

TECHNICAL DATASHEET 5-axis horizontal Table Type Borer

| | |
|--------------|-----------------------------------|
| manufacturer | TOS VARNSDORF |
| type | WHN(Q) 13 CNC |
| control | SIEMENS 840D solution line |
| built | 2015 |



Travels

| | | | |
|---|-------|----|----------|
| X-axis (lateral movement table) | 4.000 | mm | |
| Y-axis (vertical movement spindle unit) | 2.500 | mm | |
| Z-axis (longitudinal movement column) | 1.250 | mm | |
| W-axis (movement quill) | 800 | mm | |
| B-axis (rotary movement table) | 360 | ° | x 0,001° |

Spindle

| | | | |
|------------------|-------------|--------------|---------------------|
| spindle diameter | 130 | mm | |
| spindle cone | | SK50 | |
| spindle power | 37 | kW | on 1.500 1/min (S1) |
| spindle speed | 10 - 3.000 | 1/min | |
| 1. gear step | 10 - 490 | 1/min | |
| 2. gear step | 491 - 3.000 | 1/min | |
| max. torque | 2502 | Nm | |
| tool force | 25 | kN | |
| Pull stud | form | DIN 69871/AD | |

Rotary table

| | | | |
|---------------------------------|---------------|----|------|
| max. workpiece weight | 20.000 | kg | |
| clamping size | 1.800 x 2.200 | mm | |
| no. of T-slots | 11 | | |
| T-slot distance | 160 | mm | 22H6 |
| center bore | 100 | mm | H6 |
| hydromechanical clamping B-axis | | | |

Feed

| | | |
|----------------------------|-------------|--------|
| feed range X-, Y-, Z- axis | 4 - 5.000 | mm/min |
| feed range W-axis | 4 – 5.000 | mm/min |
| feed range B-axis | 0,003 – 1,5 | 1/min |
| rapid feed X-axis | 8.000 | mm/min |
| rapid feed Y, Z, W-axis | 10.000 | mm/min |

Manual milling head HUR 50

| | | | |
|-------------|-------|-------|------------------|
| no. of axes | 2 | | |
| max. speed | 3.000 | 1/min | |
| power | 20 | kW | |
| torque | 1.000 | Nm | |
| increment | 0,1 | ° | Manual via scale |



Faceplate LD-650

| | | |
|------------------------|-------------|--------|
| diameter of body | 650 | mm |
| travel cross slide | 170 | mm |
| max. speed | 200 | 1/min |
| feed range | 1 – 1.000 | mm/min |
| possible bore diameter | 300 – 1.000 | mm |



tool changer

| | | |
|---|-------|-------|
| no. of tool slots | 40 | slots |
| max. tool weight | 25 | kg |
| max. total weight in chain | 1.000 | kg |
| max. tool length | 500 | mm |
| changing time according to manufacturer | 15 | s |

equipment

- chip conveyor
- fixed operator platform
- coolant equipment with tool cooling through outer coolant nozzles
- universal-milling head HUR 50, manual attachable
- face plate LD-650
- spindle extension PVD 13-550, manual attachable
- 3D-probe with optical transmission, manufacturer Renishaw, type OMP60
- 2 pieces clamping angle 1620 x 700 mm
- electronic handwheel