drawings and enter the profile and tool data in the Nexus program before delivery. After startup, the machine and your main profiles will be started on site by our service technicians.

With training tailored to your needs, we will familiarize you with the use of Conturex technology. Beyond the operation of the machine, you will be able to independently create and administer profiles.

Available at the right time with optimized energy concept

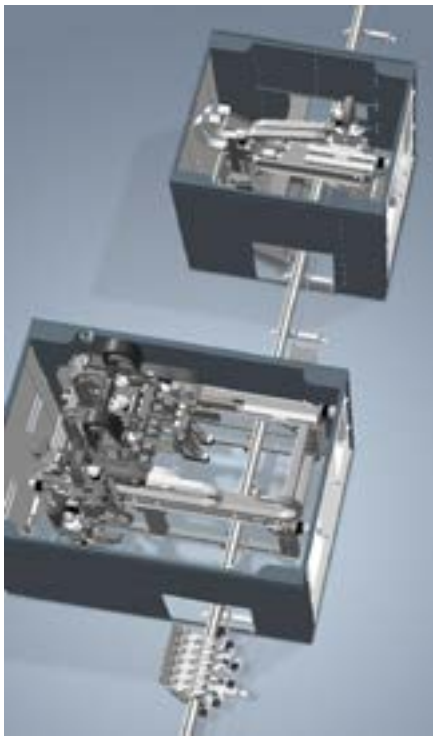
The Conturex automatically changes the right tools at the right time in the spindle. The necessary information is provided from the profile and tool database. The speed and direction of rotation of the tool as well as the geometric values such as radius, maximum length and collision values are retrieved from the database.

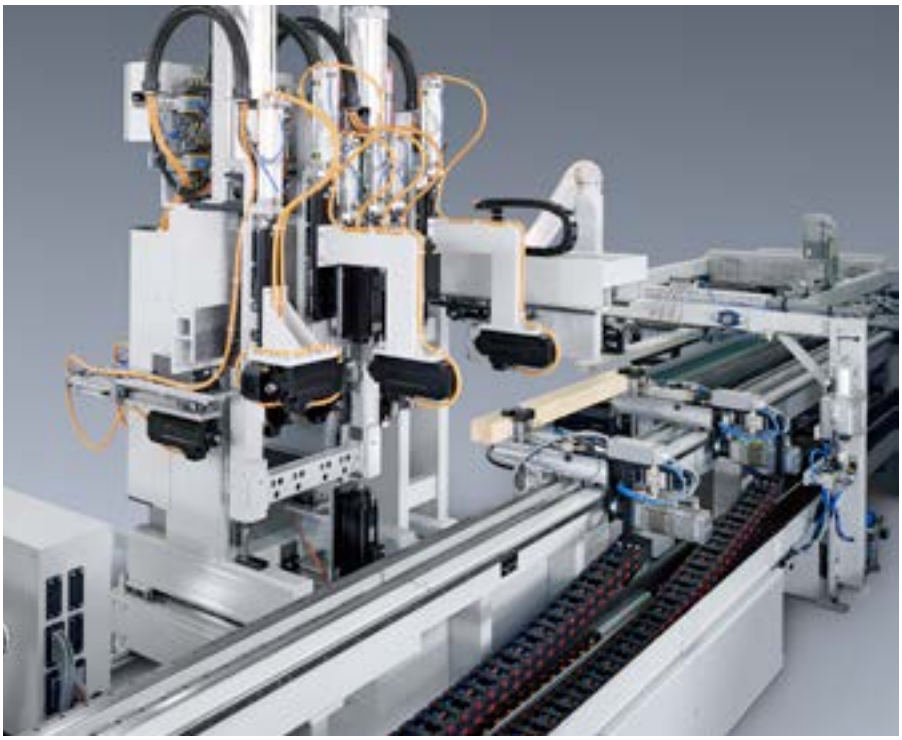
With an optimized energy concept and intelligent control, the various parameters, when machining, are taken into consideration. In order to re-use the braking energy, a recovery unit was integrated. Drive on demand is made possible with the help of frequency converters. A throttle system opens only the suction hood required at the moment. This and a few other innovations result in great energy efficiency and conservation of resources.

When changing window systems the right tool is automatically changed in the spindle at the right time. In order to re-use the braking energy the Conturex was equipped with a recovery unit.

- automatic tool change
- increased energy efficiency
- optimized power consumption
- minimized emmissions
- reduces life cycle costs

Unirex 3000 drilling center





The Unirex machining system drills and mills all six sides. The workpiece contours are identical with those of the Conturex.

- Table with independently controlled clamps
- Integratable in production lines
- Six-side workpiece machining
- Machine housing of the entire machining area
- WEINIG Nexus control
- Hardened and polished precision guides
- Room exhaust system

The WEINIG Unirex 3000 is used for six-sided horizontal and vertical drilling and milling. The machine is designed to be integrated in a production line. By linking to one or more Conturex units, high-performance window systems can be created. Drilling and milling at different angles is as easy as the precise sectioning of the individual parts.

The processing unit for scoring the window profile is also highly useful. The profile contour undergoes an initial safety milling to prevent wood from tearing out in subsequent crosswise machine.

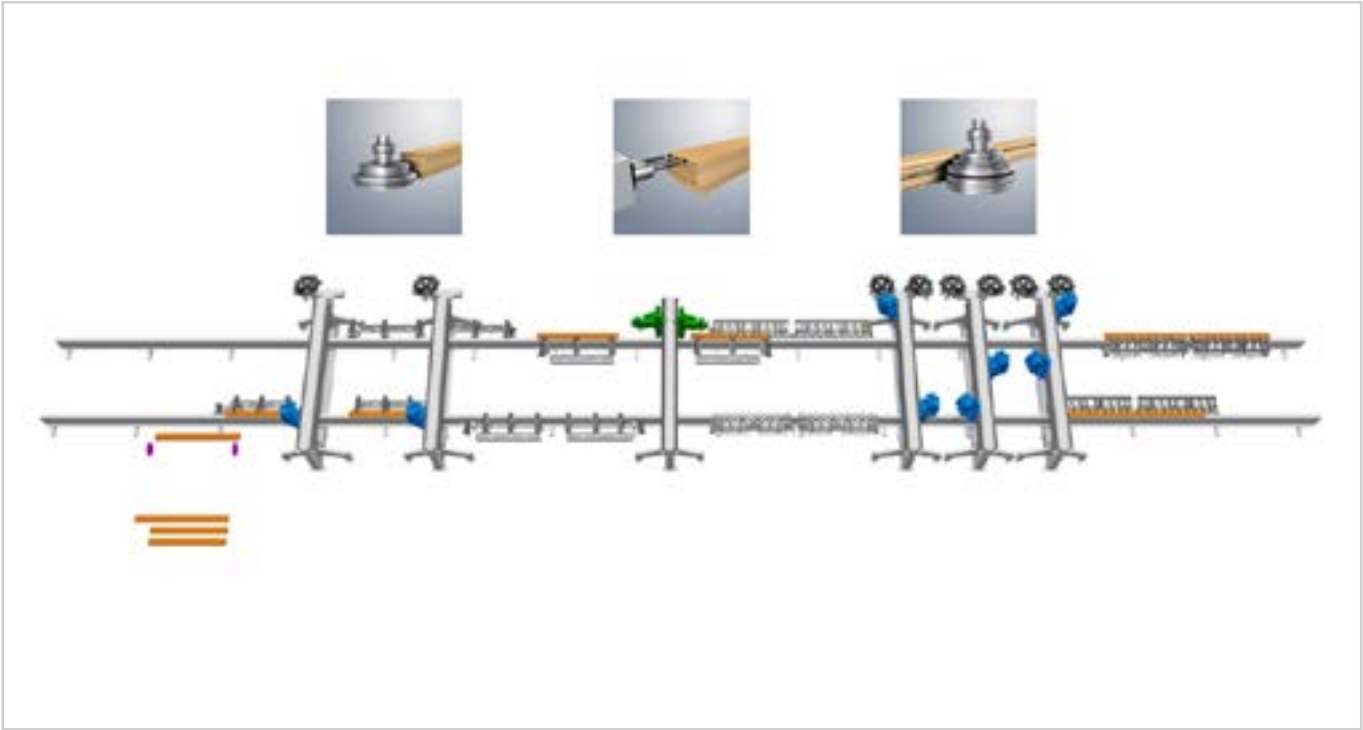
Gluing and driving in dowels in no time at all

A new operating panel and optimized process are some of the highlights of the next generation Dowel insertion machine with automatic gluing, the WEINIG UniPin 100. The machine can be operated separately or online with the Conturex or industry software. In less than 3 seconds the exact amount of glue is applied and dowels are driven in at the face side. Thus, a high quality window corner connection is ensured.
Placed next to the outfeed of the Conturex, the UniPin is an excellent supplement and fully integrated in the Weinig production process.

It is not unusual for some small and mid-sized businesses to use up more than 1.000 dowels per shift. At the same time, it is absolutely necessary to achieve a high quality corner connection with exact quantity of glue.

- Safe clamping of the parts
- Online connection
- 3-axis control
- Cleaning cycle
- Counter hole gluing (optional)
- Double piece production (optional)
- Drilling aggregate (optional)

Conturex System – systems engineering the platform for modular processing



The platform for modular processing in window production is the Conturex family. When planning the line all peripheral processes can be taken into consideration. Standardized data sets as well as the modular software structure ensure smooth and reliable processes.

- individual customer's solutions
- fully automated production
- highly flexible production processes
- all WEINIG machines actively integrated
- one data set for all components
- "high class"- complete processing
- integrated periphery
- high level of performance

The Conturex-family provides the opportunity for continuous and innovative development of window production. Tables, portals, aggregates, tool magazines and automation in various combinations and levels are the basis for producing highly complex production lines to the customer's requirements. The modular platform also includes all peripheral processes. Planning the production line starts with the automated storage for unfinished parts, cutting and calibrating with glass bead production, complete production of single pieces as well as the integrated impregnation and de-stacking units. Intermediate buffer, marking of parts and automated tool cleaning complement the project-specific possibilities. These complex processes are a tremendous challenge for the control system and software. As a consequence, a master computer organizes the modular software structure for an optimized and safe work flow.

WEINIG service – Help when you need

Whatever WEINIG machine you choose, you are investing in the future and success of your company. Guaranteed by superior WEINIG technology and worldwide WEINIG service.

You are in good hands: WEINIG service is known for its speed, reliability and quality. Whether replacement parts or expertise, Austria or Australia, our trained team of technicians will have you quickly back on your feet. This is our promise.

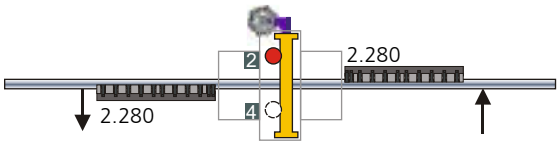
In addition, WEINIG service includes remote diagnosis via the Internet (NTR support, VPN) over the telephone.

Whether it concerns servicing the individual software packages or the hardware, you can always count on WEINIG.

- Expert advice
- Quick startup
- Production support
- Servicing and remote diagnosis
- Fast supply of replacement parts and repair
- No unnecessary production downtime
- Reliable trained
- Financing support

Conturex Compact

The Conturex Compact is the starter model in the world of modern complete machining. With its high flexibility, the machine can produce the various systems of medium-size window and door manufacturers.



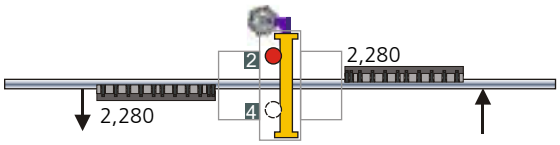
Conturex Compact

	● Standard	O Option
Single portal - supports on one sides at pos. 2, 4	●	
Two PowerGrip clamping tables/length: 2,280 mm (# of clamps: 2 x 11, pneumatically controlled)	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	1.000 mm	2.000 mm
Automatic conveyor outfeed, wide belt with supporting plate	●	wide belt
Automatic conveyor outfeed – buffer length	2.100 mm	2.200 mm
Axis-controlled workpiece infeed with workpiece measurement as an option (plausibility check)	●	
Min./max. working height	25 - 100 mm	25 - 150 mm
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without re-run cycle	175 - 2.700 mm	
Workpiece length with re-run cycle	3.500 mm	4.500, 6.000 mm
Internal tool magazine, number of slots	30	25, 35, 50
External tool magazine, number of slots		100
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindle, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		O
Universal spindle		O
Energy recovery unit	●	
Machine encapsulation (dust protection, noise protection, safety), CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		O

Subject to technical alterations. The statements and pictures provided in this brochure also include optional equipment that is not included in standard delivery.
Some protective covers were removed for photographing.

Conturex 114

The Conturex 114 is nearly identical with the Conturex Compact but with a lot more options.



Conturex 114

	● Standard	○ Option
Single portal - supports on one sides at pos. 2, 4	●	
Two PowerGrip clamping tables/length: 2,280 mm (# of clamps: 2 x 11, pneumatically controlled)	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 100 mm	25 - 150 mm
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without re-run cycle	175 - 2.700 mm	140 - 2.700 mm
Workpiece length with re-run cycle	4.500 mm	6.000 mm
Internal tool magazine, number of slots	30	25, 35, 50
Internal tool magazine when using an external holder, number of slots	30	25
External tool magazine, number of slots		100, 140
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindle, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		○
5-axis head		○
Universal spindle		○
Multi-spindle drilling heads MBK1/MBK2 (MBK2 with vertical milling spindle)		○
Energy recovery unit	●	
Machine encapsulation (dust protection, noise protection, safety), CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		○
Barcode reading system		○

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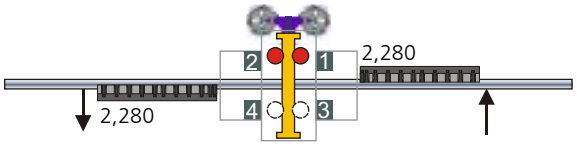
Conturex 124

The Conturex 124 is the machine for Medium-size to large window producers. There are four main areas for optimally equipping and tailoring to your window systems.



Conturex 124

	● Standard	O Option
Single portal - supports on both sides at pos. 1, 2, 3, 4	●	
Two PowerGrip clamping tables/length: 2,280 mm (# of clamps: 2 x 11, pneumatically controlled)	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 100 mm	25 - 150 mm
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without re-run cycle	175 - 2.700 mm	140 - 2.700 mm
Workpiece length with re-run cycle	4.500 mm	6.000 mm
Internal tool magazine, number of slots	48 (2 x 24)	
External tool magazine, number of slots		90, 130, 170
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindles, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		O
5-axis head		O
Universal spindle		O
Multi-spindle drilling heads MBK1/MBK2 (MBK2 with vertical milling spindle)		O
Energy recovery unitMachine encapsulation (dust protection, noise protection, safety),	●	
CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		O
Barcode reading system		O

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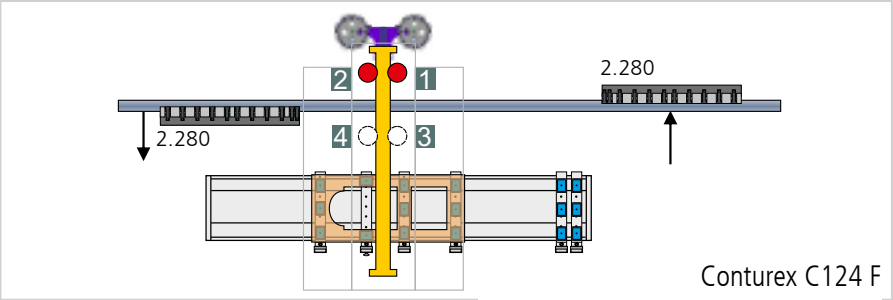
Some protective covers were removed for photographing.

Conturex 124 F

The Conturex 124F has a special place among the basic models. The C 124F combines the advantages of a clamping table PowerGrip with a surface table. Large-size workpieces can be clamped and machined paralell.



Conturex C124 F

	● Standard	○ Option
Single portal - supports on both sides at pos. 1, 2, 3, 4	●	
Two PowerGrip clamping tables/length: 2,280 mm (# of clamps: 2 x 11, pneumatically controlled)	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 100 mm	25 - 150 mm
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without re-run cycle	175 - 2.700 mm	140 - 2.700 mm
Workpiece length with re-run cycle	4.500 mm	6.000 mm
Internal tool magazine, External tool magazine, number of slots	48 (2 x 24)	90,130,170
Maximum workpiece weight (per mandrel)	12 kg	
Maximum tool weight	340 mm	
Maximum tool diameter (sawblade 280 mm)	290 mm	
Main spindles, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
5-axis head or universal spindle		○
Multi-spindle drilling heads MBK1 / MBK 2 (MBK2 with vertical milling spindle).		○
Very rigid and vibration free surface table for surface and arched workpieces	●	
Amount of consoles for surface table	4	6
Vacuum pump for clamping system	●	
Working width / working height	1.500 mm	
Max. workpiece length for surface table	3.000 mm	
Length- and lateral fences on surface table	monitored	
Feeding assistance	●	
Projection laser		○
CAD/CAM software AlphaCAM		○

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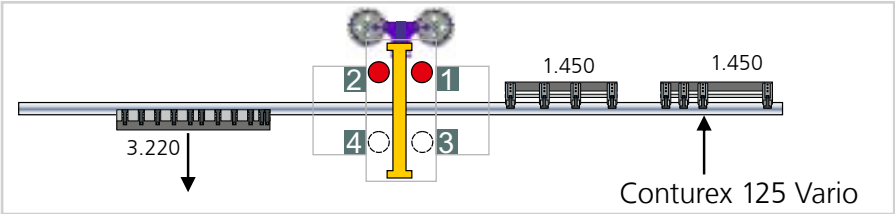
Some protective covers were removed for photographing.

Conturex 125 Vario

When manufacturing windows and doors, special sequences and work steps have to be followed. With the Conturex 125 Vario these complex processes have been optimized. With the "variable" clamping table the line is suitable for double piece production.



	● Standard	○ Option
Single portal - supports on both sides at pos. 1, 2, 3, 4	●	
Two VARIO PowerGrip single clamping tables, one PowerGrip clamping table 3.220 mm	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 150 mm	
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without offset cycle, Doubelpiece-mode	480 - 1.600 mm	
Min. / max. Workpiece length without offset cycle, Singlepiece-mode	175 - 3.500 mm	140 - 3.500 mm
Workpiece length with offset cycle	3.500 - 6.000 mm	
Internal tool magazine, number of slots	48 (2 x 24)	
External tool magazine, number of slots		90, 130, 170
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindles, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		○
5-axis head		○
Universal spindle		○
Multi-spindle drilling heads MBK1/MBK2 (MBK2 with vertical milling spindle)		○
Energy recovery unitMachine encapsulation (dust protection, noise protection, safety),	●	
CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		○
Barcode reading system		○

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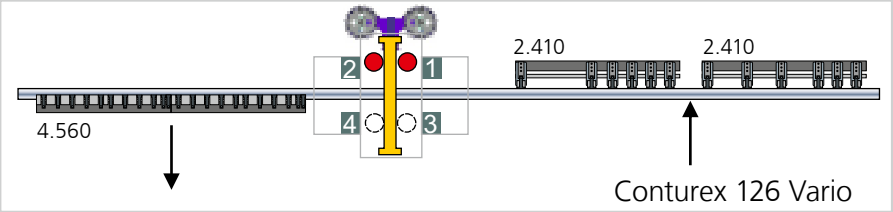
Some protective covers were removed for photographing.

Conturex 126 Vario

The consequent and consistent continuation of the VARIO table technique is reflected in the Conturex 126 Vario. Window- and door pieces up to 2.600 mm length can be processed in double piece production.

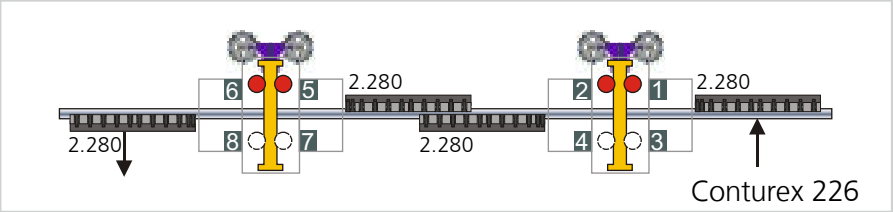


	● Standard	○ Option
Single portal - supports on both sides at pos. 1, 2, 3, 4	●	
Two VARIO PowerGrip single clamping tables, one PowerGrip clamping table 4.560 mm	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 150 mm	
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without offset cycle, Doubelpiece-mode	480 - 2.600 mm	
Min. / max. Workpiece length without offset cycle, Singlepiece-mode	175 - 5.400 mm	140 - 5.400 mm
Workpiece length with offset cycle	5.400 - 6.000 mm	
Internal tool magazine, number of slots	48 (2 x 24)	
External tool magazine, number of slots		90, 130, 170
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindles, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		○
5-axis head		○
Universal spindle		○
Multi-spindle drilling heads MBK1/MBK2 (MBK2 with vertical milling spindle)		○
Energy recovery unitMachine encapsulation (dust protection, noise protection, safety),	●	
CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		○
Barcode reading system		○

Subject to technical alterations. The statements and pictures provided in this brochure also include optional equipment that is not included in standard delivery.
Some protective covers were removed for photographing.

Conturex 226

The Conturex 226 offers the maximum expansion level for stand-alone machines. To further increase performance, plant systems are available.



	● Standard	○ Option
Two portals - supports on both sides at pos. 1, 2, 3, 4, 5, 6, 7, 8	●	
Two PowerGrip clamping tables/length: 2,280 mm (# of clamps: 4 x 11, pneumatically controlled)	●	
Maximum travel speeds of main axes x, y, z	145, 120, 60 m/min.	
Automatic conveyor infeed – buffer length	2.000 mm	3.000, 4.000 mm
Automatic conveyor outfeed – buffer length	2.500 mm	3.500, 4.500 mm
Axis-controlled workpiece infeed with workpiece measurement (plausibility check)	●	
Min./max. working height	25 - 100 mm	25 - 150 mm
Min./max. working width	40 - 260 mm	
Min. / max. Workpiece length without re-run cycle, dual assignment	2 x 175 - 2.700 mm	2 x 140 - 2.700 mm
Min. / max. workpiece length without re-run cycle, single assignment	175 - 5.000 mm	140 - 5.000 mm
Workpiece length with re-run cycle	5.000 - 6.000 mm	
Internal tool magazine, number of slots	96 (4 x 24)	
External tool magazine, number of slots		230
Maximum tool weight	12 kg	
Maximum tool diameter (sawblade 280 mm)	340 mm	
Tool interface with main units HSK-63F, max. tool length from HSK interface	290 mm	
Main spindles, stepless 0 - 18,000 rpm, mode S1/S6 (40%)	20 kW, 30 kW	
C-Axis (rotational axis about Z) 360°		○
5-axis head		○
Universal spindle		○
Multi-spindle drilling heads MBK1/MBK2 (MBK2 with vertical milling spindle)		○
Energy recovery unitMachine encapsulation (dust protection, noise protection, safety),	●	
CE-compliant	●	
Program control: Siemens 840D SL + WEINIG Nexus control	●	
AlphaCAM CAD/CAM software		○
Barcode reading system		○

Subject to technical alterations. The statements and pictures provided in this brochure also include optional equipment that is not included in standard delivery.
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WEINIG quality:
The sum of many properties

Not many companies succeed in becoming a brand. WEINIG has succeded in doing so. Trust plays a central role here. And the ability to prove this trust on a daily basis with our customer. We do this with quality. From product development to our supply of spare parts, from materials used to our world-wide service network. Based on employees noted for their expertise and passion for the product. Utmost care in assembling machines is part of this, as is continuous training. In order to maintain WEINIG's high standards we focus on vertical integration and independent quality management. Based on the world famous kaizen method, our production undergoes a continuous optimization process.

But WEINIG quality also means aligning production for the future with open machine systems, energy efficiency and sustainability. All these characteristics blend to create a product praised by our customers around the globe as outstanding. We call it 100% WEINIG quality.

More information at
http://film6.weinig.com