



# Novelties regarding Housing Machining Centres for Routing and Drilling

### ACCORD 25 FX the smart and easy-to-use machine hits new performance levels

The machining centre **Accord 25 FX**, already available on the market to meet the needs of small-and medium-sized companies, now offers new important features.

The new machining unit is with a 12-position "Rapid 12 On-Board" tool store equipped, facilitating tool change during masked time, when machining is performed using an additional unit (drilling unit or BRC unit for auxiliary operations), reducing production cycle time and increasing productivity.

With the Rapid 12 On-Board, the secondary unit runs along a second Z axis independent from that of the main spindle: this speeds up the alternation of two machining units and improves performance during vertical drilling.

Available in both bars- and multifunction-worktable versions, the Accord 25 FX combines high-tech features with incredible ease-of-use for flexible production of doors, windows, stairs, solid wood parts and for machining plastics and advanced materials.

#### HIGHLY-VERSATILE AND FAST PRODUCTION

With Accord 25 FX you can produce more types of products in less time. The increased work piece dimensions, up to 250 mm in height, combined with the 5-axis Prisma unit, allows machining of larger pieces with complex shapes.

The introduction of the new Rapid 12 On-Board tool store allows you to have up to 56 tools in the machine and always ready to use, ensuring a great profile variety and flexibility without the need of tool chancing.

The new 145 mm high locking clamps and an increased vertical stroke of up to 70 mm, available on both the automated MATIC worktable and manual worktable, allow the use of double profile tools without risking collisions with other machine parts You can produce elements of various thicknesses – from 60 to 120 mm – without any manual set-up operation.

#### **ERGONOMIC USE AND SAFETY**

The "Pro Speed" system, with horizontally arranged photocells and bumpers, combines **maximum** accessibility to the worktable with operator safety.

#### **SMART PROGRAMMING**

Thanks to the Maestro software suite, developed in-house at SCM, programming the Accord 25 FX is easy, intuitive and effective.

The **Maestro 3D** module helps you programme and perform 5-axis machining of free-form surfaces; **Maestro WD**, designed specifically for the production of doors and windows, helps you programme the process, from setting the architectural opening to defining individual elements to be





produced. The **Maestro Pro View** simulator helps you calculate production costs and improve production efficiency by offering you the possibility of simulating machining operations on a PC in your office prior to actually performing it with the machine.

Using the **Maestro MSL Connector** module all leading business software management programmes can easily interface with Maestro. Machining strategies can be planned according to work piece sizes and required operations, optimizing the position of locking systems and tool paths.

In addition, the Maestro Suite that comes with the Accord 25 FX includes Maestro APPS, a function library developed by SCM based on its extensive experience acquired over years of working with manufacturers of windows, doors, stairs and furniture.

## **NEW ACCORD 50 FX MACHINING CENTRE larger machining volume, more opportunities of use**

Accord 50 FX is the new Scm machining centre allowing to perform routing and drilling of work pieces up to 500 mm in height. In recent years, the development of the machining centres affected mainly the 5-axis technology, a topic in which SCM has always been the champion: from the first applications born over twenty years ago to today's widespread use.

Today, the business sectors for a 5-axis machining centre are multiple: panels, curved plywood, traditional elements in solid wood, design objects in wood, plastic, composites, resins, light alloys, prototyping, modeling and molds.

In order to meet the needs of the new 5-axis applications, it was necessary to increase the maximum machining capacity and allow the tool to move freely around complex-shaped work pieces; that trend has led to the design of **Accord 50 FX**.

#### **Great finish quality**

The machining capacity is more than 6 cubic meters, with all tools available on the machining head, while maintaining precision and finish quality at the highest level. The machining head is equipped with an electrospindle developing an output of 17 kW from 12000 up to 24000 rpm, ensuring maximum performance supported by a sturdy aluminium structure, integrated with powerful drive units setting the rotary axes.

#### **Unlimited possibilities**

Tool stores positioned on the machining head, the mobile gantry and to the worktable side, make available **up to 72 tools**, reducing downtime.

#### Reliable technology

The aluminium multi-function worktable ensures a perfect lasting planarity, despite changes in ambient factors such as temperature and humidity. Direct integrated vacuum system and specially designed T-shaped grooves allow an **optimum locking of the work pieces** and the positioning of any type of mechanical locking equipments. The machine is available also with bars worktable, equipped with suction cups and pneumatic clamps with manual or automatic positioning, for easy and quick set-up.

#### **Ergonomics and safety**

Ergonomic use and high productivity of the machine are a perfect match. Thanks to the exclusive **Pro-Speed safety system**, the machine detects the operator's presence, allowing maximum access during work piece loading/unloading and giving high travel speed.





#### **Smart programming**

Thanks to the Maestro software suite developed by SCM, Accord 50 FX programming is easy, intuitive, effective.

Maestro 3D integrated module for 5-axis machining of 3D surfaces.

**Maestro Pro View** simulator, for visualizing in advance the machining operations to be carried out on the machine on a PC in the office with remarkable customer benefits: eliminating collision risks, errors and downtime; calculating time and cost production, resulting in easy determination of the yield of acquired orders.

#### **ACCORD WD**

## The maximum productivity of an integrated cell for windows and doors with the maximum flexibility of a machining centre

The main objective of many manufacturers of windows and doors has been the automation of the work cycle, in order to remain competitive in an extremely demanding market, which requires quality products at prices that are difficult to achieve with traditional machinery.

The integration of a machining centre with an automatic loading and unloading system has the great advantage of not requiring the constant presence of an operator, but at the same time loses some flexibility, focuses the production on just one type of product and with work cycles that are not always fast.

Accord WD, SCM's machining cell, revolutionises this trend: as well as the advantages of high productivity levels thanks to the automatic loading and unloading of the work pieces, it maintains the typical flexibility of a machining centre without sacrificing anything in terms of performance.

Manufacturing special windows or other types of products is extremely simple, because the cell is fitted with the "Pro Speed" safety system introduced on SCM's latest range of Accord FX machining centres, which ensures access to the worktable with manual loading and unloading with utmost freedom of movement.

The possibility of pendulum machining ensures that the "processing autonomy" is at the highest levels for the category. The work cycle is never interrupted: whilst the machine operates on one half-table, the finished work pieces are unloaded on the other half-table and the new ones can be loaded. It is possible to process up to 16 window elements without the operator's presence.

Accord WD offers maximum performances for windows and doors manufacturing: a specific machining unit that guarantees high routing speeds and excellent finish quality; tool stores that can house up to 72 tools always ready to use.

## Shown at "Ligna 2017", Accord WD will present some news: New hold-down clamps

More flexibility thanks to the new **hold-down clamps with increased locking range**. They allow to eliminate worktable set-up times, when the window element thickness to be machined changes.

#### Maestro MSL Connector software, developed by Scm

High programming ease, thanks to the new software MSL Connector. It uses information from the management software and, based on the dimensions of the work pieces and the operations required, manages the machining strategy and optimizes the positions of the hold-down systems and the tool paths.

Accord WD is simple, fast and practical. It offers the best solution by marrying productivity and flexibility.





#### **SUPERSET NT**

### New range of SCM throughfeed moulders: A second right vertical spindle and new electronic controls

The SCM range of Superset NT throughfeed moulders is extended and updated, with **two new compositions** of 7 and 8 spindles and **new electronic controls**, Control 10 and Mobile PC.

What makes this product range stand out is its high versatility, enabling manufacturing of a wide variety of products: profiles for windows, doors, stairs and furniture.

The Superset NT machines can be managed manually or automatically with a fully digital configuration; configurations of **up to 8 compositions**, **with one or two right spindles**, one or two upper spindles, increased axial strokes, high profiling depth and HSK technology.

These technical features ensure fast set-up, rich selection of profiles and consequently fast production cycles and high diversification.

#### **EASY CONTROL**

The **MOBILE PC** electronic control, provided with **MAESTRO 4-SIDE** software and a 19" touch screen monitor, offers many **new functions**: easy search within the program, thanks to an import of profile images; detailed reports on machine use; clear and intuitive icons for programming; customised machine layouts; etc.

The use of Mobile PC allows a complete **integration of all machine control functions:** management of electronic axes, conveyor system and spindle motors for each machining unit. Operator are thus assisted during all phases of machine setup, thanks to the **MDI function** which can also control the manual axes.

#### **PRECISION AND SPEED**

The "SET-UP" system allows to change and set tools by eliminating the possibility of errors and making setup time up to 20 times faster in the machining operation change.

#### **PROFILE VARIETY**

**HSK technology** offers a wide range of tools for producing various profiles, facilitating flexible production of even smaller batches. Tool change is fast and accurate and performed in maximum ergonomic conditions. **Downtimes are drastically reduced and the perfect quality of the finished product is guaranteed.** 

#### **TECHNICAL SPECIFICATIONS:**

- Work piece width: 15 - 260 mm

- Work piece thickness: 6 - 200 mm

- Axial strokes: 80 mm for vertical spindles, 45 mm for horizontal spindles

- Profiling capacity: 50 mm

- Throughfeed speed: up to 36 m/min

- Number of spindles: from 4 - 8