



fives

AEROSTAR

Powering performance
with digitalization



HIGH PRECISION
MACHINES

MATERIAL REMOVAL

AEROSTAR



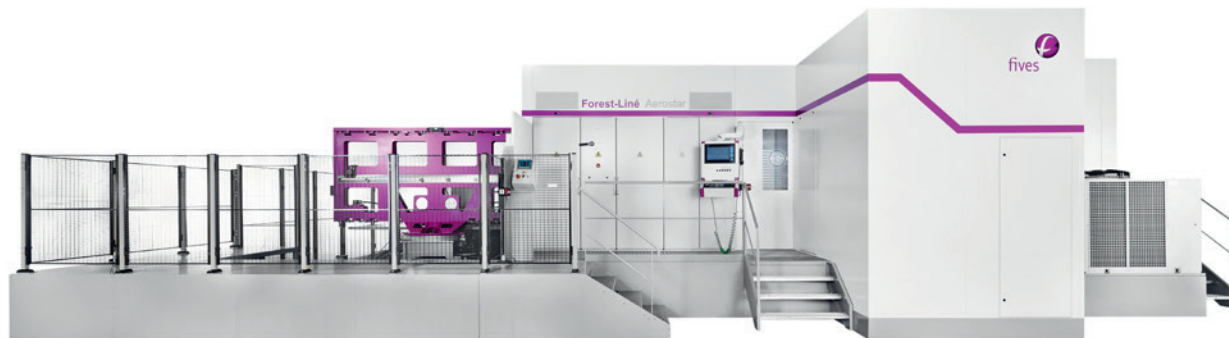
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AEROSTAR



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AEROSTAR



Thanks to an unmatched level of automation, the new-generation AEROSTAR is a high-end powering equipment designed for the mass production of structural workpieces for aerospace.

This large-part milling machine tool offers ultimate productivity and best-in-class manufacturing processes. The High-Speed 5-Axis Horizontal Machining provides the perfect solution for rapidly removing large volumes of material, such as aluminum alloys. The closed structure ensures high rigidity while considerably reducing the effects of temperature rises, thus providing the best manufacturing accuracy and geometrical stability. At the same time, the mobile pallet system ensures the secure and efficient loading and unloading of complex parts.

This new-generation AEROSTAR offers the market's most efficient, dynamic, and versatile solution.

01 Smart control

02 Smart machining

03 Smart design



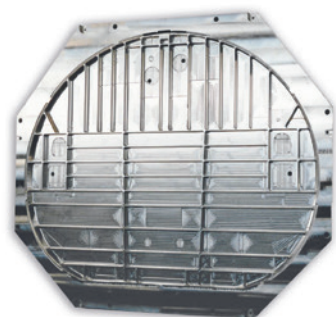
AEROSTAR

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Mass production of structural workpieces for aerospace



Spar



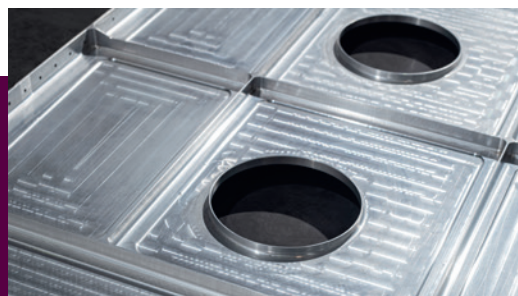
Front panel nozzle



Fuselage frame



Wing Ribs



Wing Ribs

The dynamic stiffness gives the accuracy of the machine and allows the manufacturing of outstanding surface quality with high-precision finished parts.

Along with complete life-cycle support, assistance, and solid technological collaboration, AEROSTAR can be customized on request to meet the highest industry standards and quality.

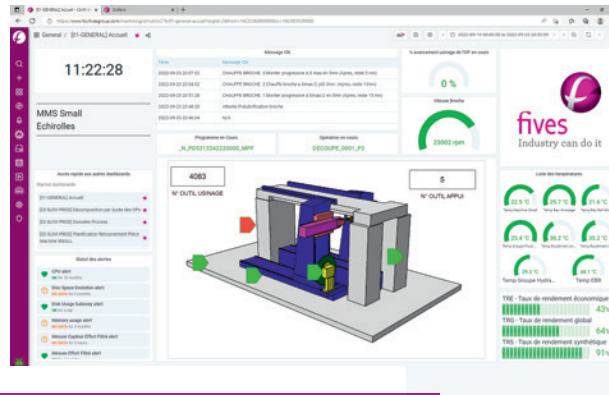
Smart control



INTUITIVE OPERATIONS

QUICK AND USER-FRIENDLY

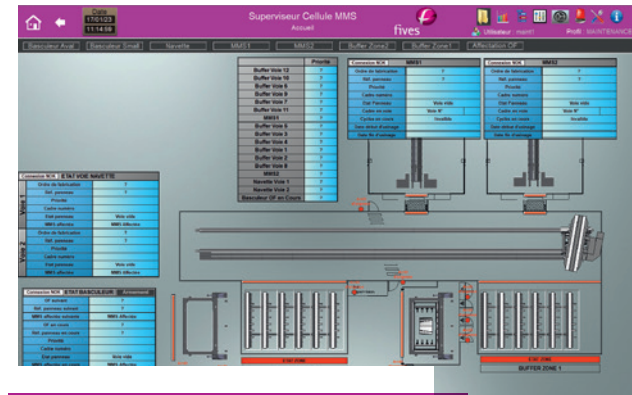
- High-end operator panel and intuitive interface
- Production control, traceability
- Preventive maintenance
- Easy migration of existing programs



CONNECTED SOLUTION

EASY SOFTWARE

- Process and production optimization thanks to process visualization
- Connectivity: OPC-UA / IO-Link
- Data collection: Fives cortX / dizisoft
- Fives consulting: experts support



SUPERVISION SOFTWARE

FM SUPERVISOR

- Optimize the production flow on large diversity of parts type
- Ergonomics, simple operations designed for operators
- Supervision system customized to your needs, evolutive system
- Excellent expertise with more than 30 years experience in Fives supervision

The new AEROSTAR Machining Center demonstrates how powering performance with digitalization has brought industrial processing solutions to the next level.

Smart machining



MAXIMUM PRODUCTION, MINIMUM EFFORT

FMS FLEXIBLE MANUFACTURING SYSTEM

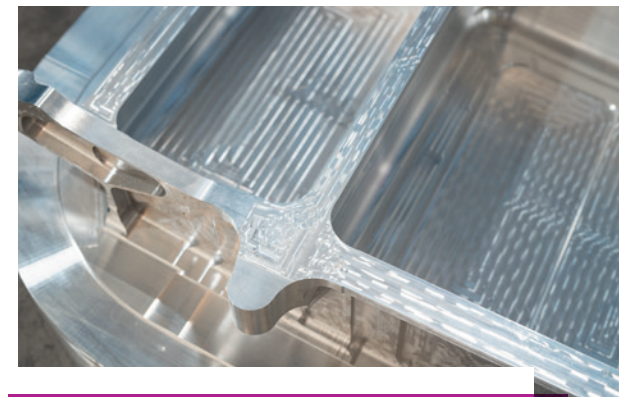
- Automated solution, simple, robust and reliable
- Automatic tool changer up to 180 tools expandable through centralized management and distribution of Fives tools



MRR HIGH METAL REMOVAL RATES

HIGH SPEED 30,000RPM AND HIGH-POWER 125KW

- MRR up to 12 litres per minute
- Linear motor with high performance
- 5-Axis motor with High-Torque rotary 1500 Nm



HIGH QUALITY AND ACCURACY

HIGH-PRECISION FINISHED PARTS

- High dynamic stiffness machine
- Outstanding surface quality
- High repeatability and consistent quality
- High accurate, clean and dry parts

Smart design



SAFE MACHINE

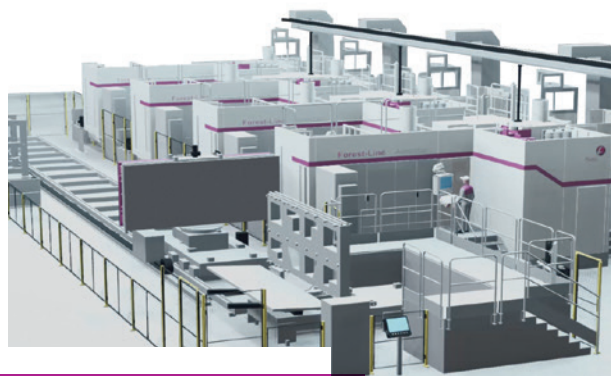
EASY OPERATIONS

- Easy access on all pallet, high ergonomics
- TPM Total Productive Maintenance: low-maintenance and low operation cost
- Easy maintenance, kinematics A&C
- Support in TCO Total Cost Ownership: Low energy, low maintenance
- Services: availability of spare parts

DEMO CENTER, Capdenac, France

Experience in-depth demonstrations of the new AEROSTAR

Discover how the new AEROSTAR, 5-axis horizontal milling machine, delivers exceptional productivity and high precision



HIGH VERSATILITY

FLEXIBLE CONFIGURATION: STAND ALONE OR FMS

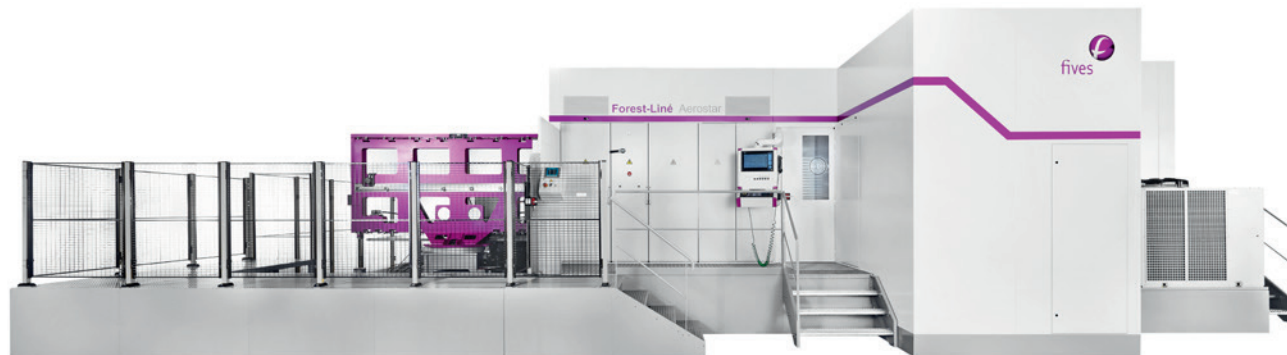
- From simple to complex parts, wide pallet 2m x 4m
- Pallet customizable to fit with your existing parts support
- Automatic change of angular heads
- Compact solution with the twist and tilt station Fives PATENTED is an all-in-one setup station and machine loading/unloading device, with minimal footprint 9 x 16 m
- Plug&Play installation



SUSTAINABLE OPERATIONS

MADE TO LAST, FIVES DESIGN EXPERTISE

- No chips or residual oil on all parts,
- Drastic reduction of power consumption during production thanks to data expertise
- Designed and produced in France, heavy duty engineering, high-quality manufacturing, 5-Axis head made by Fives
- Made with more than 150 years experience in machine-tools



AEROSTAR | SPECIFICATIONS

Pallet

Size	2 x 4 m
Type	Cast iron or steel weldment

Max part

Size	2 m x 4 m x 0,43 m
Max load	4 tons

X Axis (Table)

Travel / Stroke	4500 mm
Speed / Feed rate	80 m/min

Y Axis (Saddle)

Travel / Stroke	2500 mm
Speed / Feed rate	60 m/min

Z Axis (Ram)

Travel / Stroke	750 mm
Speed / Feed rate	60 m/min

Acceleration up to 7.5 m/s²

C Axis (Rotary)

Travel / Stroke	+/- 360°
Speed / Feed rate	40 rpm

A Axis (Rotary)

Travel / Stroke	+/- 110°
Speed / Feed rate	20 rpm

Acceleration 1200°/s²

HF-Spindle

Max Power (SI)	125 kW
Max Torque (SI)	60 Nm
Max Speed	30 000 rpm
Taper	HSK A63

AEROSTAR



GLOBAL SERVICES



OPERATION

- OEM spare parts and other brands
- Customer support 7 days a week
- Preventive maintenance
- Sub-assembly repair
- Workshop machinery relocation



OPTIMIZATION

- Certified training
- Consulting (setting-up, operation...)
- Expertise and certifications
- Process optimization



EVOLUTION

- Refurbishment - Machine rebuilding
- Mechanical transformation
- Retrofit (NC and automation)
- Retooling
- Obsolescence management



50 field technicians and experts

3 000 parts items in stock in Europe

3 shops floor dedicated to refurbishment

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Industry can do it

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