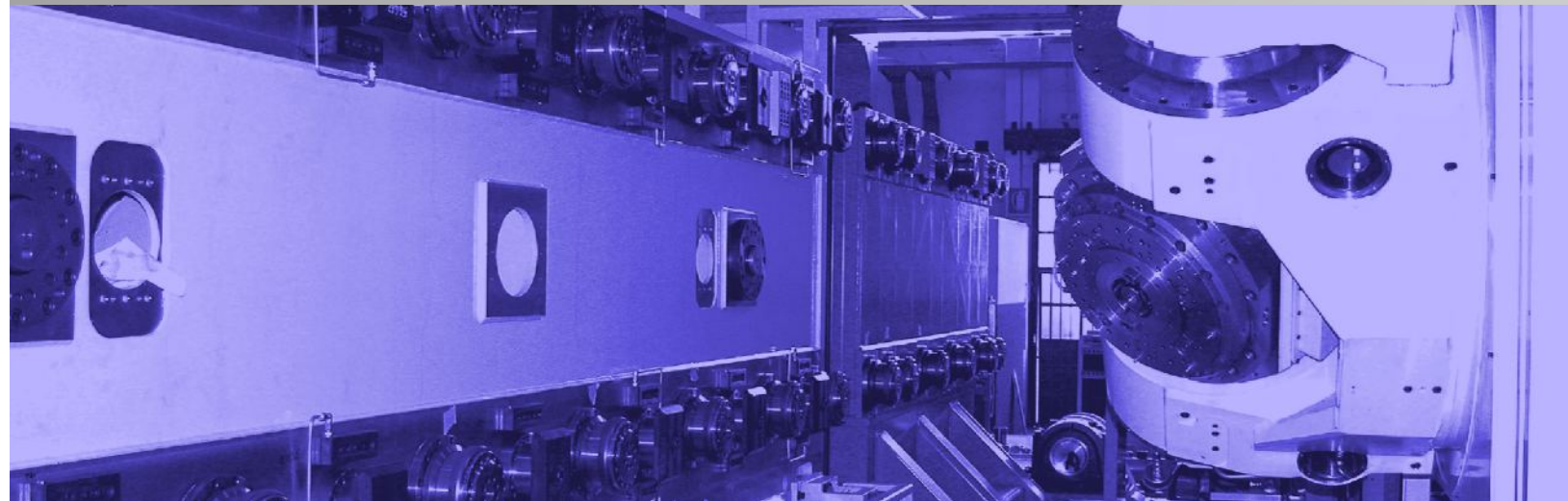
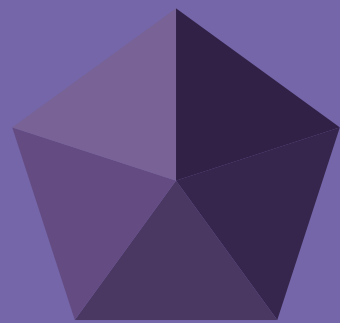




JET FIVE





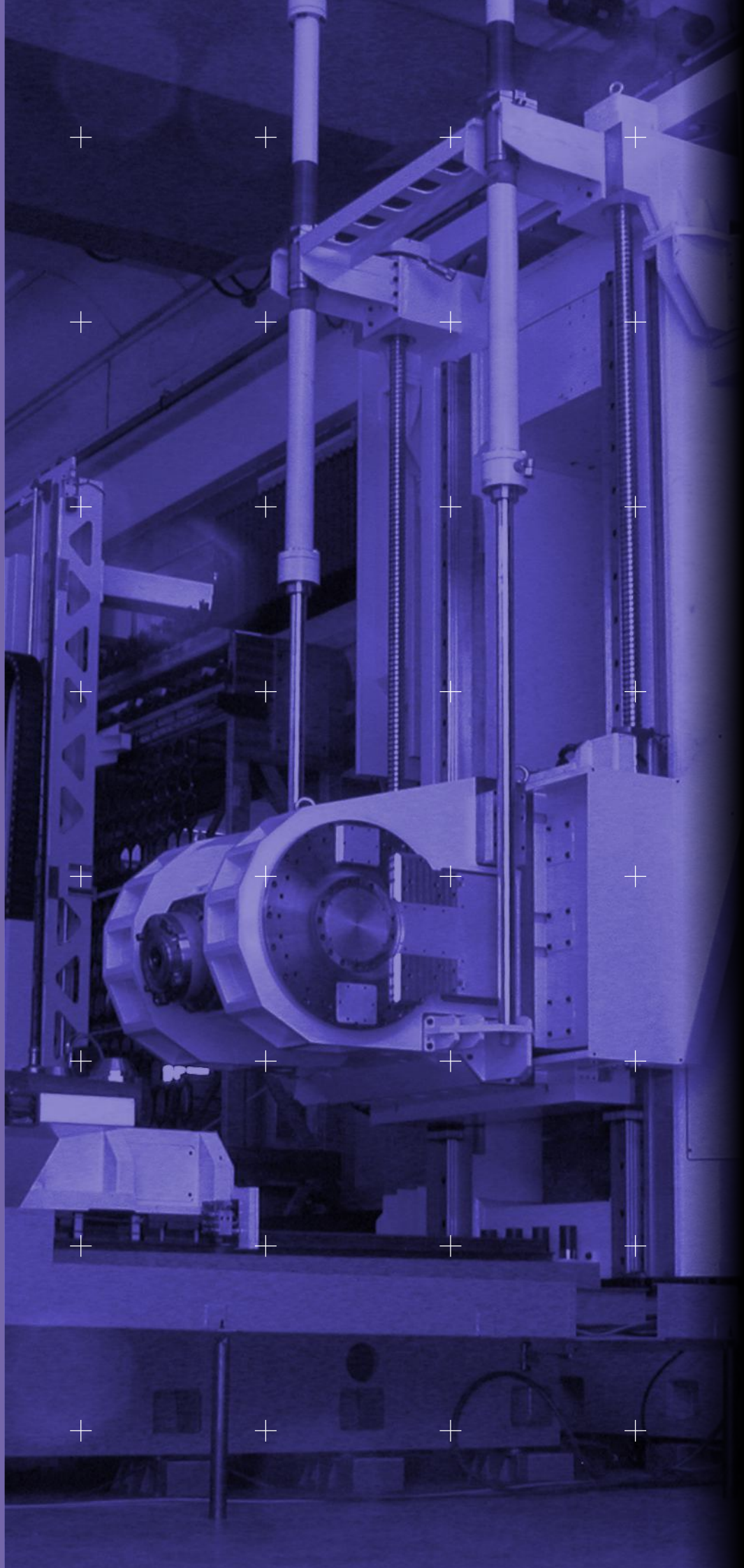
VERSATILITY

EXCEPTIONAL DYNAMICS

HIGH MATERIAL
REMOVAL RATES

MULTI INDUSTRY
SECTOR APPLICATIONS

CUSTOMISED
and FLEXIBLE SOLUTIONS



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JET FIVE

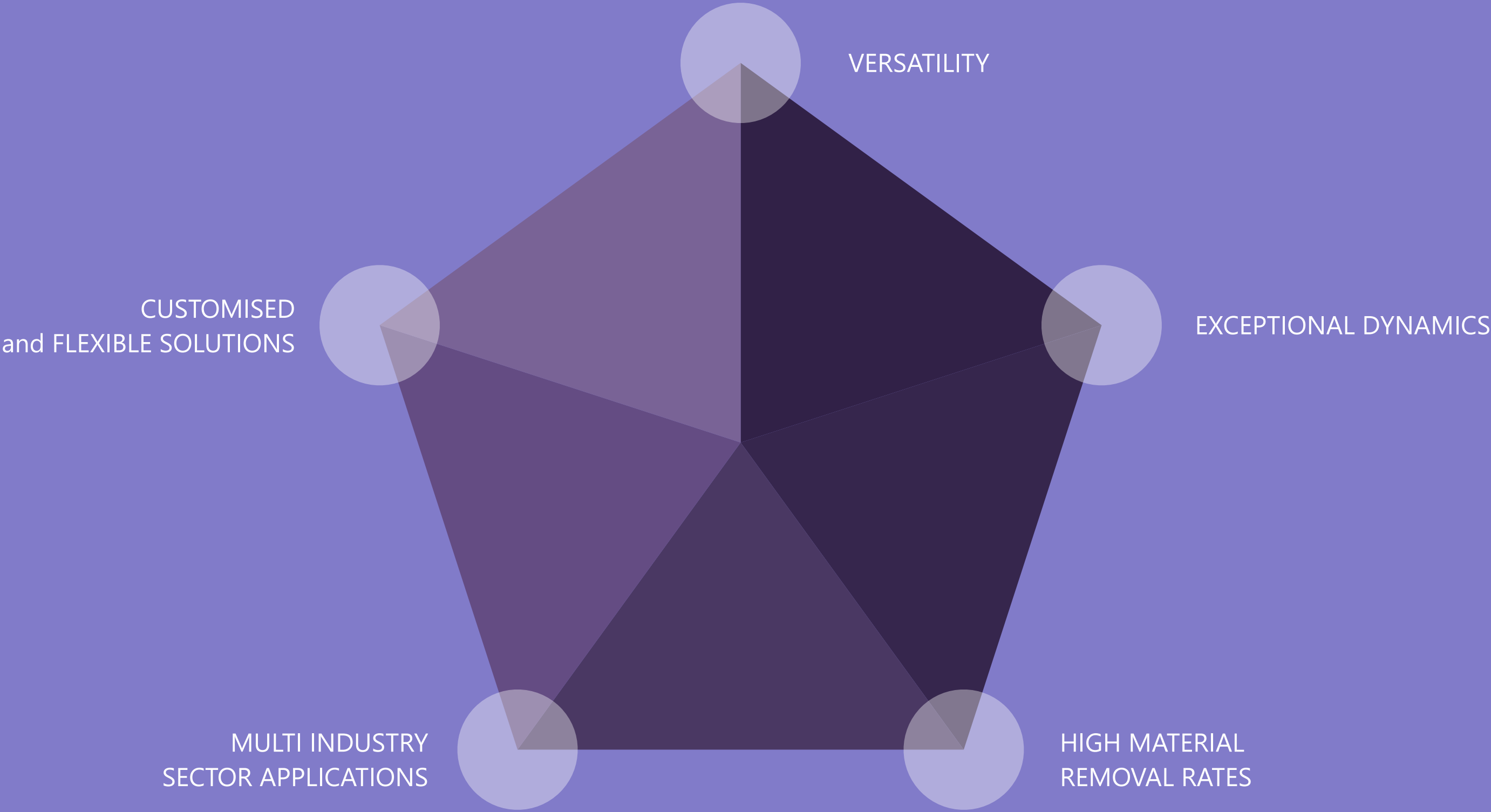
JET FIVE family represents the highest in technology and size range for MCM machining centers. It stands out for its wide variety of configurations, performances and material removal capacity. JET FIVE models are suitable for the most challenging and demanding machining operations.

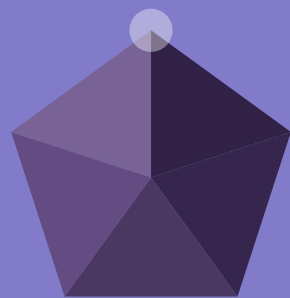
JET FIVE series have been specifically developed for meeting today's most demanding machining operations on large components manufacturing. All the JET FIVE machines, as with every MCM machining centre, feature a horizontal spindle and are highly customisable in terms of structure, layout, dynamic performances and level of automation elements. JET FIVE can be configured to manufacture a wide range of parts, both of difficult-to-machine materials (i.e. Inconel, Titanium alloys) or lightweight materials (i.e. aluminium, magnesium alloys).

All JET FIVE models can be included in Flexible Manufacturing Systems or Multipallet solutions, completely designed and assembled by MCM.

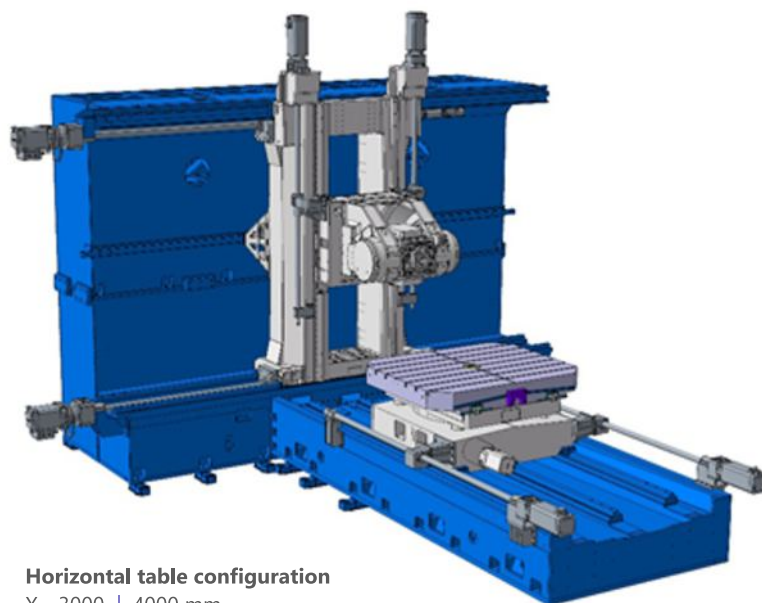
The whole production systems are developed case by case on the customer needs in order to optimise both productivity and shop floor surface employment.

JET FIVE HIGHLIGHTS



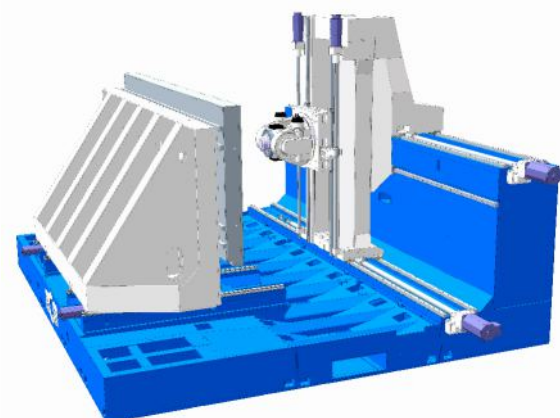


VERSATILITY



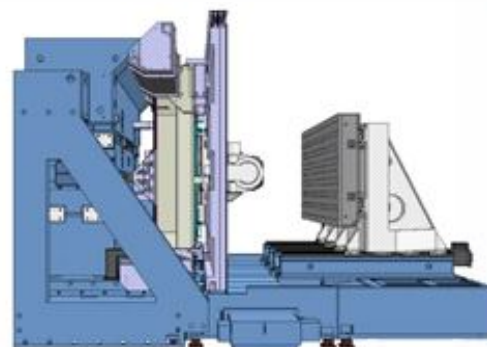
Horizontal table configuration

X _ 3000 | 4000 mm
Y _ 2000 mm
Z _ 3000 | 2500 mm
A _ +80 /-100 | +195° / -195°
B _ continuous
Pallet _ 1600x2000 mm | 2000x2500 mm
Fixture + part _ H2500 D3400 8000 kg | H2800 D3500 15000 kg

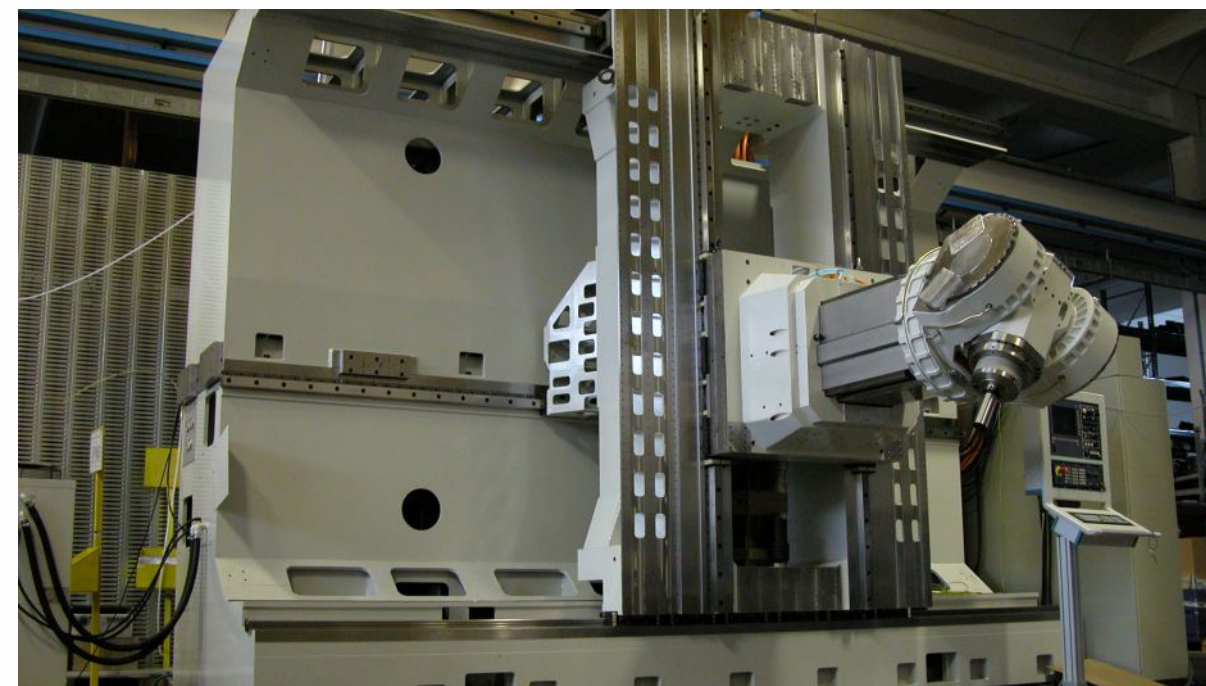


Vertical table configuration

X _ 4000 | 5000 | 6000 mm
Y _ 1500 | 2000 | 2500 mm
Z _ 800 mm
A _ ± 110°
C _ ± 360°
Pallet up to 6000x2000 mm

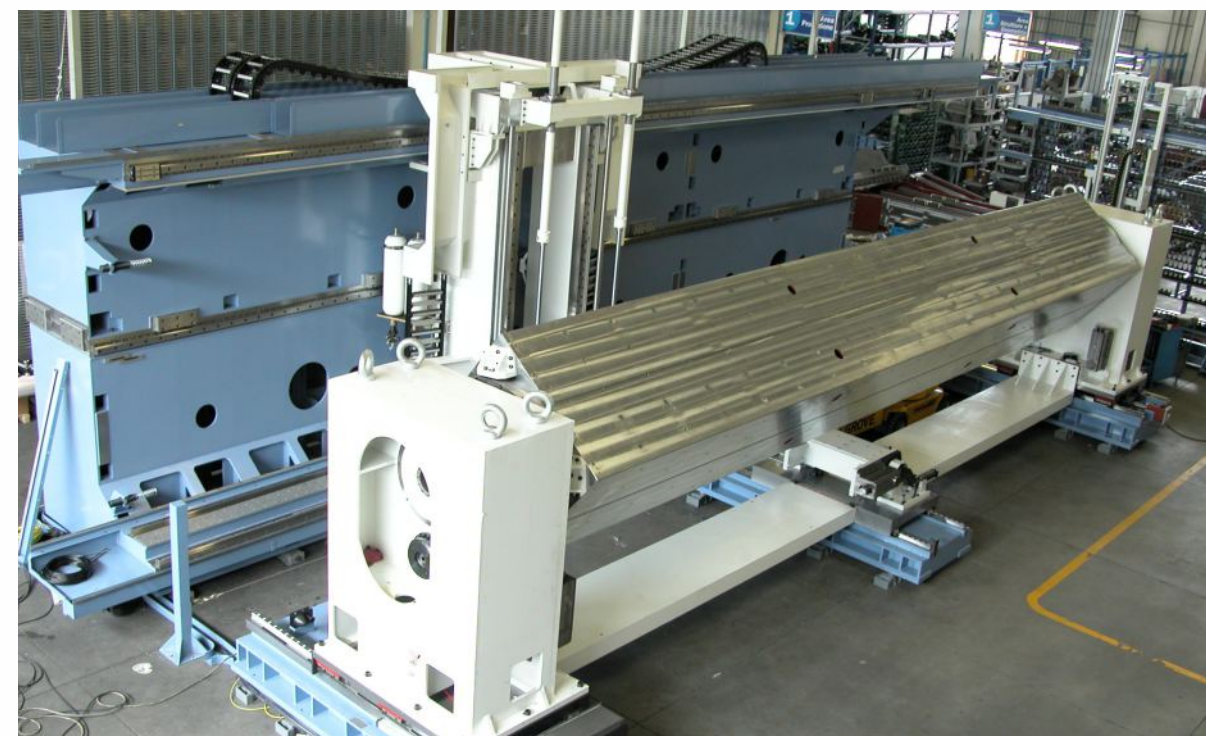


JET FIVE hyper-static structures are optimised for improving precision and machining reliability. They guarantee uniformity in the distribution of mechanical stresses and loads, symmetry and high machine stiffness. Different structural configurations are possible and design can be adapted to the specific customer application requirements in both capacity and machine layout.



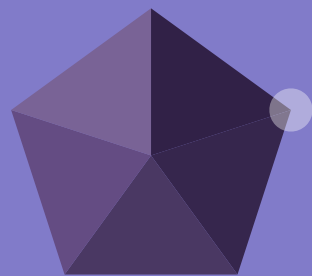
Vertical / Horizontal table configuration

X _ 3000 mm
Y _ 2000 mm
Z _ 600 (ram) +800 (positioning) mm
A _ ±110°
C _ ±360°
Pallet _ 3000x2000 mm



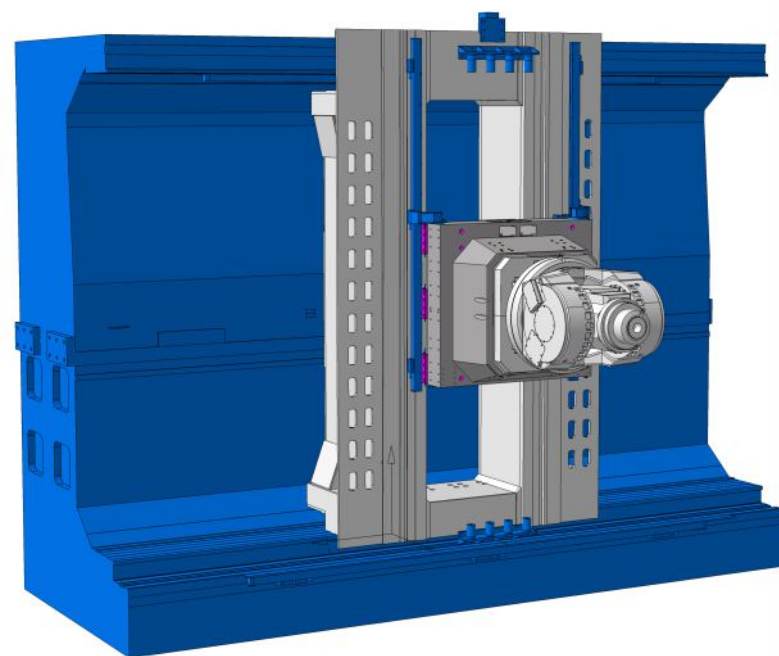
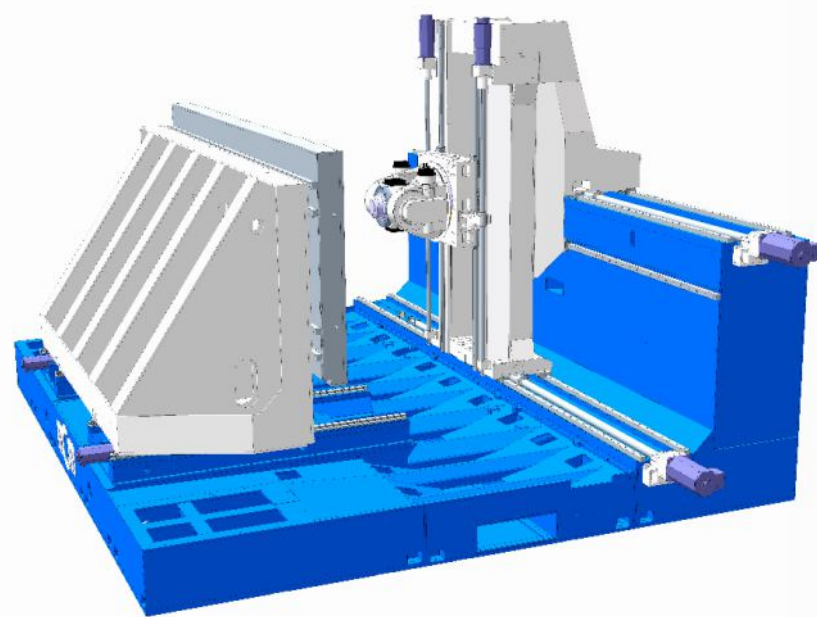
Rotating drum configuration

X _ 4000 | 7000 | 11000 mm
Y _ 2000 mm
Z _ 600 + 800 mm
A _ 200°
C _ 360°
4 Drum faces / dimensions _ Height 1250 mm / Lenght (up to) 10000 mm
Rotating drum indexing angle 90°



EXCEPTIONAL DYNAMICS +

JET FIVE series provides exceptional dynamic process performance thanks to its structure and to the possibility of utilising different axis drive technologies: linear motors and / or ballscrew configuration for linear motion transmission. This allows only the movement of the structure relating to the machining mass and is strictly related to the machining (spindle head), reducing inertia and mechanical stresses.



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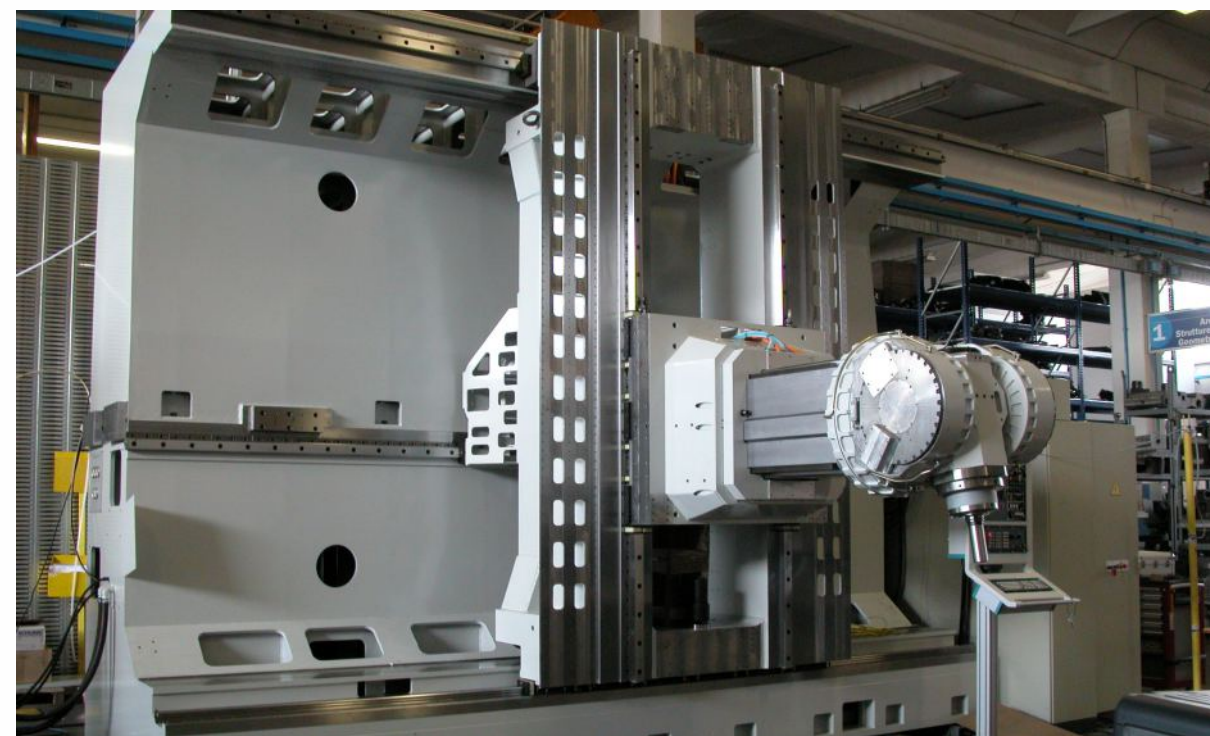


LINEAR AXES DRIVE: BALL-SCREWS

Rapid feeds _ 40 m/min

Acceleration _ 4 m/s²

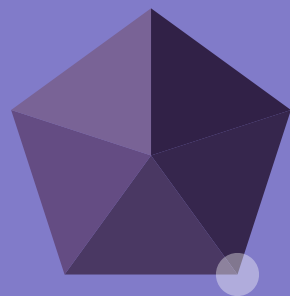
Thrust _ 40.000 N



LINEAR AXES DRIVE: LINEAR MOTORS

Rapid feeds _ 70 m/min.

Acceleration _ up to 1 G



HIGH MATERIAL REMOVAL RATES

AERO STRUCTURAL PARTS



LIGHTWEIGHT ALLOYS

HSK 63 Spindle _ 30.000 rpm
Continuous power _ 70 / 120 kW
Maximum torque _ 200 Nm

The JET FIVE series include solutions and configurations both of superior dynamic performances for lightweight alloys (i.e. Aluminium) machining and of great stiffness for machining hard-to-cut materials (i.e Titanium, Inconel, special alloys). Thanks to the wide choice of high torque and power spindles, JET FIVE can machine the most demanding parts manufacturing.

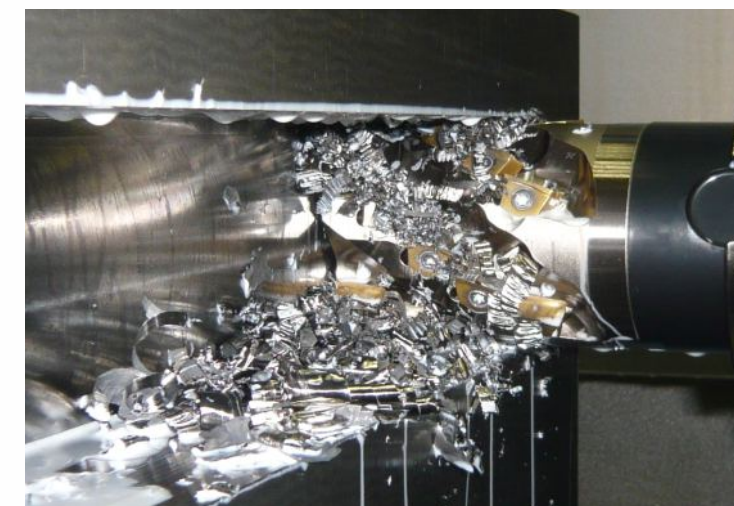


AERO STRUCTURAL PARTS

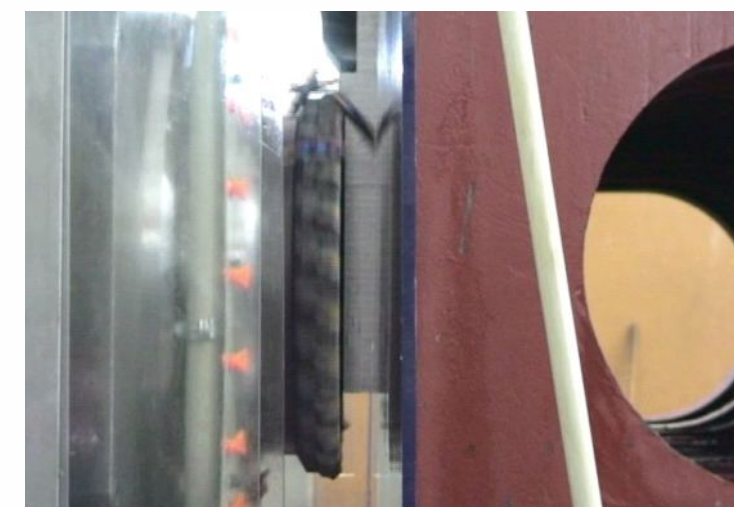
HARD-TO-MACHINE ALLOYS

HSK B160 Spindle / 5000 RPM
Maximum power 115 kW
Maximum torque 10.000 Nm

Material Removal Rate _ 576 cm³/min
Inserts Milling Tool _ Ø 96 mm
Axial depth of cut (ap) _ 50 mm
RPM _ 133
Feed Rate (f) _ 120 mm/min



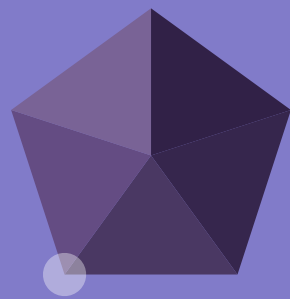
Material Removal Rate _ 550 cm³/min
Inserts Milling Tool _ Ø 315 mm
Axial depth of cut (ap) _ 9 mm
RPM _ 42 rpm
Feed Rate (f) _ 194 mm/min



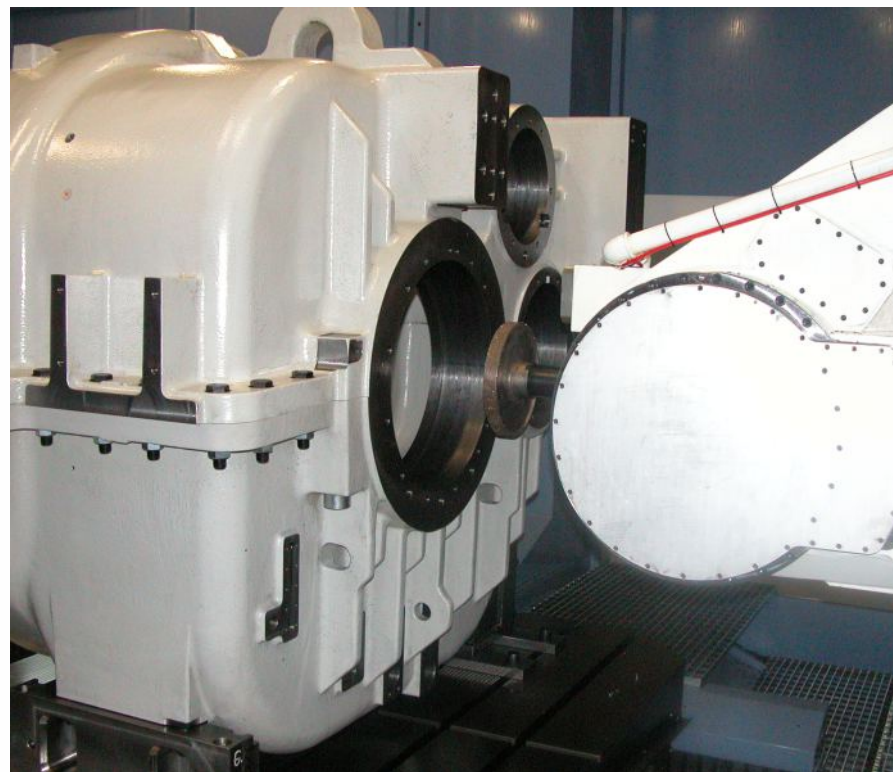
HSK-A125 Spindle / 4000 rpm
Maximum power 115 kW
Maximum torque 1750 Nm

Material Removal Rate _ 280 cm³/min
Inserts Milling Tool _ Ø 80 mm
Radial depth of cut (ae) _ 80 mm
Axial depth of cut (ap) _ 35 mm
RPM _ 160
Feed Rate (f) _ 100 mm/min
Simultaneous interpolation of X, Y, A, C axes

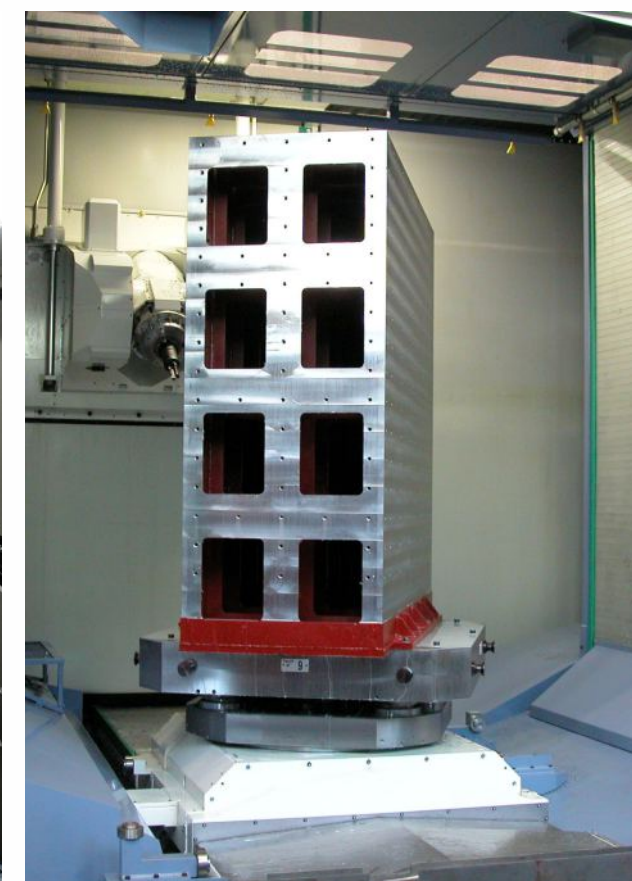


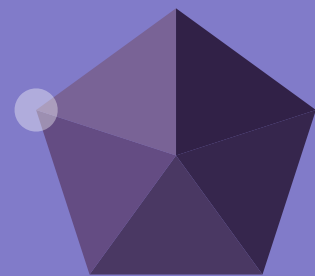


MULTI INDUSTRY SECTOR APPLICATIONS



JET FIVE is operative for a wide range of applications in various high precision manufacturing sectors such as Aerospace, Oil and Gas, Renewable Energy, Marine Engineering, and Industrial applications..





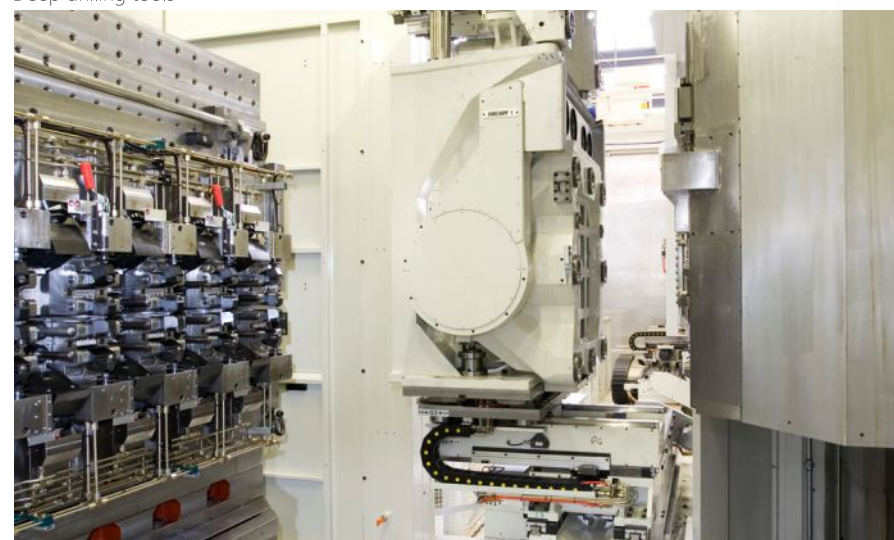
CUSTOMISED and FLEXIBLE SOLUTIONS



Special angular heads



Deep drilling tools



Two interchangeable heads on the same machining center

Every JET FIVE-based solution is designed to match specific needs. Accessories and options are also conceived expressly allowing further adaptation and setting.

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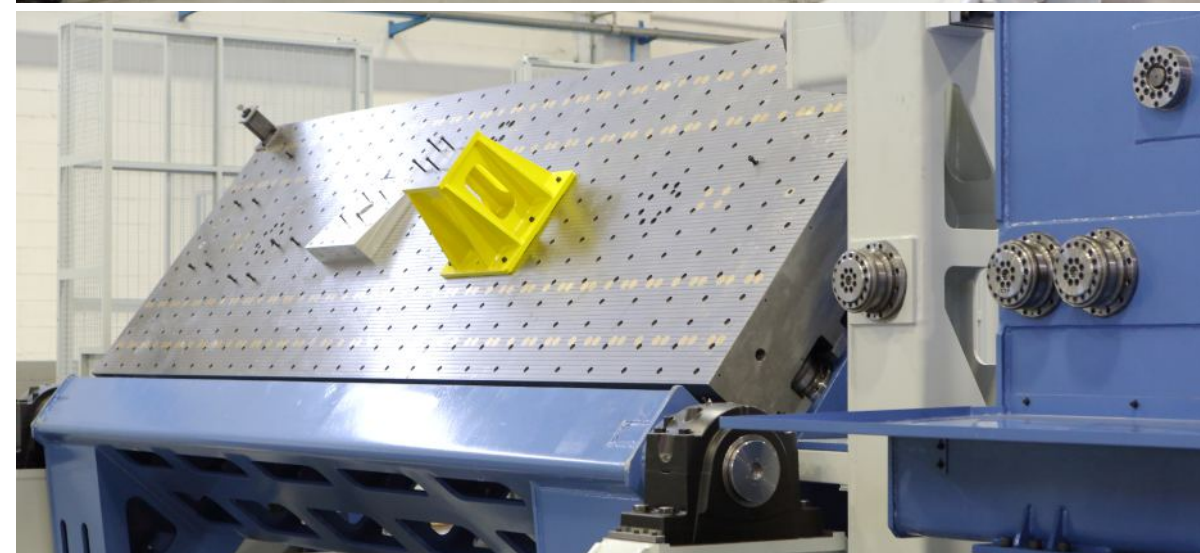
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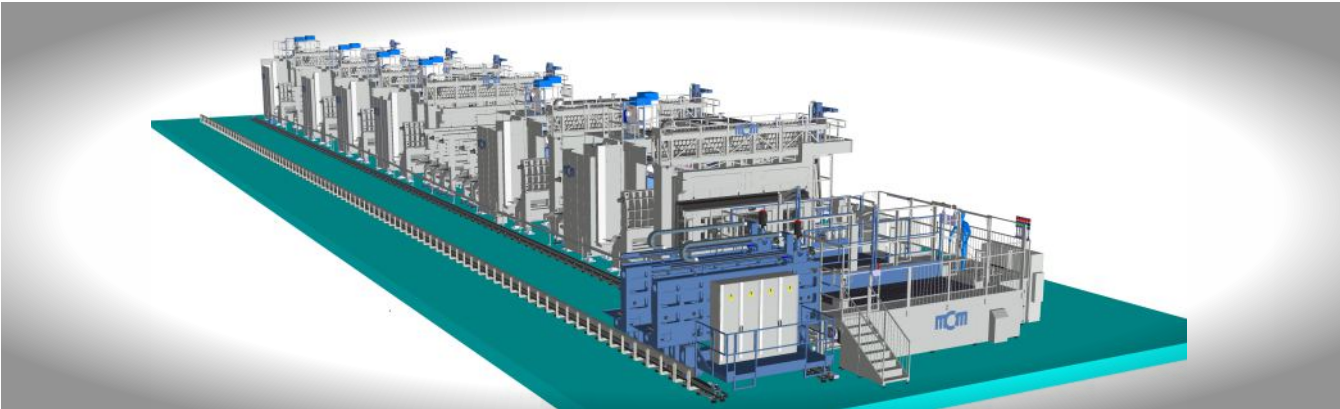
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Tilting loading / unloading station



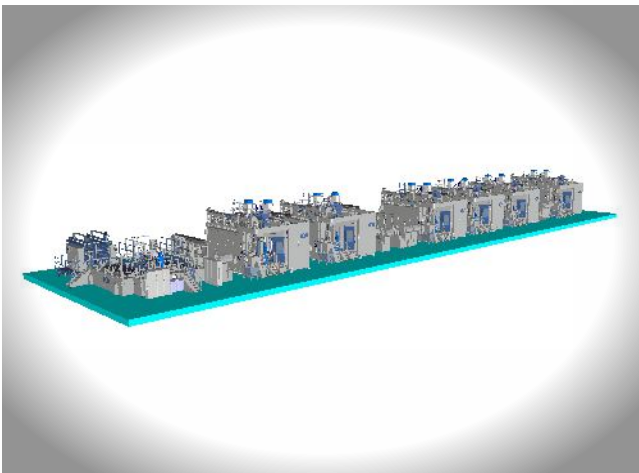
0/90° Pallet tilting system at the loading / unloading station



FMS



FMS



FMS



FMS



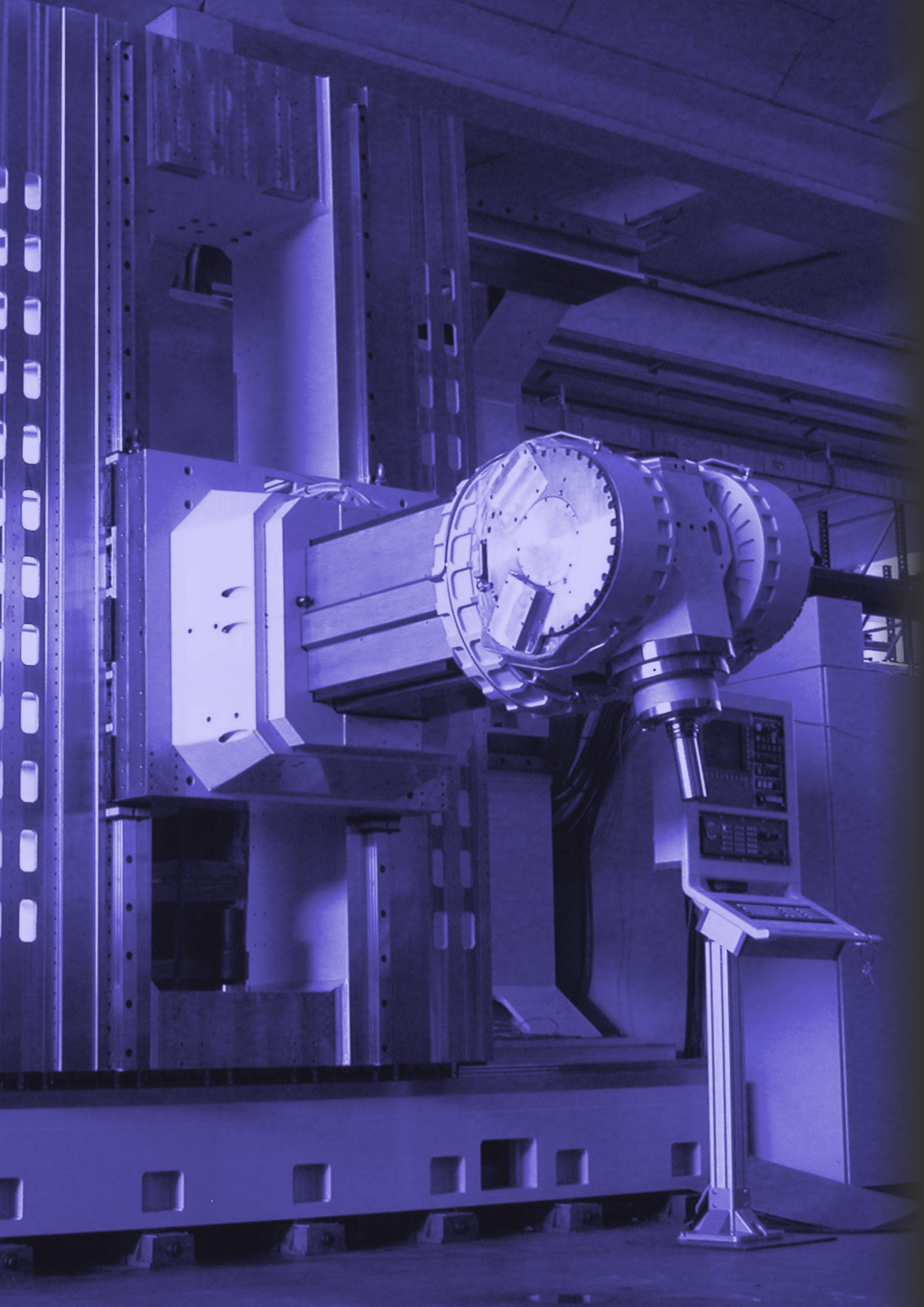
FMS



MULTIPALLET CAROUSEL



MULTIPALLET CAROUSEL



JET FIVE

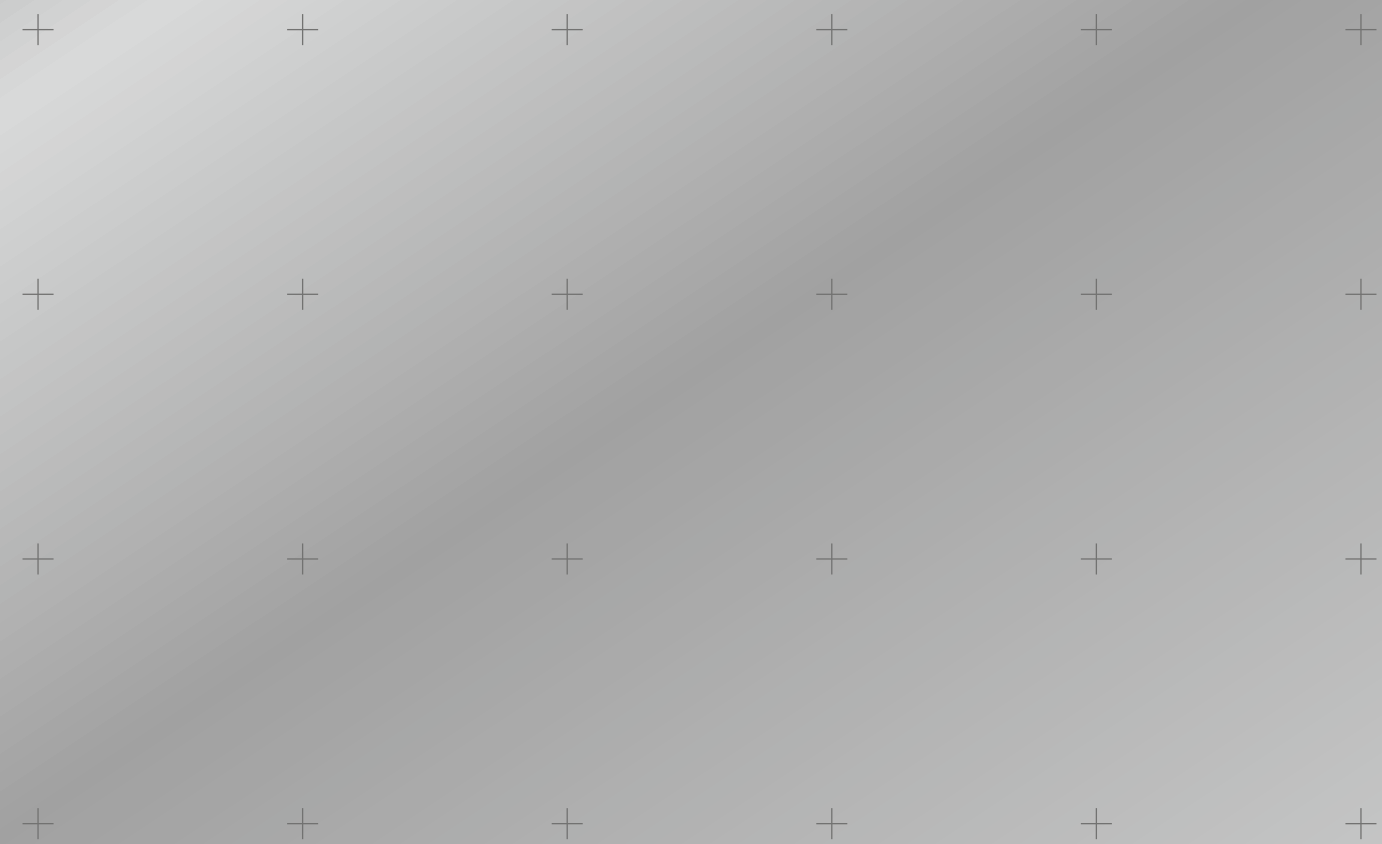
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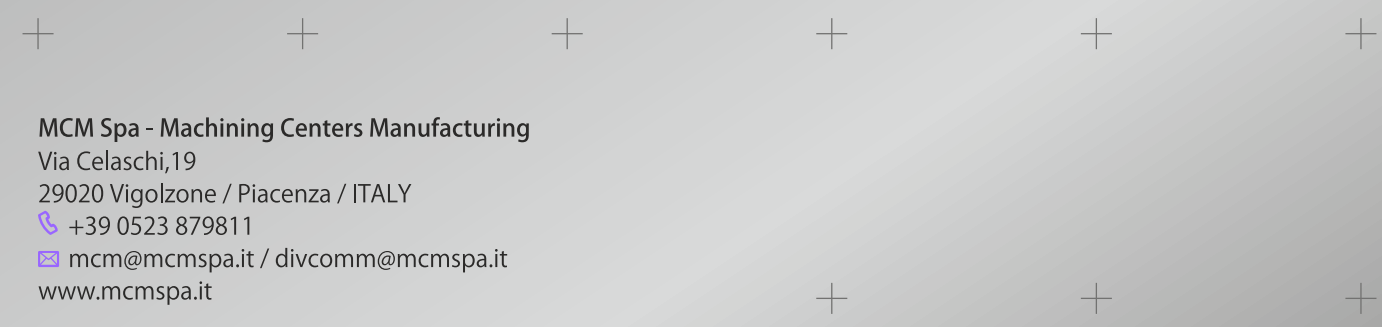
MULTI INDUSTRY
SECTOR APPLICATIONS

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