# **BR-BL - CONROD BORING AND GRINDING MACHINES**

SPECIFICATION	BL600V	BL600S	BR650	BR1000
WORKING CAPACITY				
Boring capacity (min. and max. dia.)	15-160 mm			15-250 mm
Grinding capacity (min. and max. dia.)				30-250 mm
Min. and Max. con-rod center distance	80-650 mm	80-650 mm	160-650 mm	160-1000 mm
Height of spindle C/L over table	150 mm	200 mm	150 mm	
SPEEDS AND FEEDS				
Boring spindle rotation speeds	0-1200 RPM	0-1200 RPM	0-1200 RPM	0-1200 RPM
Grinding spindle rotation speeds			3300 4400 5300 6300 7500 9000 RPM	3300 4400 5300 6300 7500 9000 RPM
Grinding spindle revolution speeds			80-160 RPM	80-160 RPM
Radial grinding travel (max. eccentricity of wheel C/L)			12 mm	12 mm
Max. table traverse			420 mm	420 mm
Variable automatic table speed on both sides	0-165 mm/min		0-165 mm/min	0-165 mm/min
MOTOR RATINGS				
Motor, feed change	0,1 KW	0,1 KW	0,1 KW	0,1 KW
Motor, boring head	1,5 KW	1,5 KW	1,5 KW	1,5 KW
Motor, planetary movement of grinding head			0,5-1 KW	0,5-1 KW
Motor, spindle grinding head			1,1 KW	1,1 KW
Motor, cooling system			0,12 KW	0,12 KW



# SPECIFICATIONS >>>

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	BL600V	BL600S	BR650	BR1000
Dimensions without packing	1800x900x1950 mm	1800x900x1950 mm	1800x900x1950 mm	1800x900x2400 mm
	850 kg	850 kg	850 kg	1720 kg

DIMENSIONS AND WEIGHTS >>>



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# **BR | BL** - CONROD BORING AND GRINDING MACHINES





# BL600V-S

# ball bearing with oil bath variable boring spindle speed with electronic variator and digital indications (o to 120 RPM) con-rod holding square with manual and/or variable automatic transversal adjustment for fast and accurate centering •electric limit switch to set automatically the boring

•electronic variable feeding speed

### BR650

WITH THE POSSIBILITY OF PLANETARY MOVEMENT ADJUSTABLE DURING THE GRINDING OPERATIONS

It has been designed for the combination of boring and grinding working

#### base of cast iron

•variable boring spindle speed with electronic variator and digitals indications •variable con-rod supporting square longitudinal speed with reversal limit switch

AZ711



MACHINE

BR

AZ832

# **BL-BR** Conrod Boring and Grinding machines Alesatrici Rettificatrici per Bielle

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 con-rod supporting square crosswise movement for easy centering •grinding wheel eccentricity micrometric device •coolant system complete with electropump

## **BR1000 - CONROD BORING AND GRINDING MACHINE FOR RODS OF BIG** DIMENSIONS

The combination of movements and speeds, controlled by motor with variable speed, permits to reach an exceptional degree of finishing.

BL600V/S BR650 BR1000 **ME150** 



EQUIPMENTS >>>	AZ411



Electric system single phase Low voltage electric control 24 V Steel base cabinet Set of no. 8 tools Set of 5 centering cones Calibrating device for tools complete with instrument (AZ721) Tool setting device Centering device with centesimal dial gauge Expanding mandrel from 37 to 77 mm. dia. capacity Expanding mandrel from 23 to 37 mm. dia. capacity Expanding mandrel from 75 to 165 mm. dia. capacity Boring mandrel 14-28 mm diameter Boring mandrel 38 mm diameter Boring mandrel 59 mm diameter Service tools Operating manual

RECOMMENDED AZ854 Rod alignement checking fixture

AZ854

#### OPTIONAL

AZ711 Inner gauge for bushing from 35 to 105 mm diameter with dial gauge AZ520 Boring head from 105 to 160 mm AZ832 Grinder for tools complete with sharpening support **RR650** 

## **STANDARD**

Low voltage electric control 24 V Coolant system Set of no. 12 grinding wheels for cast iron and steel Set of no. 8 tools Grinding wheel dresser (diamond excluded) Set of centering cones (No.5) No. 3 expanding arbors, 23-38 mm. dia. 37-77 mm. dia. 75-160 mm. Grinding spindle from 30 to 65 mm. dia.

No. 2 grinding mandrels, 30-65 mm. dia. and 65-165 mm. dia

No. 3 boring mandrels, 14-29 mm. dia, 38 mm. dia. and 58 mm. dia. Tool setting device

AZ520

Centering device with centesimal dial gauge

Calibrating device for tools complete with instrument (AZ721) Square with mounted pin for clamping connecting rods 3 liters of coolant additive

#### Service tools Operating manua

RECOMMENDED

AZ411 Diamond and rest 0,40 kt AZ854 Rod alignement checking fixture

#### **OPTIONAL**

AZ830

AZ711 Inner gauge for bushing from 35 to 105 mm diameter with dial gauge

AZ520 Boring head from 105 to 160 mm AZ832 Grinder for tools complete with sharpening support

## **BR1000**

**STANDARD** Low voltage electric control 24 V. Coolant system Set of 12 grinding wheels for steel and for cast iron Set of no. 8 tools Set of centering cones (No.5) Grinding wheel dresser (diamond excluded) Expanding arbor for con-rods clamping from 160 to 250 mm. dia. Expanding mandrel for con-rods clamping from 75 to 160 mm. dia. Expanding mandrel for con-rods clamping from 37 to 76 mm. dia. Expanding mandrel for con-rods clamping from 23 to 37 mm. dia. Boring spindle 59 mm. dia. Boring spindle 38 mm. dia. Boring spindle from 14 to 29 mm. dia Boring Head da 110 to 160 mm. dia. Boring Head from 160 to 210 mm. dia. and from 210 to 250 mm. dia. Grinding spindle from 65 to 250 mm. dia. Tool setting device

Centering device with dial gauge Calibrating device for tools complete with instrument Square with mounted pin for clamping connecting rods 3 liters of coolant additive

AZ866

#### Service tools and Operating manual RECOMMENDED

AZ411 Diamond and rest 0,40 kt AZ854 Rod alignement checking fixture

## OPTIONAL

AZ714

AZ832 Grinder for tools complete with sharpening support AZ711 Inner gauge for bushing from 35 to 105 mm diameter with dial gauge

AZ714 Inner gauge from 100 to 220 mm with dial gauge









AZ spa | Viale dell'Elettronica, 20 36016 THIENE (VI) | ITALY | tel. +39 0445 575543 | fax +39 0445 575640 | email: info@azspa.it | www.azspa.it