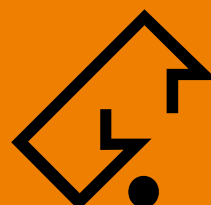


# PRODUCT OVERVIEW

## Precision Dividing Units RWNC



WERKZEUGSYSTEME  
MÜLLER GMBH  
**HOFMANN**  
MESS- UND TEILTECHNIK

Quality from Germany

# Innovations and advantages of the RWNK-series

## All innovations in the overview:

### Improved performance data

- Increased spindle speed for minimized non productive times
- Increased load capacity for the treatment of heavy workpieces

### Solid motor cover made of stainless steel

- With internal fixing
- No dirt and corrosion by fixing screws inside of the motor cover
- Much more solid in comparison to motor covers made of other materials
- Sealed design by sealing on the planar side

### Sunked and flushed covers and closures on the gear box

- Attractive appearance
- Uninterrupted flow of chips and coolant
- No clogged gaps
- Automation features on request

### Surface coated gear box

- High corrosion resistance
- Durability
- High availability
- Function and appearance remain over years

### Attractive appearance

- Suitable to current machines of well known manufacturers



## The advantages at a glance:

- Highest precision by manufacture and quality control in our own company
- Low energy consumption in comparison to torque drives
- High rigidity by heavy duty axial-/radial ball bearings and worm drive with big diameter
- Eight different design sizes available
- Backlash of worm drive easily adjustable
- Wide variety of motor installations
- Wide range of accessories available
- Attractive price-performance ratio
- Easy to service
- Special designs for customer specific applications easy realizable (see right image)
- Compact construction
- Matured construction
- Long lasting and modular extendible
- Fast customer service





system	●	●	reference point
acceleration	●	●	limit switch 1
rotation clamp	●	●	limit switch 2
error clamp	●	●	●
rotation sec.	●	●	●
rotation min.	●	●	●
oil temperature	●	●	●
oil level	●	●	●

## Hofmann LogicBox

Visual indication of the current states via LED:

- Reference drive, reference-point recognized
- Dividing unit in operation
- Indexing spindle "clamped"/"unclamped"

Optical error indication:

- Error
- Oil level
- Oil temperature above maximum
- Cycle time above maximum
- Speed above maximum
- Error clamping
- Rotation against clamped indexing spindle
- Indication of collisions



Your benefit:

- Plain text display of errors
- Quick identification of error sources
- Short downtimes
- Efficiency will be increased by enhancement of availability

## Detailed performance specifications

# Technical Data of the **RWNC**-series

### Accuracies

Type/centre height		75	100	125	160	220	300	380	400
Indexing accuracy (standard) indirect position feedback	(sec)	± 45	± 45	± 20	± 15	± 10	± 10	± 10	± 10
direct position feedback with RXN 2XX/bearing	(sec)	-	± 5	± 5	± 5	± 5	± 5	± 5	± 5
direct position feedback with RXN 7XX/287	(sec)	-	± 2.5	± 2.5	± 2.5	± 2.5	± 2.5	± 2.5	-
direct position feedback with RXN 8XX	(sec)	-	± 1.5	± 1.5	± 1	± 1	± 1	± 1	-
Repeatability (indirect)	(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Repeatability (direct)	(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

### Load and performance data\*

\* stated data are standard values under best possible conditions

Type/centre height	(mm)	75	100	125	160	220	300	380	400
Reduction ratio Worm gear	(i)	45:1	45:1	60:1	90:1	90:1	90:1	120:1	120:1
Spindle speed at indexing operation	(rev./min)	135	135	50	35	35	35	17	17
Load capacity with vertical indexing spindle	(kg)	45	180	340	750	1,200	3,500	5,000	8,000
Load capacity with horizontal indexing spindle	(kg)	25	45	95	200	320	650	1,000	1,500
Load capacity with horizontal indexing spindle with tailstock	(kg)	40	80	170	400	900	2,000	3,000	4,000
Load capacity with horizontal indexing spindle and support	(kg)	-	-	340	800	1,800	4,000	6,000	8,000
Axial forces max.	(kN)	3	17	24	45	55	75	95	120
Workpiece torque max.	(Nm)	150	500	1,000	3,000	6,000	10,000	14,000	18,000
Clamping moment at 160 bar	(Nm)	120	250	750	1,400	3,000	7,500	15,000	28,000

### Sizes

An almost full and complete range of individual customer wishes will be covered by our modular design, which offers a large variability by currently eight different sizes and a wide range of different motor mounting variations.

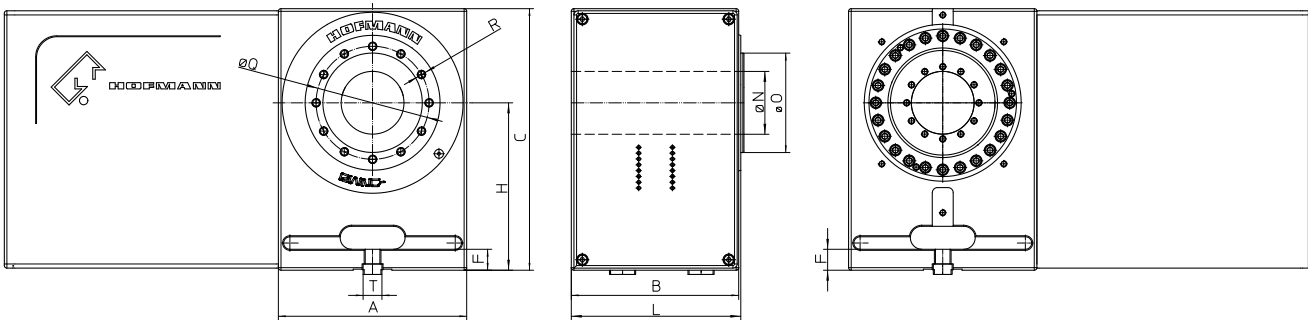
### Advantages

CNC-dividing units from the Hofmann **RWNC**-series are especially characterised by a reliable, robust and solid design.





## Dimensions



Type		75	100	125	160	220	300	380	400
A	(mm)	70	90	120	180	260	430	520	600
B	(mm)	100	130	145	160	195	210	270	300
C	(mm)	110	145	185	250	350	510	640	700
F	(mm)	16	20	20	20	20	40	40	40
H	(mm)	75	100	125	160	220	300	380	400
L	(mm)	102	132	147	162	197	217	280	310
N	(mm)	18	17	30	60	80	150	200	320
O h6	(mm)	30	40	60	95	160	410	480	540
Q	(mm)	40	52	76	108	190	320	380	450
R	(mm)	4 x M5	4 x M8	4 x M8	12 x M8	12 x M10	12 x M12	12 x M16	12 x M16
T h6	(mm)	according to customers wishes							
Weight	(kg)	6	12	30	60	125	300	540	800

The customer gets a reliable and individual solution according to the particular application in combination with extraordinary high accuracy values.

The eccentric adjustable worm gear consists of a case hardened worm shaft and a worm wheel made of an extraordinary wear resistant bronze alloy.

A significant low current consumption in comparison to torque drives will be achieved by a low friction- and a low backlash run in combination with a high performance lubricant

The sophisticated design ensures a failure free operation at everytime for years and gives hereby an important input for the efficiency of your company.



Suitable for any application:

## The accessories of the **WNC**-series

### Tailstocks

- For a safe support and a low vibration fixture of long workpieces
- Manual, pneumatic or hydraulic operation
- Center heights according to customers wishes
- Different sizes and taper fixtures available



### Supports

- Designed for the fixation of clamping bridges or similar clamping devices
- Available without clamping or with clamping 400 Nm, 1000 Nm, 2000 Nm
- Different sizes and centre heights available
- Diverse special models



### Three- and four jaw chucks (manual + hydraulic)

- Precision chucks of renowned manufacturers for accurate and powerful clamping of very different workpieces.
- Automatic workpiece clamping via hydraulic cylinder realisable



### Face plates

available in various diameters and versions:

- Easy and safe clamping of workpieces
- Special versions for every diameter available



### Controls

- Control of the dividing unit via M-function of the machine by independent CNC-control
- Independent CNC-control for the drive
- No preparation on the side of the machine necessary, for the operation of a 4th axes
- Interface and wiring complete and ready for operation for the connection to the machine control

### Interfaces | Power supply

- Large selection of standard interfaces/power supplies for machines of many renowned manufacturers available
- Individual and flexible design of interface/power supply







## Hydraulic units | pressure converters



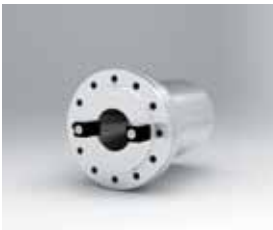
- Unit to be installed independently and externally, for the supply of the dividing unit with hydraulic pressure
- Integrated pressure converters

## Collet chucks



- Allowing high precision and centric clamping of turned parts and semifinished products
- Assembly of different collet chuck manufacturers like Hainbuch, Ortlieb a.s.o.
- Possibilities for automation on request

## Spindle holders



- Standardised spindle holders for flexible and automated workpiece fixture, for example SK, HSK, MK, KK
- Concentricity precision within micrometers

## Clamping bridges



- Various flanges for dividing unit and support available
- Set of Kipp clamping bridges in various versions available:
  - Cube with or without bore pattern
  - Swing with or without bore pattern
  - Zero point clamping systems

## Motors

- Attachment of servo motors from a wide variety of manufacturers (Siemens, Heidenhain, Fanuc, Mitsubishi, Indramat) by versatile adapter system realizable
- Attachment variant (motor mounting straight, toothed belt drive, angle gear box) will be adapted to the conditions inside of the machine housing and the requirements of the customer



## Direct Heidenhain measurement systems

- In case of high demands on indexing accuracy
- Indexing up to  $\pm 1,5''$



Hofmann Mess- und Teiltechnik is part of the renowned Müller group, a successful alliance of five companies, which offers great synergistic effects to their customers.

Having more than 80 years of experience combined with fresh creativity and innovational strength, Hofmann is a well sought-after partner by renowned manufacturers of machine tools for processing metal. Our efficient and customized solutions are produced by qualified specialists in our state-of-the-art machine shop in Pliezhausen near Stuttgart. Fast, cost-saving and specially designed for the needs of our customers.

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