

# HYDRAULIC CRANKSHAFT GRINDERS



www.EcoMachineTools.com 770-279-2001

### **REX: HYDRAULIC CRANKSHAFT GRINDERS**

REX Crankshaft Grinders use work heads with 4-way cross slides with an advanced locking system which permits quick centering of the crankshaft.

Heavy duty one piece cast iron construction assures you a lifetime of superior accuracy and dependability.

#### WHEEL HEAD

Sideways are coated with antifriction material to obtain free movement and a minimun of wear Hardened steel spindle, turns in oil bathed fully adjustble precision sleeve bearings

#### HYDRAULIC CONTROLS

Rapid hydraulic wheelhead traverse and hydraulic table movement increase speed during set-up and grinding

Fine feed controls for both movements assure accuracy

#### WORK HEADS

4 way cross slides with advanced locking system permit quick centering of crankshaft. Shiftring is found by a centesimal dial indicator

"O" setting is obtained by shifting the heads against the central stop, which maybe released for possible corrections

Indexed chucks rotate 360 °

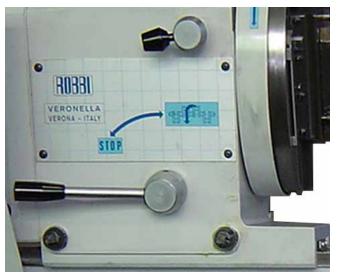
Micrometric chuck rotation

Easy change from chucks to centers

Only two keys for all shifting, centering and clamping operations



## Rex 1200 - 1500



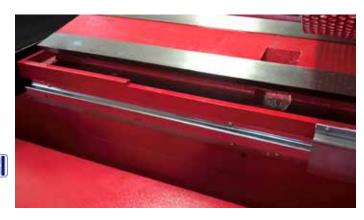


# REX 1800 - 3100













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## <u> Rex 1200 - Rex 1200 к</u>



### STANDARD EQUIPMENT

Electric installation 24 V Hydraulic installation Cooling installation with tank Two self centering chucks Pair of additional counter weights Grinding wheel with pair of wheel hubs Narrow steady rest Wheel periphery and side truing attachment with diamond Eccentricity control device with dial gauge Truing fixture for checking concentricity with dial gauge V-square for centering of crankpins with dial gauge Wheel balancing mandrel Motor drive pulley for reduced wheel diameter Grinding wheel stripper Set of steel splash guards Service spanners Operating manual

#### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATIONS			
Distance between centers		1320	mm
Distance between chucks		1300	mm
Height of centers over table		220	mm
Swing over table	Max	440	mm
Offset of centers	Max	80	mm
Grinding diameter	Max	180	mm
Fast hydraulic wheelhead traverse		80	mm
Hand micrometric wheelhead feed		150	mm
Hand micrometric wheelhead feed graduation		0,005	mm
Whellhead feed per reverse		1	mm
Hand micrometric worktable traverse per reverse		11	mm
Fast hydraulic worktable traverse		3	m/min
Grinding wheel speeds	Min	1000	rom
Grinding wheel speeds	Max	1150	rpm
Grinding wheel diameter	Max	610	mm
Width of grinding wheel	Min	19	mm
Width of grinding wheel	Max	40	mm
Diameter of chucks		160	mm
Chucks holding diameter		200	mm
Rest capacity		30-100	mm
Workhead spindle speeds		35-70	rpm
Weight on centers	Max	120	Kg
Weight on rests	Max	300	Kg
Wheel-head motor		4	kW
Workhead spindle motor		0,33-05	kW
Hydraulic power motor		0,5	kW
Cooling pump		0,12	kW
Length		3300	mm
Width		1350	mm
Height		1550	mm
Approximate net weight		2800	Kg



## **Rex 1500 NM**



### **STANDARD EQUIPMENT**

Electric installation 24 V Hydraulic installation Cooling installation with tank Two self centering chucks Pair of additional counter weights Grinding wheel with pair of wheel hubs Narrow steady rest Wheel periphery and side truing attachment with diamond Eccentricity control device with dial gauge Truing fixture for checking concentricity with dial gauge V-square for centering of crankpins with dial gauge Wheel balancing mandrel Motor drive pulley for reduced wheel diameter Grinding wheel stripper Set of steel splash guards Service spanners Operating manual

### TECHNICAL SPECIFICATIONS

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	TECHNICAL SPECIFICATIONS				
	Distance between centers		1550	mm	
	Distance between chucks		1540	mm	
	Height of centers over table		250	mm	
	Swing over table	Max	500	mm	
	Offset of centers	Max	100	mm	
	Grinding diameter	Max	180	mm	
	Fast hydraulic wheelhead traverse		110	mm	
	Hand micrometric wheelhead feed		150	mm	
	Hand micrometric wheelhead feed graduation		0,005	mm	
	Whellhead feed per reverse		1	mm	
	Hand micrometric worktable traverse per reverse		11	mm	
	Fast hydraulic worktable traverse		3	m/min	
	Grinding wheel speeds	Min	900	rom	
	Grinding wheel speeds	Max	1000	rpm	
	Grinding wheel diameter	Max	710	mm	
	Width of grinding wheel	Min	19	mm	
	Width of grinding wheel	Max	50	mm	
	Diameter of chucks		180	mm	
	Chucks holding diameter		220	mm	
	Rest capacity		30-100	mm	
	Workhead spindle speeds		20-30-40-60	rpm	
	Weight on centers	Max	200	Kg	
	Weight on rests	Max	500	Kg	
	Wheel-head motor		5,5	kW	
	Workhead spindle motor		0,5-0,75	kW	
	Hydraulic power motor		0,75	kW	
	Cooling pump		0,12	kW	
	Length		3900	mm	
1	Width		1500	mm	
	Height		1700	mm	
	Approximate net weight		3300	Kg	

### **Rex 1800**



#### **STANDARD EQUIPMENT**

Electric installation 24 V Hydraulic installation Cooling installation with tank Two self centering chucks Pair of additional counter weights Grinding wheel with pair of wheel hubs Narrow steady rest Normal steady rest Wheel periphery and side truing attachment with diamond Eccentricity control device with dial gauge Truing fixture for checking concentricity with dial gauge V-square for centering of crankpins with dial gauge Wheel balancing mandrel Motor drive pulley for reduced wheel diameter Grinding wheel stripper Set of steel splash guards Service spanners Operating manual

#### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATIONS			
Distance between centers		1800	mm
Distance between chucks		1750	mm
Height of centers over table		300	mm
Swing over table	Max	600	mm
Offset of centers	Max	125	mm
Grinding diameter	Max	180	mm
Fast hydraulic wheelhead traverse		130	mm
Hand micrometric wheelhead feed		170	mm
Hand micrometric wheelhead feed graduation		0,005	mm
Whellhead feed per reverse		1	mm
Hand micrometric worktable traverse per reverse		8	mm
Fast hydraulic worktable traverse		3	m/min
Grinding wheel speeds	Min	850	rpm
Grinding wheel speeds	Max	940	ipin
Grinding wheel diameter	Max	760	mm
Width of grinding wheel	Min	19	mm
Width of grinding wheel	Max	50	mm
Diameter of chucks		200	mm
Chucks holding diameter		250	mm
Rest capacity		30-120	mm
Workhead spindle speeds		0÷60	rpm
Weight on centers	Max	350	Kg
Weight on rests	Max	800	Kg
Wheel-head motor		5,5	kW
Workhead spindle motor		2,2	kW
Hydraulic power motor		1,25	kW
Cooling pump		0,12	kW
Length		4500	mm
Width		1650	mm
Height		1700	mm
Approximate net weight		4600	Kg



# **REX 2200 L - REX 2200 RM**



### STANDARD EQUIPMENT

Electric installation 24 V	Eccentricity control device with dial gauge
Hydraulic installation	Truing fixture for checking concentricity with dial gauge
Cooling installation with tank	V-square for centering of crankpins with dial gauge
Two self centering chucks	Wheel balancing mandrel
Pair of additional counter weights	Motor drive pulley for reduced wheel diameter
Grinding wheel with pair of wheel hubs	Grinding wheel stripper
Narrow steady rest	Set of steel splash guards
Normal steady rest	Service spanners
Wheel periphery and side truing attachment with diamond	Operating manual
Narrow steady rest	Set of steel splash guards Service spanners

TECHNICAL SPECIFICATIONS		L	Rм	
Distance between centers		2300		mm
Distance between chucks		2220		mm
Height of centers over table		300	350	mm
Swing over table	Max	600	700	mm
Offset of centers	Max	130	150	mm
Grinding diameter	Max	180	200	mm
Fast hydraulic wheelhead traverse		130	170	mm
Hand micrometric wheelhead feed		180	200	mm
Hand micrometric wheelhead feed graduation		0,005		mm
Whellhead feed per reverse		1		mm
Hand micrometric worktable traverse per reverse		8		mm
Fast hydraulic worktable traverse		3		m/min
Grinding wheel speeds	Min	850	770	<b>FID 100</b>
Grinding wheel speeds	Max	940	900	rpm
Grinding wheel diameter	Max	760	815	mm
Width of grinding wheel	Min	19		mm
Width of grinding wheel	Max	50	60	mm
Diameter of chucks		200	230	mm
Chucks holding diameter		250	290	mm
Rest capacity		30-120	30-160	mm
Workhead spindle speeds		0÷60		rpm
Weight on centers	Max	350	600	Kg
Weight on rests	Max	800	1500	Kg
Wheel-head motor		7,5	10	kW
Workhead spindle motor		2,2		kW
Hydraulic power motor		1,25	1,25	kW
Cooling pump		0,12	0,12	kW
Length		5000		mm
Width		1750		mm
Height		1750	1800	mm
Approximate net weight		5000	5400	Kg

## <u>Rex 2700 Rm - Rex 2700 M</u>



### STANDARD EQUIPMENT

Electric installation 24 V	Eccentricity control
Hydraulic installation	Truing fixture for ch
Cooling installation with tank	V-square for centeri
Two self centering chucks	Wheel balancing ma
Pair of additional counter weights	Motor drive pulley f
Grinding wheel with pair of wheel hubs	Grinding wheel strip
Narrow steady rest	Set of steel splash g
Normal steady rest	Service spanners
Wheel periphery and side truing attachment with diamond	Operating manual

Eccentricity control device with dial gauge Truing fixture for checking concentricity with dial gauge V-square for centering of crankpins with dial gauge Wheel balancing mandrel Motor drive pulley for reduced wheel diameter Grinding wheel stripper Set of steel splash guards Service spanners Operating manual

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TECHNICAL SPECIFICATIONS		Rм	Μ		
Distance between centers		2800		mm	
Distance between chucks		2700		mm	
Height of centers over table		350	400	mm	
Swing over table	Max	700	800	mm	
Offset of centers	Max	150	200	mm	
Grinding diameter	Max	200	230	mm	
Fast hydraulic wheelhead traverse		170	190	mm	
Hand micrometric wheelhead feed		200	220	mm	
Hand micrometric wheelhead feed graduation		0,005		mm	
Whellhead feed per reverse		1		mm	
Hand micrometric worktable traverse per reverse		8		mm	
Fast hydraulic worktable traverse		3		m/min	
Grinding wheel speeds	Min	770	680	rom	
Grinding wheel speeds	Max	900	800	rpm	
Grinding wheel diameter	Max	815	915	mm	
Width of grinding wheel	Min	19	25	mm	
Width of grinding wheel	Max	60	70	mm	
Diameter of chucks		230	250	mm	
Chucks holding diameter		290	310	mm	
Rest capacity		30-160	30-200	mm	
Workhead spindle speeds		0÷60		rpm	
Weight on centers	Max	600	950	Kg	
Weight on rests	Max	1.500	2200	Kg	
Wheel-head motor		7,5	12,5	kW	
Workhead spindle motor		2,2		kW	
Hydraulic power motor		1,25		kW	
Cooling pump		0,12		kW	
Length		5500	6000	mm	
Width		1850	2100	mm	
Height		1800	2000	mm	
Approximate net weight		6400	7400	Kg	

# Rex 3100 M



### STANDARD EQUIPMENT

Electric installation 24 V	Eccentricity control device with dial gauge
Hydraulic installation	Truing fixture for checking concentricity with dial gauge
Cooling installation with tank	V-square for centering of crankpins with dial gauge
Two self centering chucks	Wheel balancing mandrel
Pair of additional counter weights	Motor drive pulley for reduced wheel diameter
Grinding wheel with pair of wheel hubs	Grinding wheel stripper
Narrow steady rest	Set of steel splash guards
Normal steady rest	Service spanners
Wheel periphery and side truing attachment with diamond	Operating manual

### TECHNICAL SPECIFICATIONS

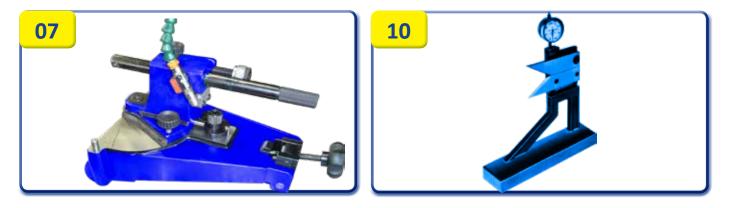
	TECHNICAL SPECIFICATIONS			
	Distance between centers		3200	mm
	Distance between chucks		3100	mm
	Height of centers over table		400	mm
	Swing over table	Max	800	mm
	Offset of centers	Max	200	mm
	Grinding diameter	Max	230	mm
	Fast hydraulic wheelhead traverse		190	mm
	Hand micrometric wheelhead feed		200	mm
	Hand micrometric wheelhead feed graduation		0,005	mm
	Whellhead feed per reverse		1	mm
	Hand micrometric worktable traverse per reverse		8	mm
	Fast hydraulic worktable traverse		3	m/min
	Grinding wheel speeds	Min	680	rom
	Grinding wheel speeds	Max	800	rpm
	Grinding wheel diameter	Max	915	mm
	Width of grinding wheel	Min	25	mm
	Width of grinding wheel	Max	70	mm
	Diameter of chucks		250	mm
	Chucks holding diameter		310	mm
	Rest capacity		30-200	mm
	Workhead spindle speeds		0÷60	rpm
	Weight on centers	Max	950	Kg
	Weight on rests	Max	2.200	Kg
	Wheel-head motor		7,5	kW
	Workhead spindle motor		2,2	kW
	Hydraulic power motor		1,5	kW
	Cooling pump		0,25	kW
RUBRI	Length		5500	mm
	Width		1850	mm
0	Height		1800	mm
3	Approximate net weight		8400	Kg

## STANDARD EQUIPMENT

- 01 Cooling installation with tank
- 02 Two self centering chucks
- 03 Pair of additional counter weights
- 04 Grinding wheel with pair of wheel hubs
- 05 Narrow steady rest
- 06 Normal steady rest (excluding Rex 1200 and Rex 1500)
- 07 Wheel periphery and side truing attachment with diamond
- 08 Eccentricity control device with dial gauge
- 09 Truing fixture for checking concentricity with dial gauge
- 10 V-square for centering of crankpins with dial gauge
- 11 Wheel balancing mandrel
- 12 Motor drive pulley for reduced wheel diameter
- 13 Grinding wheel stripper
- 14 Set of steel splash guards
- 15 Service spanners
- 16 Operating manual



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## **DOTAZIONI EXTRA**

- 13.00 Hydraulic truing attachment for wheelhead periphery, without diamond
- 030R Infinitely variable hydraulic table traverse speed from 0 to 3000 mm/min with automatic reversing and variable dwell, for cylindrical grinding
- 031R Infinitely variable hydraulic table traverse speed from 0 to 3000 mm/min with autonatic reversing and variable dwell and centesimal wheel feed adjustable from 0,01 to 0,04 mm for cylindrical grinding
- AG System for gauging while working capavity from Ø 30 ÷ 130 mm
- AG.240 Equipment for AG capacity ø 130 ÷ 240 mm
- 019M Dial indicator ø 100 mm cwith reduction for application on AG
- 021M Electronic equipment for continuos gauging during grinding work operation with one screen complete with transducer head application on AG
- 1001 Electronic equipment for continuos gauging during grinding work operations with two screens complete with transducer head applicable on AG
- 020R Balancing stand for grinding wheels and other rotating parts, disc type
- 021R Balancing stand for grinding wheels and other rotating parts, blade type
- 14.00 Centre grinding attachment
- 033R Portable belt super finisher
- 033.20 Abrasive belt 1450x20 mm for 033R
- 033.28 Abrasive belt 1450x28 mm for 033R
- 028R Diamond tool for wheel dressing
- 024R Coolant magnet cleaner
- 025R Coolant paper cleaner
- 034R Grinding wheel recessing attachment
- 16.00 Narrow steady rest
- 035R Pair of additionals counterweights
- 036R Divers for diameters 90 ÷150x35mm







		mm	1200	1500 MN	1800	2200	3100M
		35			35.23.00.B	37.23.00.B	38.23.00.B
Porpo gira brida con vita		50			35.23.00.C	37.23.00.C	38.23.00.C
Perno gira brida con vite		40	33.23.00.B	34.23.00.B			
		55	33.23.00.C	34.23.00.C			
		25-65	33.23.00.D				
Brida	d	20-90		34.23.00.E	35.23.00.E		
DITUd	Ø	60-100			35.23.00.F	37.23.00.E	38.23.00.E
		90-150				37.23.00.F	38.23.00.F
Piastra menabrida			33.23.01	34.23.01	35.23.01	37.23.01	38.23.01
Punta conica	d	40	33.23.08	34.23.08	35.23.08		
Fund conica	Ø	45				37.23.08	38.23.08
		55	33.23.09	34.23.09	35.23.09		
Punta tronco-conica	4	75			35.23.10		
Punta tronco-conica	Ø	70				37.23.09	38.23.09
		93				37.23.10	38.23.10





## SEMI-AUTOMATIC CRANKSHAFT GRINDERS

Crankshaft grinding machines:

- Rex 2700
- Rex 3100
- can be made also in semi-automatic version

#### **OPERATOR PANEL**

- SIEMENS TP 700 touch screen operator panel that allows a simple and intuitive working cyles programming
- Plunge and pass rectification cycles parametrically programmed
- Grinding with automatic stop at the programmed quote
- Grinding wheel dressing with automatic compensation
- Direct reading system of the work quota during the cycle (optional)
- Progress to the quota controlled by a measuring device in processl
- Electronic handwheels

The 'touch-screen' panel displays:

- machine status and alarm messages
- all the parameters set for the automatic cycle being processed
- any corrections to the set parameters made during the automatic cycle being processed

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DEAMETRO 2 [	mm] 🝩	0		CORR	ETT. 2 [	huu)		+0	
DIAMETRO 3 (	mm) 🌰	0		CORR	етт. з (	um]		+0	
DIAMETRO 4 [	mm] 😮	0	1	CORR	ETT. 4 (	pm]		+0	)
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PROTECTION POLA	P. Constant		
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## **AT YOUR SERVICE SINCE 1936**



Robbi has operated in the machine tool market since 1936 and specialise in the manufacture of machines tailored to meet the more demanding needs of the customer's complexed and more specialised demands.

Whilst maintaining competitive prices, Robbi have ensured their machines have stability and precision.



Robbi grinding machines, use the best technology and the most robust and reliable components available on the market in their build programme.

Robbi have a commitment to assist and help, proactively, its customers to ensure they maximise the efficiency of the machine.



*Robbi, in fact, offers various service solutions, including the:* 

- development of manufacturing processes;
- replacement parts spare part programme,
- making parts available for older models,
- tailored operational training programs
- and maintenance training to maximise the features of grinding machines and maintain the Robbi Grinders longevity.



Understanding the needs of our customers we are offer the best solutions and services that increase their return on productivity thus improving our customers return on his investment.

*Ideas that may improve our business are always appreciated from customers.* 

*If there's anything we can do to improve your experience with Robbi, please let us know.* 

Robbi have a commitment to ensure all customers are completely satisfied.

*Choose Robbi precision for increased productivity and a faster return on your investment.* 

*Call us today,we've have a solution for your grinding application.* 



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