

# PowerSpeed Cube

The possibility to combine your individual requirements of a machine with a large number of quality elements have prompted us to consider a new machine concept.

Variant diversity, based on configurable travels and clamping situations, makes your PowerSpeed Cube to a tailor-made solution for your machining tasks. The main axes symbolically represent the corner of a cube, which becomes a scalable cube by the 3x3x3 combination possibilities. The Tightblock, which allows a floor level installation without a complicated step foundation, the optimized chip management, the complete housing of the machine and numerous integrated options complete the classic travelling column machine and take machining to a new level.



#### Technical Data

Working range / travels

X-axis (horizontal/longitudinal) mm 3.000 // 4.000 // 5.000 Y-axis-(vertical) mm 1.600 // 2.100 // 2.600 Z-axis (horizontal /cross) 1.500 // 1.600 mm 1.000 (-350 //+650) W-axis (cross axis) mm

45° Diagonal milling head degree° 0,01° indexed

(1.296 billion of head positions)

Main drive

up to 75/70 Drive power kW Speed range up to 8.000 rpm

Feeds and rapid traverses

mm/min up to 40.000 X.Y.Z axis

Acceleration m/s² Clamping surfaces

1.600 - 2.500 Rotary or turning table

3.000 // 4.000 // 5.000 X 2.000 Clamping plate mm Table load 6 - 15 tons

As an option: pallet changing system

ATC

48 // 66 // 90 // 120 Number of pockets

**Tool taper** SK 50 BIG-Plus

Control system Heidenhain TNC 640 Siemens 840D sl

Machine weight tons 80 -125

(depending on the travels)

Working area (depending on travels) Volume

# TightBlock

The enhanced TightBlock allows an installation of the machine at floor level without an expensive step foundation, it grants an optimal chip removal, due to steep inlet surfaces and a doubling of the chip removal capacity.



#### Chip Management

Two powerful chip conveyors, with a feed width of 630 mm each, ensure a clean working area – even with maximum chip removal



#### Tool Magazine

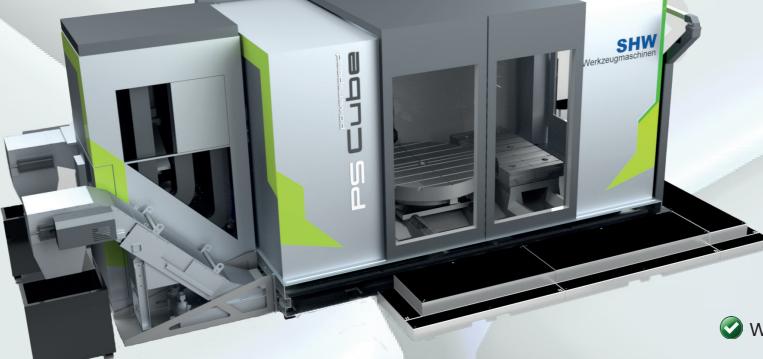
The completely housed tool magazine quarantees maximum protection against contamination of the tools. Number of tool pockets: 48 / 66 / 90 / 120



## Clamping Surfaces

Interfaces, integrated in the TightBlock, allow numerous clamping surfaces, suited for your machining task. The optionally available cross axis (W-axis) for the table units not only increases the clearance for the table rotation to 3.500 mm, but also opens up a wide range of processing possibilities Available variants:

Rotary or turning table Cross axis (W-axis) for table units Clamping plates Pallet changing systems for part automation and set-up during machining time





## Operation

The swiveling control panel allows operation from the side as well as from the front. In order to give the operator the best possible view of the workpiece and the machining process in every situation, a camera can be provided whose image is displayed in the split screen on the control monitor.



# Options

A large number of pre-defined options such as tool breakage control or SHW-UniScan collision monitoring round off the overall package

## Working Area - Space Requirement

The ergonomic workspace offers ideal conditions for safe and efficient work. Completely enclosed, it sets new standards and is also optionally available with an extraction system.

An ideal workspace/space requirement ratio is achieved by the optimized arrangement of units and peripherals.

Working area - space requirement:

 $X = 3.000 \, \text{mm}$ 10.000 mm x 8.000 mm X = 4.000 mm11.000 mm x 8.000 mm X = 5.000 mm12.000 mm x 8.000 mm



## Commissioning

Pre-assembled main components eliminate costly installation work and considerably reduce assembly times.



## Panorama Glazing

Large viewing windows in the front and side doors allow an optimal view into the machining area at all times



#### SHW-Care

The new SHW Care classic includes AR supported remote maintenance and is included free of charge for the first year.

