

## Rusach International 2-Series: Horizontal NC Rotary Tables - Range A 200mm thru 800mm



Made in the USA

### The Rusach Advantages

#### Application

For applications that require table sizes between 200mm and 800mm diameter in the horizontal position. Suitable for heavy machining and metrology applications with high loading capacities and accuracies to +/-1 arc seconds.

#### Bearing

Preloaded axial-radial roller bearings incorporated providing high rigidity in both planes. Sensitivity and fine positioning ensured.

#### Clamping

Distortion free passive clamping by preloaded spring elements and hydraulic release.

#### Measuring Systems

Standard mechanical accuracy of +/- 15.0 arc seconds. High precision Heidenhain encoders are offered for increased accuracies to +/-1.0 arc seconds.

#### Motors

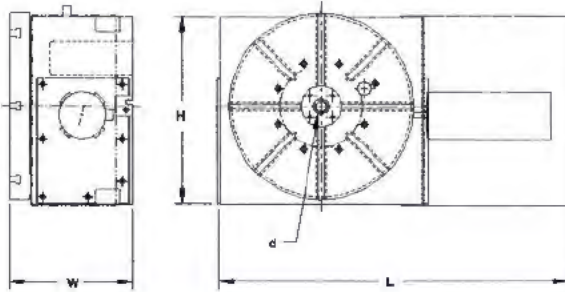
DC and AC servomotors.

#### Construction

Modular design permits freedom to match application requirements. Worm gear drive specially configured for maximum torque and minimum (adjustable) backlash.



## 2-Series: Horizontal NC Rotary Tables - Range A



### Available Options

- Hand Scraped Table Top Surface
- Customized Table Top
- Workpiece Clamping System
- Prepared for Pallet System
- Alternative Measuring Systems made by Heidenhain. i.e. (ROD 800).
- Air Inlet for Internal Pressurization
- Various Motor Drives and Intermediate Gear Boxes
- Prepared for Linear Axis (Saddle)
- Hydraulic Unit for the Clamping System
- Other Paint Surface Finishes
- NC Systems to Suit Your Application

Technical Data		Unit	2-02	2-03	2-04	2-06
Type Designation			D200	D320	D450	D630
			D250	D450	D630	D800
			D320			
Table Size	Rnd.	mm	200	320	450	630
		Inches	7.87	12.60	17.72	24.80
		mm	250	450	630	800
		Inches	9.84	17.72	24.80	31.50
		mm	320			
		Inches	12.60			
T-slots (DIN 650)	Size number	mm	12	14	14	18
			4	6	8	8
Dimension	L	mm	530	640	850	1000
		Inches	20.87	25.20	33.46	39.37
	W	mm	305	345	475	800
		Inches	12.01	13.58	18.70	31.50
	H	mm	180	200	305	325
		Inches	7.09	7.87	12.01	12.79
mm		180	220	315	350	
Inches		7.09	8.66	12.40	13.78	
	mm	180				
	Inches	7.09				
Centre Hole	d	mm	25	40	40	50
		Inches	0.98	1.57	1.57	1.97
Weight (Approx) w/o motor	Rnd.	kg	90	120	200	400
		lb	198	264	440	880
		kg	110	190	310	530
		lb	242	418	682	1166
		kg	120			
		lb	264			
Loading Capacity (uniform)	kg	500	800	1500	4000	
	lb	1,100	1,760	3,300	8,800	
Permitted Machining Force	N	10,000	20,000	25,000	30,000	
	lb	2200	4400	5500	6600	
Clamping Torque (standard)	Nm	800	2000	4000	9000	
	lb in	6,929	17,323	34,647	77,953	
Max. Milling Torque	Nm	700	700	4000	5500	
	lb in	6,063	6,063	34,647	47,638	
Main Gear Ratio		120:1	120:1	180:1	180:1	
Parallelism	mm	0,010	0,020	0,020	0,020	
	inches	0,0004	0,0008	0,0008	0,0008	
Face Plate Runout	mm	0,005	0,010	0,010	0,010	
	inches	0,0002	0,0004	0,0004	0,0004	
Runout of Centre Bore	mm	0,010	0,010	0,010	0,010	
	inches	0,0004	0,0004	0,0004	0,0004	

### Standard Resolution

.0001 degree (others on request)

### Standard Accuracy

+/- 15 arc seconds. Higher accuracy on request.

### Clamp Release Pressure

90 bar or 1300 psi

### Painted Surface Finish

RAL-Color range in textured surface finish

For other specifications please contact our technical department. The rights for technical modifications are reserved.

**Reference dimensions only. Approval prints are supplied on all tables.**



## Rusach International 2-Series: Horizontal NC Rotary Tables - Range B 800mm thru 2,000mm



Made in the USA

### The Rusach Advantages

#### Application

For applications that require table sizes between 800mm and 2,000mm diameter in the horizontal and vertical position. Suitable for heavy machining and metrology applications with high accuracies and heavy load capabilities.

#### Bearing

Axial-radial roller bearings provide high rigidity in both planes. Sensitivity and fine positioning ensured.

#### Clamping

Distortion free passive clamping by preloaded spring elements and hydraulic release.

#### Measuring Systems

Standard mechanical accuracy of +/- 15.0 arc seconds. High precision Heidenhain encoders are offered for increased accuracies to +/-1.0 arc seconds.

#### Motors

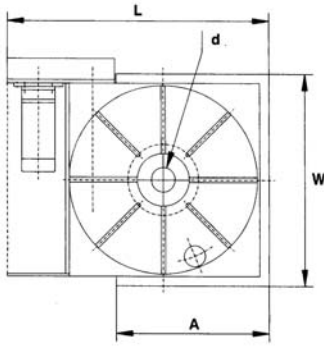
DC and AC servomotors.

#### Construction

Modular design permits freedom to match application requirements. Worm gear drive specially configured for maximum torque and minimum (adjustable) backlash.



## 2-Series: Horizontal NC Rotary Tables - Range B



### Available Options

- Hand Scraped Table Top Surface
- Customized Table Top
- Workpiece Clamping System
- Prepared for Pallet System
- Alternative Measuring Systems made by Heidenhain. i.e. (ROD 800).
- Air Inlet for Internal Pressurization
- Various Motor Drives and Intermediate Gear Boxes
- Prepared for Linear Axis (Saddle)
- Hydraulic Unit for the Clamping System
- Other Paint Surface Finishes
- NC Systems to Suit Your Application

### Standard Resolution

.0001 degree (others on request)

### Standard Accuracy

+/- 15 arc seconds. Higher accuracy on request.

### Clamp Release Pressure

90 bar or 1300 psi

### Painted Surface Finish

RAL-Color range in textured surface finish

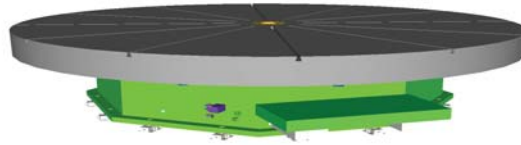
For other specifications please contact our Technical Department.  
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**Reference dimensions only. Approval prints are supplied on all tables.**



Technical Data		Unit	2-08	2-10	2-12	2-16
Type Designation			D800	D1000	D1250	D1600
			D1000	D1250	D1600	D2000
			800x800	1000x1000	1250x1250	1600x1600
Table Size	Round	mm	800	1000	1250	1600
		Inches	31.50	39.37	49.21	62.99
	Square	mm	1000	1250	1600	2000
		Inches	39.37	49.21	62.99	78.74
T-slots (DIN 650)	Size number	mm	18	18	22	22
			8	8	8	8
Dimension	L	mm	1115	1330	1630	1870
		Inches	43.90	52.36	64.17	73.62
	W	mm	900	1100	1350	1720
		Inches	35.43	43.31	53.15	66.93
	H	mm	270	300	360	470
		Inches	10.63	11.81	14.17	18.50
mm		280	310	370	480	
Inches		11.02	12.20	14.57	18.90	
Centre Hole	d	mm	100	100	100	100
		Inches	3.94	3.94	3.94	3.94
Weight (Approx) w/o motor	Round	kg	1,050	1,300	2,000	3,500
		lb	2,310	2,860	4,400	7,700
	Square	kg	1,100	1,400	2,100	4,000
		lb	2,420	3,080	4,620	8,800
Loading Capacity (uniform)		kg	8,000	13,000	18,000	25,000
		lb	17,600	28,600	39,600	55,000
Permitted Machining Force		N	50,000	75,000	100,000	100,000
		lb	11,000	16,500	22,000	22,000
Clamping Torque (standard)		Nm	17,000	22,000	30,000	65,000
		lb in	147,244	190,551	259,842	562,992
Max. Milling Torque		Nm	11,000	19,000	27,000	60,000
		lb in	95,286	164,567	233,858	519,685
Main Gear Ratio (standard)			360:1	360:1	360:1	360:1
Parallelism		mm	0,020	0,020	0,030	0,030
		inches	0,0008	0,0008	0,0012	0,0012
Face Plate Runout (0.9xD Max)		mm	0,015	0,015	0,020	0,020
		inches	0,0006	0,0006	0,0008	0,0008
Runout of Centre Bore		mm	0,010	0,010	0,010	0,010
		inches	0,0004	0,0004	0,0004	0,0004

## Rusach International 2-Series: Horizontal Air Bearing Rotary Tables Range C 2,000mm thru 5,000mm



Made in the USA

### The Rusach Advantages

#### Application

Suitable for inspection applications and some machining applications, with high accuracies and load capabilities. Size range 2,000mm to 5,000mm. Larger diameters designed on request.

#### Bearing

Preloaded axial-radial air bearing to provide high rigidity in both planes. Sensitivity and fine positioning ensured.

#### Clamping

Distortion free passive clamping achieved by several mechanically pre-loaded devices which are hydraulically released.

#### Measuring Systems

Standard mechanical accuracy of +/- 15.0 arc seconds. High precision Heidenhain encoders are offered for increased accuracies to +/- 1.0 arc seconds.

#### Motors

AC and DC servomotors.

#### Positioning Accuracy

Positioning accuracy up to +/- 1 arc seconds or better are available.

#### Repeatability

Repeatability 1/2 or better of positioning accuracies.

#### Construction

Modular design permits freedom to match application requirements. Worm gear drive is specifically configured for maximum torque and minimum (adjustable) backlash, if applicable.



Technical Data		Unit	2-20	2-25	2-30	2-40	
Type Designation	Round		D2000	D2500	D3000	D4000	
			D2500	D3000	D4000	D5000	
	Square		2000x2000	2500x2500	3000x3000	4000x4000	
			2500x2500	3000x3000	4000x4000	5000x5000	
Rectangle		2000x2500	2500x3000	3000x4000	4000x5000		
Table Diameter	Round	mm	2000	2500	3000	4000	
		Inches	78.74	98.43	118.11	157.48	
	Square	mm	2500	3000	4000	5000	
		Inches	98.43	118.11	157.48	196.85	
Table Size	Square	mm	2000x2000	2500x2500	3000x3000	4000x4000	
		inches	78x78	98x98	118x118	157x157	
	Rectangle	mm	2500x2500	3000x3000	4000x4000	5000x5000	
		inches	98x98	118x118	157x157	196x196	
	Rectangle	mm	2000x2500	2500x3000	3000x4000	4000x5000	
		Inches	78x98	98x118	118x157	157x196	
Base Dimension		mm	2000	2500	3000	4000	
		inches	78.74	98.43	118.11	157.48	
Total Height	Round	mm	650	800	1,050	1,300	
		inches	25.59	31.50	41.34	51.18	
		mm	700	850	1,100	1,350	
		inches	27.56	33.46	43.31	53.15	
	Square	mm	750	900	1,150	1,400	
		inches	29.53	35.43	45.28	55.12	
		mm	770	920	1,170	1,420	
		inches	30.31	36.22	46.06	55.91	
	Rectangle	mm	800	950	1,200	1,450	
		inches	31.50	37.40	47.24	57.09	
Bearing Type		Air Bearing					
T-slots (DIN 650 H12)	Size number	mm	28	28	28	28	
			16	16	16	16	
Centre Bore H6		mm	250	250	250	250	
		Inches	9.84	9.84	9.84	9.84	
Loading Capacity		kg	20,000	30,000	40,000	50,000	
		lbs	44,000	66,000	80,000	110,000	
Permitted Machining Force (Axial)		Nm	40,000	50,000	60,000	70,000	
		ft lbs	28,000	36,000	43,000	50,000	
Permitted Machining Force (Radial)		Nm	15,000	20,000	25,000	30,000	
		ft lbs	10,000	14,000	18,000	21,000	
Clamping Moment		Nm	50,000	70,000	90,000	110,000	
		ft lbs	36,150	50,610	65,070	79,530	
Max. take of Torque <sup>2</sup>		Nm	62,000	80,000	100,000	120,000	
		ft lbs	44,826	57,840	72,300	86,760	
Weight (Approx) w/o motor	Round	kg	20,000	25,000	30,000	40,000	
		lbs	44,080	55,100	66,120	88,160	
		kg	23,000	28,000	33,000	43,000	
		lbs	50,692	61,712	72,732	94,772	
	Square	kg	21,000	26,000	31,000	41,000	
		lbs	45,284	57,304	68,324	90,364	
		kg	25,000	30,000	35,000	45,000	
		lbs	55,100	66,120	77,140	99,180	
	Rectangle	kg	24,000	29,000	34,000	44,000	
		lbs	52,896	63,916	74,936	96,976	
	(1) With closed clamping increase by 20%. (2) Actual torque available dependent on power unit.						
	Mechanical Accuracies						
Parallelism	mm	0.01	0.015	0.02	0.025		
	inches	0.0004	0.0006	0.0008	0.0009		
Face Plate Runout	mm	0.005	0.005	0.01	0.02		
	inches	0.0002	0.0002	0.0004	0.0008		
Runout of Center Bore	mm	0.005	0.005	0.005	0.005		
	inches	0.0002	0.0002	0.0002	0.0002		

## Available options

- Hand Scraped Table Top Surface
- Hydrostatic Drive
- Customized Table Top
- Workpiece Clamping System
- Various Motor Drives and Intermediate Gear Boxes
- Prepared for Linear Axis (Saddle)
- Other Paint Surface Finishes
- NC Systems to Suit Your Application
- Prepared for Pallet Automation
- Larger Diameters Engineered on Request

## Standard Resolution

0.0001 degree (others on request)

## Standard Accuracy

+/-15 arc seconds. Higher accuracies on request

## Clamp Release Pressure

90 bar or 1300 psi

## Painted Surface Finish

RAL-color range in textured surface finish

For other specifications please contact our Technical Dept. The rights for technical modifications are reserved.

**Reference dimensions only. Approval prints are supplied on all tables.**