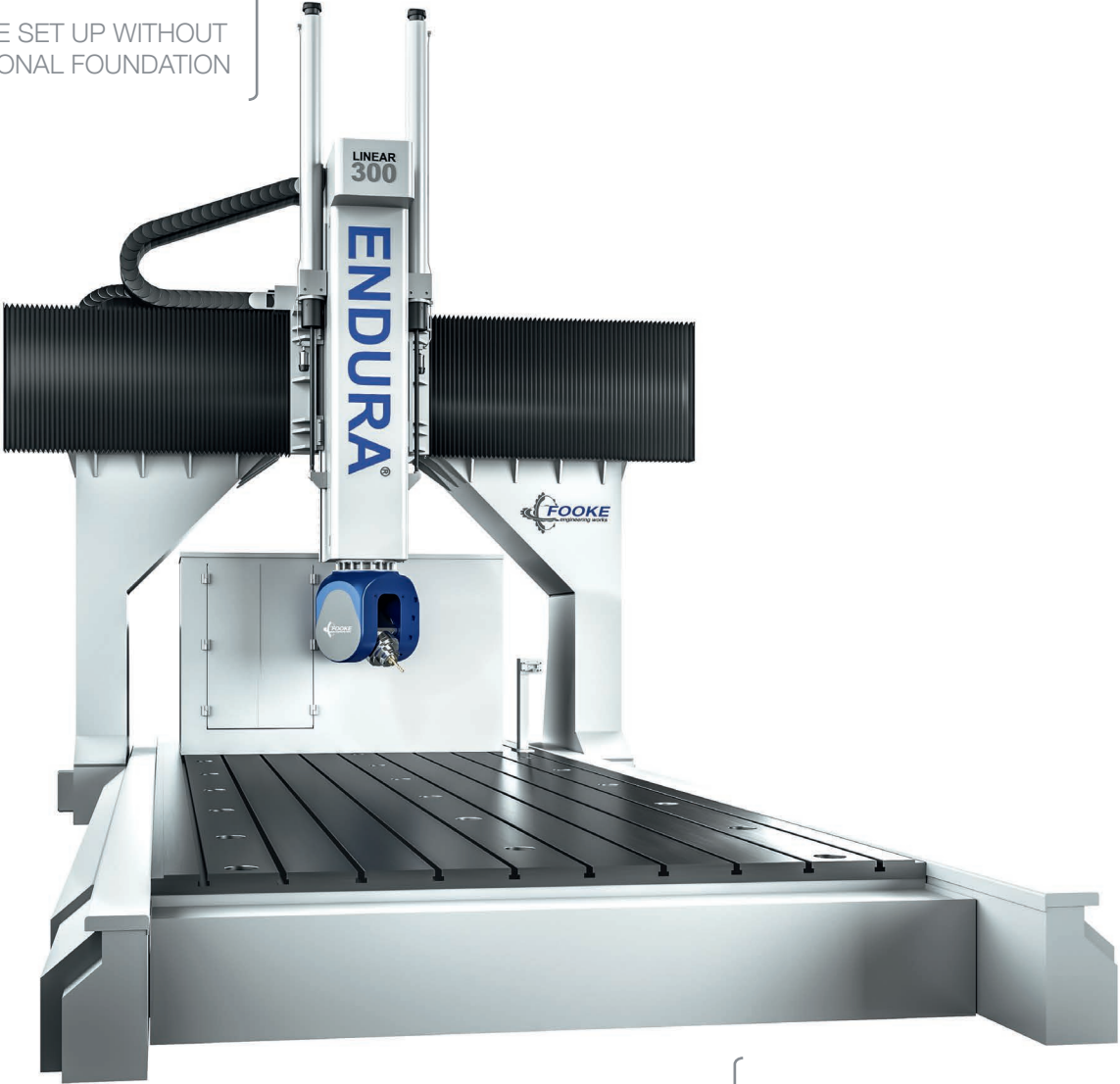




GANTRY MILLING MACHINE

ENDURA® 300LINEAR

CAN BE SET UP WITHOUT
ADDITIONAL FOUNDATION



LARGE MACHINING AREA
SMALL INSTALLATION SURFACE

GANTRY MILLING MACHINE

ENDURA® 300LINEAR

TECHNICAL DATA

Traverse paths

X-axis:	3,000 - 7,000 mm
Y-axis:	2,800 / 3,500 mm
Z-axis:	1,200 / 1,500 mm

Feed rate

X-axis:	5 - 40,000 mm/min
Y-axis:	5 - 65,000 mm/min
Z-axis:	5 - 65,000 mm/min

Acceleration up to 3.5 m/sec²

Position accuracy

in X (P_a)	0.030 mm
in Y (P_a)	0.020 mm
in Z (P_a)	0.020 mm

Position deviation

in X (P_s)	0.020 mm
in Y (P_s)	0.010 mm
in Z (P_s)	0.010 mm

HIGHLIGHTS

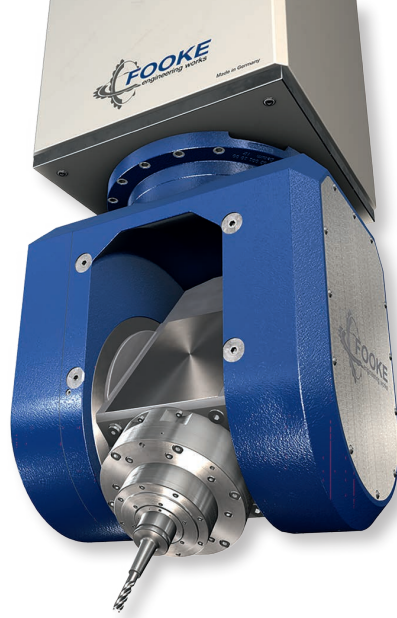
- Can be set up without additional foundation
- Large machining area despite small facility space usage
- Self-supporting machine bed construction in mono-block construction
- Ergonomic loading and optimal accessibility
- Economic gateway into 5-axis universal processing

Equipment

- Fixed cast iron machine table with traversing overhead gantry in X-axis path
- Structurally rigid travelling column with gantry in an annealed low tension steel-welded construction
- Milling head and Z-axis from low-attenuation cast iron
- MASTER-SLAVE rack and pinion drive in the X-axis
- Resistant, highly dynamic linear motors in linear axes Y and Z.
- Direct measuring system in all linear and rotary axes
- Safety system and brakes in all linear axes
- Drive units efficiently protected
- CNC-controlling from HEIDENHAIN or SIEMENS

Additional equipment

- Automatic tool changer
- Minimum quantity spray dosing system
- Cooling system (wet operation)
- Tool measuring systems
- Workpiece measuring systems
- Chips and dust disposal systems
- Sound insulation enclosure
- Online-Service
- and much more



TORQUE MOTORS
IN C- AND A-AXIS

DIRECT MEASURING
SYSTEMS IN C- AND
A-AXIS

MILLING HEAD 11

C-axis

(Milling head rotary axis)

Pivoting angle:	550° (+/-275°)
Pivoting torque:	170 Nm
Clamping torque:	750 Nm
Revolution:	300°/sec
Axis acceleration:	600°/sec ²
Position accuracy:	15" (0.0041°)
Position deviation:	10" (0.0027°)

A-axis

(Spindle pivoting axis)

Pivoting angle:	220° (+/-110°)
Pivoting torque:	250 Nm
Clamping torque:	750 Nm
Revolution:	300°/sec
Axis acceleration:	600°/sec ²
Position accuracy:	15" (0.0041°)
Position deviation:	10" (0.0027°)

High-frequency milling spindle 1

Tool holding fixture:	HSK63 A
max. power:	20 kW
max. rpm:	22,000 rpm
max. torque:	30 Nm

High-frequency milling spindle 2

Tool holding fixture:	HSK63 A
max. power:	20 kW
max. rpm:	30,000 rpm
max. torque:	21.5 Nm

High-frequency milling spindle 3

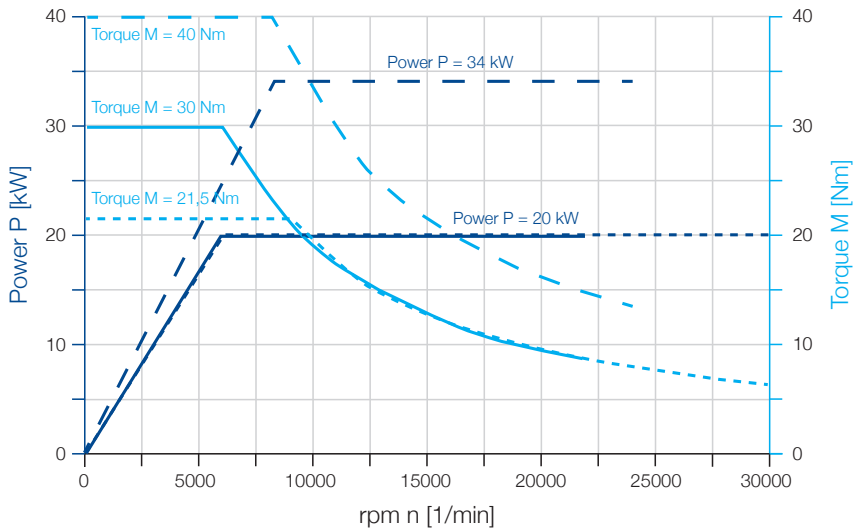
Tool holding fixture:	HSK63 A
max. power:	34 kW
max. rpm:	24,000 rpm
max. torque:	40 Nm

Milling head 11

High-frequency milling spindle
HSK63 A

- with 20 kW, 22,000 rpm ———
- with 20 kW, 30,000 rpm - - - - -
- with 34 kW, 24,000 rpm - - - - -

Spindle also available with other performance characteristics



MATERIAL

Plastics	Blockmaterials for modelling	Composite materials (CFRP/GRP)	Aluminium	Cast Iron	Steel
+	+	+	+	-	-