# **ROLL GRINDING MACHINE (CNC)**

## technical details:

manufacturer	HERKULES
type	WS 180 x 1.750
year of construction	1987
construction	table machine
center height	180 mm
distance between centers	1.750 mm
connected load	30 kW
max. grinding-Ø with new grinding wheel	325 mm
max. grinding- $\varnothing$ at all	375 mm
max. rotating $\varnothing$	375 mm
movable distance of grinding support	210 mm
range of back rest	Ø 50 − 180 mm
max. usable work piece weight	
between the *back rest	750 kg
required space (I x w)	5.500 x 4.000 mm
weight	kg

### grinding wheel

dimension	450 x 50 x 203 mm
rotation speed	500 – 2.000 Upm.
adjustable by Override-controller	50-140%
speed (adjustable)	9 – 45 m/Sek.
power	15 kW

#### spindle head (head stock)

rotation speed (adjustable)	16 – 160 Upm.
adjustable by Override-controller	50-120%
power	max. 18 Nm
drive	spec. V-belt
fixture bores for the center punch	morse taper no. 4

### **tailstock**

fixture bores for the center punch	morse taper no. 4
fixture bores for the dressing tool	morse taper no. 1

	<u>vements</u>

feeding (adjustable)	50 – 3.000 mm/min.
adjustable by Override-controller	50-150%
no. of strokes (adjustable)	0 - 99
fast movement (by Override adjustable)	0 - 3.000  mm/min.
slow movemenmt (by Override adjustable)	0 – 200 mm/min.

## adjustment of grinding support

single adjustment (adjustable)	0-99 mym
complete adjustment (adjustable)	0-2.000 mym
(1  mym = 1  micrometer = 0,001  mm)	
fine adjustment: 1 graduation	0,001 mm
fast movement (by Override adjustable)	0 – 350 mm/min.
slow movement (by Override adjustable)	0 - 200  mm/min.

<u>concav- and convex grinding unit</u>max. value, in accordance to the diameter 1 mm

#### wet grinding device

capacity of water tank	1.400 Liter
max. water level	600 mm
power of cooling water filter	app. 100 l/min.
power of cooling water pump	app. 100 l/min.

#### accessories:

• electric	mounted in container with air condition
manufacturer SIEMENS	SIMATIC S 5 – PG 675
<ul><li>1 x grinding spindle</li></ul>	NEW
• 1 x ball roller spindle (Z-A	Axis) used
<ul><li>spare parts</li></ul>	grinding wheels / ruler / electronic device
<ul><li>measuring bridge</li></ul>	
<ul><li>documentation</li></ul>	available

<ul><li>water tank (filter equipment)</li></ul>	not available
* = back rest	not available