

CNC machining heads

Discover Unisign's comprehensive range of high-performance machining heads—engineered to enhance flexibility and efficiency in CNC operations. Our versatile selection is optimized for a wide range of applications, offering seamless interchangeability and compatibility with various tooling systems.

We offer an extensive range of machining heads, tailored to the type of vertical spindle:

1. **Vertical ram with integrated spindle** - machining heads connected to the spindle/ram via basic adaptor
2. **Vertical ram with adaptor for indexable heads** - machining heads directly mounted into the vertical ram
3. **Vertical ram with C-axis adaptor** - machining heads directly mounted with C-axis into the vertical ram



1.

Vertical ram with integrated vertical spindle

A. Attachments heads

- Z-axis: 1.000 / 1.250 / 1.600 mm
- Attachment diameter: 230 mm
- Max. spindle speed: 6.000 rpm
- Max. torque: 1.600 Nm
- Power: 36/54 kW
- Indexable in the C-axis and optionally on the B-axis in 2,5° or 1° positioning steps
- Machining head change time: 25 sec.
- Taper size: HSK-A100 | SK50 | Capto C8
- For: UNIPORT4000-XL | UNIPORT6000 | UNIPORT6000-P | UNIPORT7000 | UNICOM6000

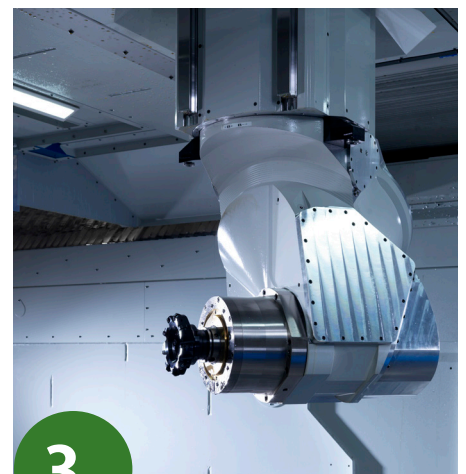


2.

Vertical ram with adaptor for indexable heads

B. Exchangeable heads - indexable

- Z-axis: 1.600 mm
- Attachment diameter: 400 mm
- Max. spindle speed: 6.000 rpm
- Max. torque: 1.600 Nm
- Power: 42/73 kW
- Indexable in the C-axis and optionally on the B-axis in 2,5° or 1° positioning steps
- Machining head change time: 25 sec.
- Taper size: HSK-A100 | HSK-A63 | Capto C8
- For: UNIPORT7000-KW | UNIPORT7000-MTC | UNICOM7000

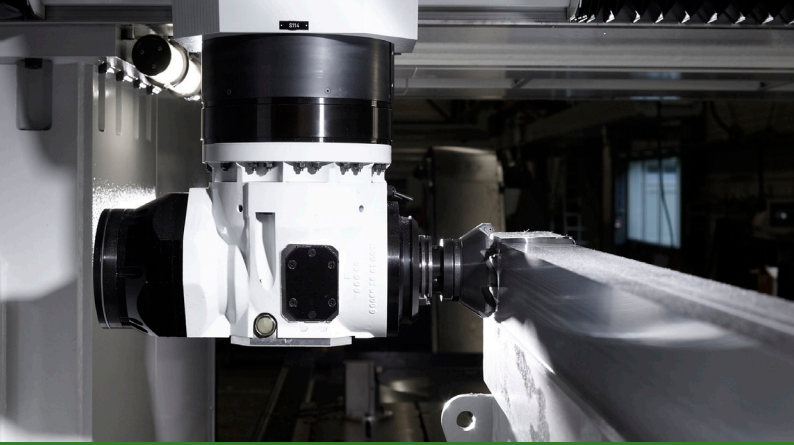


3.

Vertical ram with C-axis adaptor

B. Exchangeable heads - indexable C. Exchangeable heads - c-axis

- Z-axis: 1.600 mm
- Attachment diameter: 460 mm
- Max. spindle speed: 6.000 rpm
- Max. torque: 1.600 Nm
- Power: 42/73 kW
- Indexable in the C-axis and optionally on the B-axis in 2,5° or 1° positioning steps
- Machining head change time: 25 sec.
- Taper size: HSK-A100 | Capto C8
- For: UNIPORT6000-HV | UNIPORT7000-KW | UNIPORT7000-MTC | UNICOM7000

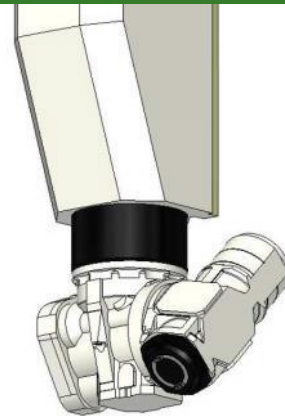


A. Attachment heads



Right angle head

- Taper size: HSK-A100 | SK50 | Capto C8
- Maximum torque: 1.000 Nm
- Maximum spindle speed: 6.000 rpm



Universal head

- Taper size: HSK-A100 | SK50 | Capto C8
- Maximum torque: 720 Nm
- Maximum spindle speed: 6.000 rpm



Extension spindle

- Taper size: HSK-A100 | SK50 | Capto C8
- Maximum torque: 720 Nm
- Maximum spindle speed: 4.000 rpm



Compact angle head

- Taper size: HSK-A63 | Capto C5
- Maximum torque: 400 Nm
- Maximum spindle speed: 6.000 rpm



Turning tool adaptor

- Taper size: HSK-A100 | Capto C8

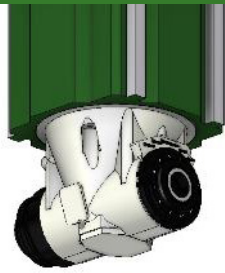


B. Exchangeable heads - indexable



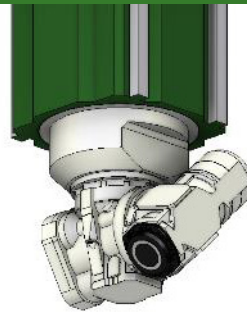
Main spindle head

- Taper size: HSK-A100
| Capto C8
- Maximum torque:
1.600 Nm
- Maximum spindle speed:
6.000 rpm



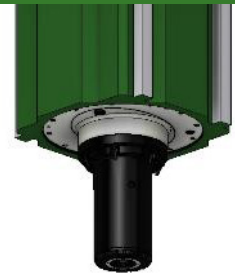
Right angle head

- Taper size: HSK-A100
| Capto C8
- Maximum torque:
1.600 Nm
- Maximum spindle speed:
6.000 rpm



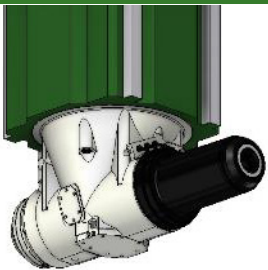
Universal head

- Taper size: HSK-A100
| Capto C8
- Maximum torque:
800 Nm
- Maximum spindle speed:
6.000 rpm



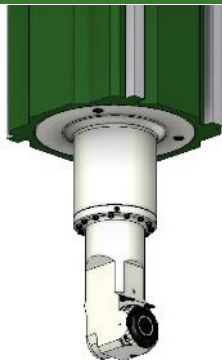
Extension spindle

- Taper size: HSK-A100
| Capto C8
- Maximum torque:
1.600 Nm
- Maximum spindle speed:
4.000 rpm



Right angle head extended

- Taper size: HSK-A100
| Capto C8
- Maximum torque:
1.600 Nm
- Maximum spindle speed:
4.000 rpm



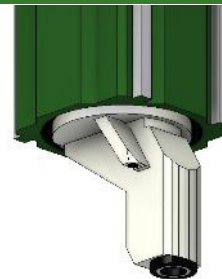
Compact angle head

- Taper size: HSK-A63
| Capto C5
- Maximum torque:
400 Nm
- Maximum spindle speed:
6.000 rpm



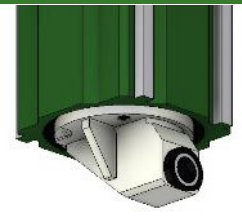
Turning tool adaptor

- Taper size: HSK-A100
| Capto C8



Turning tool adaptor extended

- Taper size: HSK-A100
| Capto C8

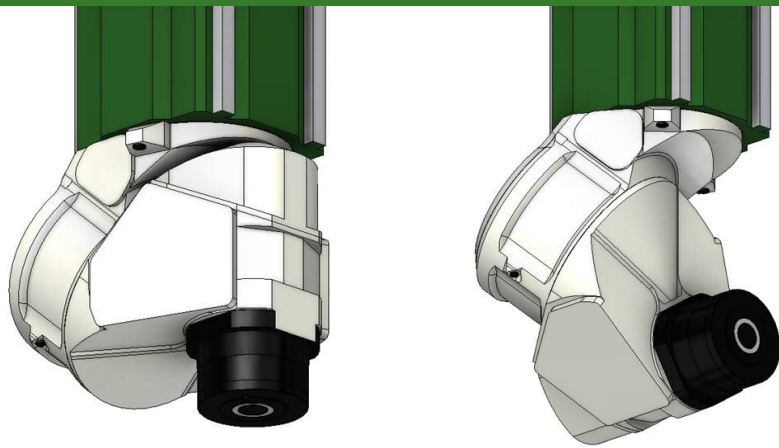


Turning tool adaptor horizontal

- Taper size: HSK-A100
| Capto C8

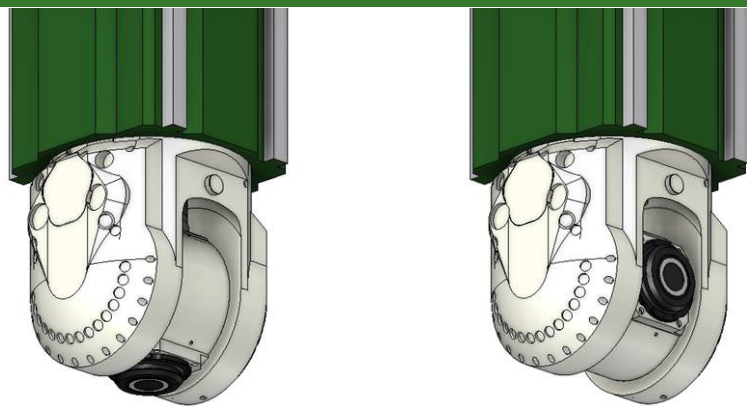


C. Exchangeable heads - C-axis



Nutator head

- Taper size: HSK-A100 | Capto C8
- Maximum torque: 700 Nm
- Maximum spindle speed: 15.000 rpm



Fork head

- Taper size: HSK-A100 | Capto C8
- Maximum torque: 600 Nm
- Maximum spindle speed: 4.000 rpm