



HIGH PRECISION
MACHINES

MATERIAL
REMOVAL

Forest-Liné Modumill^{mT}

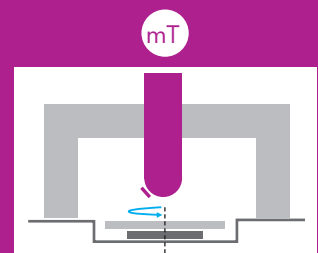
Milling & Turning Titanium Machining Center

^{mT} milling Turning



Focusing on innovation in roughing and finishing titanium and hard material aircraft complex parts, Fives designs dedicated 5-axis profilers in vertical configuration.

- High stiffness and accuracy
- High torque and high speed spindle
- High pressure and flowrate coolant processing
- Secure process
- Extra compact machine
- Stand-alone or FMS configuration



Vertical turning and milling machine

Relying on Fives' technological expertise in manufacturing 5-axis machining centers, the Forest-Liné Modumill MT offers adaptative solutions for circular titanium parts, using both milling and turning operations.

To ensure parts quality, the Forest-Liné Modumill MT is declined in two versions: single and double ram.

- Patented “constant overhang ram” in-house design and manufacture of 5-axis milling heads providing high torque with rigid and compact structure
- Geometry 5-Axis Control System
- Turning effector

The patented “constant overhang” ensures a high stiffness and accuracy of the machine for titanium processing, whatever the position is.

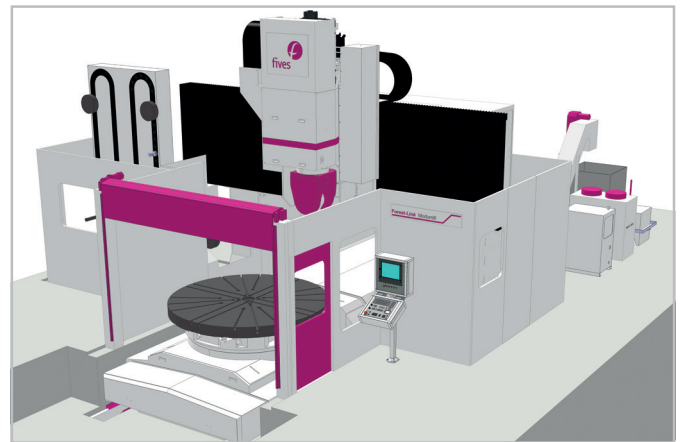
FOREST-LINÉ MODUMILL[®] SPECIFICATIONS

	Single Ram	Double Ram	
Work area (Pallet)		Ø 2.5 m	
Load		15,000 kg	
Axis			
X Axis travel	3.5 m	3.5 m	
Y Axis travel	3.5 m	2,675 m	2,675 m
Z Axis travel	1 m	1 m	1.1 m
Linear Axis speed	40 m / mn		
C rotary Axis (Plate)	n x 360° / 200 rpm		
B rotary Axis	± 110°	± 110°	
Spindle			
Electro-Spindle HS5			
Power	105 kW		
Torque	1,000 Nm		
Speed	10,000 rpm		

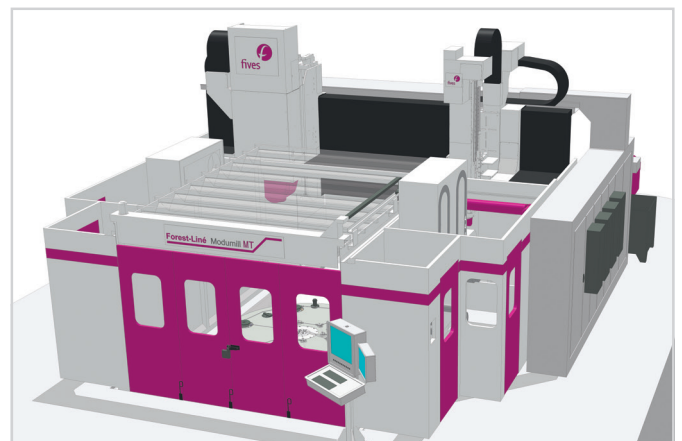
FEATURES

- CNC: SIEMENS 840D sl or HEIDENHAIN iTNC
- User-friendly integrated HMI: FL Vision
- Direct measuring system
- C-axis integrated in the ram
- Eco-design
- CE certification

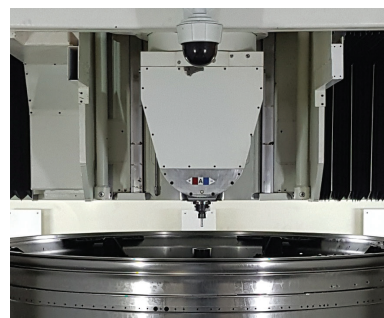
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Single ram: milling and turning 5-axis spindle



Double ram: Ram no.1: milling and turning 5-axis spindle
Ram no.2: horizontal turning spindle



Smart way to switch from milling to turning mode:

In turning mode, the spindle holder is equipped with an automatic effector changing device. The turning effector will be mounted on the spindle holder. It allows to use the turning tools independently of the milling spindle.

- High accuracy portal machining center
- Configuration in one or two rams
- Constant overhang

CONTACT US

Fives Machining
 Parc d'Activité Henry Potez – 80300 Albert – FRANCE – Tel.: +33 (0)3 22 74 43 00 – www.fivesgroup.com
 mcc-europe@fivesgroup.com – mcc-china@fivesgroup.com – mcc-asean@fivesgroup.com
 mcc-russia@fivesgroup.com – mcc-americas@fivesgroup.com

