

Forest-Liné Aeromill

High Speed Horizontal Machining center



Forest-Liné Aeromill is a high speed milling machine, designed for processing large sized aircraft structural parts and panels, with high velocity, reliability and precision.

- Pallet size up to 3.4 m wide & up to 20 m long
- Clean: quick removal of the chips for efficient recycling filtering and treatment of the fumes
- Dynamic and Reliable with linear motors
- Productive: pallet system and hidden time preparation of the parts
- Accurate: closed structure, heat elimination
- Powerful: spindle up to 125 kW
- Maintainable: quick spindle removal
- General purpose: roughing, finishing and complex machining with angle heads

Over 50 High Speed Horizontal Machining center in production worldwide

Thanks to the use of most advanced technologies for high-speed machining and its horizontal structure, the Forest-Liné Aeromill is the perfect solution to process large aircraft structural parts in light alloys with a fast removal and no deflection.

The wings and structures of the modern airplanes generate large parts whose length can be up to 14 m and width up to 3,2 m.

These parts, made of aluminum, have their thickness under 200 mm.

The Forest-Liné Aeromill 5 axes milling equipment adds the advantages of linear drives to the vertical position of the table and its closed structure for High Speed Machining efficiency and accuracy.

High productivity, silence, reliability are the main characteristics of this production system which was chosen by the main aerospace actors for the milling of their largest accurate parts.

OPTIONS & SERVICES

Ergonomic & Automation

- Stand alone with Automated Pallet System
- FMS cell automation

Parts & chip management

- Chip conveyor
- Coolant systems

Head & Tool Management

- Automatic Tool Changer
- Tool management
- Integrated tool calibration laser
- Tools ID
- Right angle heads

Secure process

- Geometry Fives Axis Check System (GFACS)
- Collision detection device
- Spindle-mounted probe
- 3D-model for simulation software

Customized project on request.

Optimize process

- Power adaptive control
- Post-processor

Safety & Protection

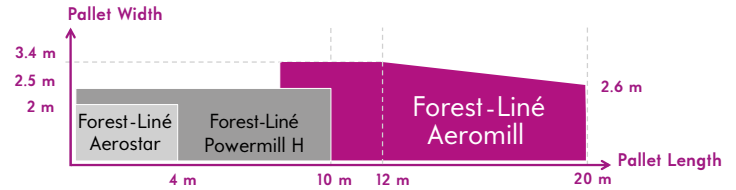
- Full enclosure
- Lighting of the working area
- Fumes and oil mist collection system

Production starting kit

- 2 weeks assistance after final acceptance
- 1 week engineering training

Diagnostic

- Remote Maintenance System (RMS)
- Global services: complete life-cycle support



FOREST-LINÉ AEROMILL SPECIFICATIONS

Pallet	
Size	Up to 3.4 m wide & up to 20 m long
Maximum Load	Up to 10,000 kg
X Axis (Longitudinal)	
Travel	Up to 20 m
Feed rate	60 m/min
Acceleration	5 m/s ²
Y Axis (Horizontal)	
Travel	Up to 3.6 m
Feed rate	40 m/min
Acceleration	5 m/s ²
Z Axis (Vertical)	
Travel	0.65 m
Feed rate	40 m/min
Acceleration	5 m/s ²
C Axis (Rotary)	
Travel	N x 360 deg (continuous)
Feed rate	50 rpm
A Axis (Rotary)	
Travel	+/- 110 deg
Feed rate	20 - 40 rpm
HF-Spindle	
Power (SI)	Up to 125 kW
Torque (SI)	Up to 163 Nm
RPM	Up to 30,000 rpm

FEATURES

- CNC: SIEMENS 840D SL
- User-friendly integrated HMI : FL Vision
- Linear motors on X, Y and Z-axis
- Vacuum network embedded in the pallet
- Direct measuring system
- Eco design
- CE certification

SOME REFERENCES

Airbus — Avic Cdac — Hongdu — Sac — Sxac — Bae Systems — Dassault Aviation — Figeac Aero — IAI — Sabca

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