TECHNICAL DATASHEET
CNC – Horizontal – Machining Centre

manufacturer	**HÜLLER HILLE**
type	**Nb-h 170 Speed**
built	**2004**
control	**SINUMERIK 840 D**

NC – rotary table			
Pallet size	630 x 500	mm	2-fold pallet changer
Smallest partial step	0,001	°	
Maximum workpiece circuit	Ø 900 x 1.100	mm	
Max. table load centric	800	kg	
Max. feed rate	30	Upm	

travels		
X-axis (rotary table cross)	1.000	mm
Y-axis (head stock vertical)	800	mm
Z-axis (column longitudinal)	800	mm
B-axis (NC – rotary table)	360.000	°

Feeds			
Feed range in X-Y-Z-axis	1 – 50.000	mm/min	
Feed force in X-Y-Z-axis 100% ED	15.000	N	
rapid feed in X-Y-Z-axis	50	m/min	
rapid feed B-axis (NC – rotary table)	30	m/min	

Tool magazine, Tool changer			
Number of magazine cassettes	3		
Number of tool places each cassette	50		150 places in total
Max. tool-Ø	100	mm	
Tool taper	HSK 100		
Tool-Ø with limitations	125/325	mm	
Tool length max.	650	mm	
Tool weight max.	40	kg	
Max. weight each magazine cassett	650	kg	
Tool changing time (max. 25 kg)	ca. 2,5 – 4,5	sec	
Chip to chip time (VDI 2852, Bl. 1)	ca. 7-8	sec	
Pallet change time	ca. 12 - 18	sec	

Main spindle			
Max. power, ED 100/40%	36/50	kW	
Max. torque, ED 100/40%	344/475	Nm	
Max. speed	12.000	min-1	
Tool taper	HSK 100		

Coolant equipment			
Tank capacity	ca. 1.250	l	
External coolant	ca. 30 l/min		at 11 bar
Internal coolant	ca. 10 l/min		at 25 + 50 bar
Flushing pump device	ca. 160 l/min		at 1,0 bar
Flushing pump channel flushing	ca. 60 l/min		at 1,7 bar
Chip conveyor – ejection height	1.200	mm	

measurement		
Space requirement	ca. 7,8 x 6,1 x 3,4	m
Machine weight	27.000	kg

equipment

- 2-fold pallet changer with in total 4 piece pallets 630 x 500 mm (2 pallets extra)
- Tool magazine with 150 places HSK 100
- NC-rotary table pitch 0,001°
- Main spindle 12.000 min-1/36 kW
- 3D-measuring probe RENISHAW OMP 60
- Machine cover with fully enclosed working area
- 2 St. chip conveyors longitudinal
- Coolant equipment with paper band filter, internal coolant
- BRANKAMP tool monitoring
- exhaust ELBARON
- Power ON: 34.000 h, Machine run: 21.600 h