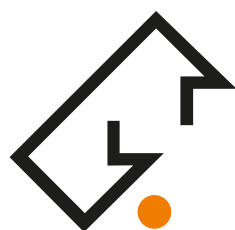




Swivelling Dividing Units RSNC



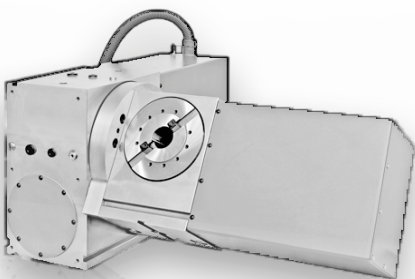
WERKZEUGSYSTEME
MÜLLER GMBH
HOFMANN
MESS- UND TEILTECHNIK



Positioning CNC-controlled Swivelling NC-Dividing Units RSNC

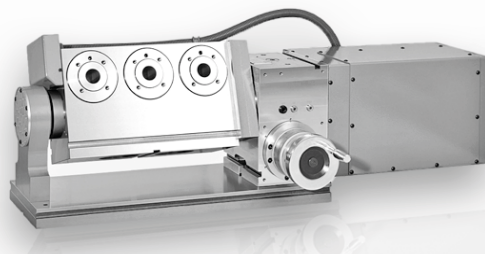
MAIN CHARACTERISTICS

- Swivelling NC-indexing devices RSNC are specially designed for use on machine tools and machining centers
- Thanks to the modular use of dividing units in the RWNC series, clients can specify a design which meets their specific needs easily & very cost effectively.
- Are compact units, providing space-saving design
- Offer high levels of flexibility thanks to their modular construction
- Allow both turning & swivel axes to be positioned quickly and precisely
- Both turning & swivel axes are hydraulically clamped, achieving a high machining Performance
- Provide options for setting the correct nip pressure, by either the machine tool, a separate hydraulic unit or a pneumatic-hydraulic intensifier.
- Allow the worm gear to be set to a low amount of Play
- Allows play in the worm gear to be adjusted
- Continuous lubrication provides low maintenance & high durability
- Excellent price-performance Ratio
- multi-spindle versions available



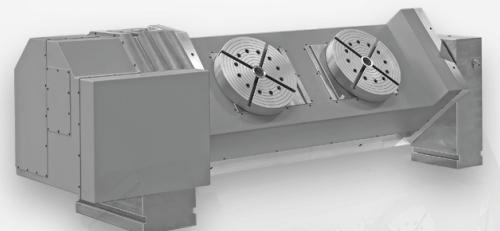
RSNC-xxx/xxxL

- for easy processing tasks
- high swivel range



RS-M-xxx/xxx

- rotation axis with servomotor
- swivel axis manual with measuring drum



RSNC-xxx/xxx/x

- multi-spindle rotation axis
- special solution according to customer specification

OPTIONS

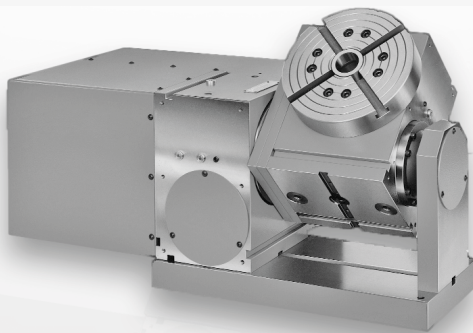
different types of indexing spindles:

- Modular design by using RWNC-types: 75, 100, 125, 160, 220, 300, 380 mm
- Direct measuring systems – for a high indexing accuracy
- All types of motors can be mounted at customers choice
- Rotating axis available in multi-spindle design with 2 to 5 spindles
- Support with clamping for increased holding torque of the tilting axis
- Different types of indexing spindles:
 - Cylindrical bore (standard)
 - Morse Taper MT
 - Short Taper ST
 - ISO Taper IT
 - Hollow Shank Taper HST
 - customized spindle design
- Increased axial and radial runout
- Mounting of a rotary distributor for hydraulic or pneumatic 2-, 4-, 6-fold available

CONNECTION

There are the following choices to interface a tilting dividing unit into a machine control:

- Rotation Axis: 4th axis of the machine CNC-control system
Swivelling Axis: 5th axis of the machine CNC-control system
- Rotation Axis: Hofmann CNC-positioning control
Swivelling Axis: Hofmann CNC-positioning control
- Rotation Axis: 4th axis of the machine CNC-control system
Swivelling Axis: Hofmann CNC-positioning control
- Rotation Axis: 4th axis of the machine CNC-control system
Swivelling Axis: manual with measuring drum



RSNC-xxx/xxxS

- cost-effective standard version
- swivelled not over the middle
- slim and long design



RSNC-xxx/xxxZ

- compact design
- swivelled over the middle





Positioning CNC-controlled Swivelling NC-Dividing Units RSNC

TECHNICAL DATA

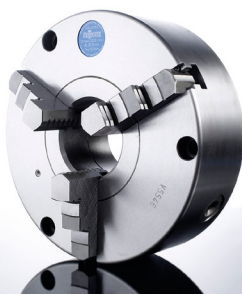
Accuracies

Type		100/100	125/125	160/160	220/220
Dividing unit rotary axis		RWNC-100	RWNC-125	RWNC-160	RWNC-220
Dividing unit tilting axis		RWNC-100	RWNC-125	RWNC-160	RWNC-220
Tilting range, standard		0° bis 90°	0° bis 90°	0° bis 90°	0° bis 90°
Indexing accuracy with indirect measurement system					
rotary axis	(sec)	± 45	± 20	± 15	± 10
tilting axis	(sec)	± 60	± 30	± 25	± 20
Indexing accuracy with direct measurement system					
rotary axis with RCN 2xxx	(sec)	± 5	± 5	± 5	± 5
rotary axis with RCN 25xx / 55xx	(sec)	± 2.5	± 2.5	± 2.5	± 2.5
rotary axis with RCN 83xx / 85xx	(sec)	± 1.5	± 1.5	± 1	± 1
tilting axis with RCN 2xxx	(sec)	± 10	± 10	± 10	± 10
tilting axis with RCN 25xx / 55xx	(sec)	± 5	± 5	± 5	± 5
tilting axis with RCN 83xx / 85xx	(sec)	-	± 4	± 4	± 4
Radial runout	(mm)	0.01	0.01	0.01	0.01
Axial runout	(mm)	0.01	0.01	0.01	0.01
Gear ratio of worm gearing	(i)	45:1	60:1	90:1	90:1
Gear ratio of timing belt/ bevel gear	(i)	2:1	2:1	2:1	2:1
Maximum load capacity for tilting	(kg)	40	80	125	200
Clamping moment of spindle clamping					
Rotary axis	(Nm)	200	400	1,000	2,000
Tilting axis	(Nm)	200	400	1,000	2,000
Tilting axis with support clamping (standard)	(Nm)	400	800	1,400	3,000
Tilting axis with support clamping (increased)	(Nm)	-	1,400	2,000	4,000
Tilting moment with clamping, maximum	(Nm)	220	450	1,125	2,200
weight (without motors)	(kg)	40	60	140	350

ACCESSORIES



Face plates with T-Slots
(according to DIN 650)



Three-/Four-Jaw-Chucks



Tailstocks manual, pneumatic or
hydraulic applied

Collet Chucks

Power Chucks

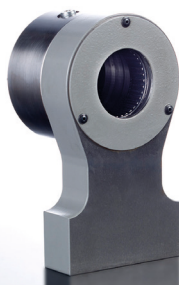
Centers and Carriers

Clamping Systems,
e. g. Erowa; Hirschmann; Mecatool; System 3 R

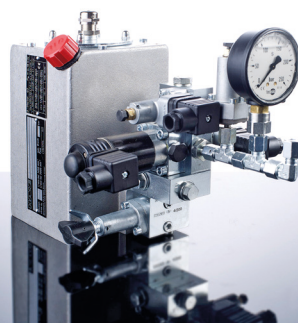
Pressure Booster
pneumatic/hydraulic



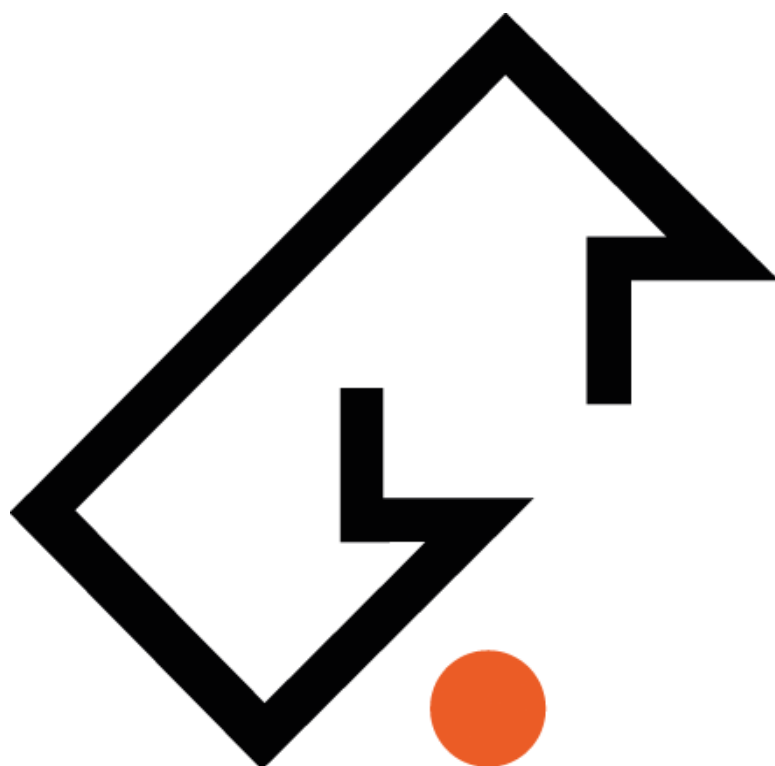
HOFMANN CNC-Control System



Supports with or without
clamping



Hydraulic Power Pack for
axis clamping system



Werkzeugsysteme Müller GmbH
Hofmann Mess- und Teiltechnik

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