

Mikron NRG Plus

**MIKRON**



More productive. More flexible  
For bigger applications.

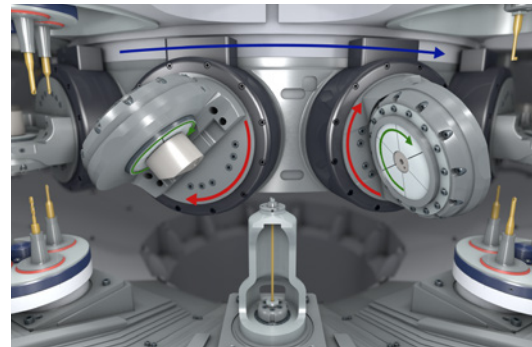
# Mikron NRG Plus

## The new Generation of Transfer Machines

The Mikron NRG Plus combines all advantages of the proven and successful Mikron NRG-50 concept with evolutionary "Plus" benefits. That means more competitiveness for you.

### Plus 1: more productive

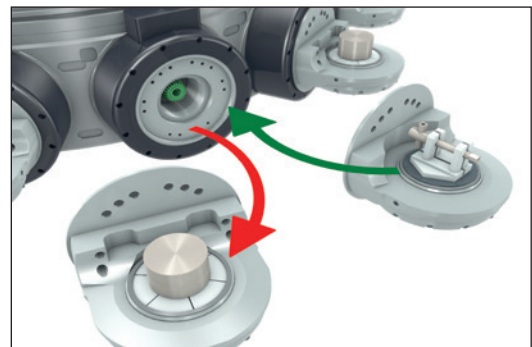
- Simultaneous movements of all 5 axis, also during the table indexing, increases the productivity
- More spindle power for turning operations
- Faster Automatic Tool Changer
- Faster B/C-axis



Simultaneous movement of table and B/C-axis

### Plus 2: more flexible

- The B/C-axis interface reduces considerably the clamping type change-over time
- Machining of demanding simultaneous 5 axis applications possible



Exchange of the B/C-axis.

### Plus 3: for bigger applications

- Parts up to 80x80x80mm or Ø65mm L100 can be efficiently machined



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# Mikron NRG Plus

## Technical data

<b>Machine type</b>	Modular & flexible rotary transfer machine
<b>Work piece dimension</b>	up to 80x80x80mm or Ø65x100mm
<b>Number of stations</b>	12
<b>Number of CNC 3-axis machining units per station</b>	up to 3 working from above, below and by side
<b>Total number of CNC 3-axis machining units</b>	up to 30
<b>Axis strokes of machining units</b>	X=90 Y=90, Z=150 mm
<b>Number of tools on board</b>	up to 96
<b>Number of automatic tool changers</b>	up to 22
<b>ATC (Automatic Tool Changer)</b>	4 tools, chip to chip 3.1 sec. at 6000 rpm
<b>ATS Advanced Thermal Stabilization</b>	Compact thermo-symmetrical structure system which ensures constant and homogenous machine temperature
<b>5 axis simultaneously CNC machining</b>	on every station, with every spindle
<b>Resolution of rotating clamping device</b>	0.001°
<b>Turning spindle (S6)</b>	max. 6'000 rpm, max 24 Nm, max 10.0kW
<b>HP spindle (S6)</b>	max 20'000 rpm, max 10.5 Nm, max 2.2kW
<b>ATC HS spindle (Automatic Tool Changer) (S6)</b>	max 27'000 rpm, max 3.5 Nm, max 6.6 kW, Z stroke 90mm (3.54")
<b>ATC HP spindle (Automatic Tool Changer) (S6)</b>	max 12'000 rpm, max 9.4 Nm, max 4.5 kW Z stroke 90mm (3.54")
<b>RH spindle (Recess Head with U axis CNC)</b>	up to 4,000 rpm, U-axis stroke up to 7mm
<b>DEEP spindle (deep hole drilling)</b>	20,000 rpm, 200 bar, Z stroke 90mm max
<b>Internal cooling on all machining spindle</b>	up to 80 bar (200 bar for DEEP spindle)
<b>CNC</b>	Bosch MTX
<b>Table transfer time (rotation and indexing)</b>	1 sec.
<b>B/C-axis movement time</b>	B/C movements during the table movement
<b>Machine weight</b>	approx 16,000 kg
<b>Machine layout (medium installation size)</b>	approx. 10x8x3.3 m

The technical data listed are not binding and may be changed at any time without notice.



Typical Mikron NRG Plus applications.

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