



CG - CRANKSHAFT GRINDING MACHINES



AZ spa | MACHINE TOOLS

model
CG270-2000
CG300-2200
CG360-3300



HIGH SPEED AND WORKING QUALITY

The crankshaft grinding machines model CG have peculiar characteristics that permit easy and quick set-up and operating of the crankshaft.

These qualities have been reached after a particular design and realisation of the headstock and the relative tailstock.

- the precise connection between the prismatic and flat guides of the basement and the table permit high stability and a perfect perpendicularity with the wheelhead.
- big base to permit the working of big crankshaft without extending the table beyond the base for more than 10% of its length.
- group of leveling points for a better leveling and for the corrections of possible distortions of the machine.



view of the machine

CRANKSHAFT ROTATION CLUTCH

FACEPLATE LOCK KNOB

- VERSIONS
- "N" VERSION
Machine with pedal-driven pneumatic index pins for faceplate lock.
 - "U" VERSION
Machine with automatic table movement, grindwheel micrometric feed for cylindrical shafts grinding, heads positioning and tailstock sleeve hydraulic movement.



- GRINDINGWHEEL CONTROL
- Push button for fine feed
 - Zero stop for fine feed
 - Scale ring for fine feed
 - Locking handle for scale ring
 - Handwheel for grinding wheel fine feed



CG // Crankshaft Grinding machine



PNEUMATIC SLEEVE OF
TAILTOCK QUILL LOCK



AIRFLOAT
Airfloat heads move with low physical effort.
Airfloat heads virtually eliminate wear on the table

CONTROL PANEL
Infinitely adjustable workpiece speeds extend grinding wheel life



Air cushion system for head displacement



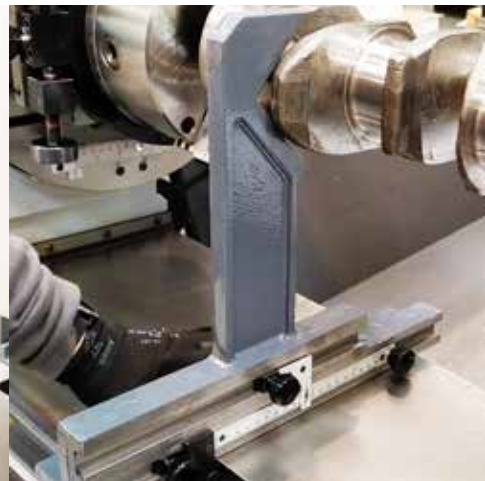
LUBRICATION
Oiling system assures continuous and complete lubrication.





STANDARD EQUIPMENT *

- Mechanical movement of the table
- Air cushion system for head displacement
- Electronical variable speed of the headstock
- Hydraulic system
- Coolant system
- Centralized lubricant system
- Crankshaft centering fixture
- Crankshaft journal checking square
- Head offset measuring device
- Wheel face, side and radius dresse
- N. 2 precision self centering chucks 200 mm. dia.
- N. 2 steady rests
- N. 2 driving dogs capacity from 20 to 75 mm
- N. 1 driving dog capacity from 70 to 140 mm
- N. 2 driving plates for drivers
- N. 2 conic centers
- N. 1 blunt center
- Wheel balancing arbor
- Grindwheel hub puller
- Machine levelling pad
- Pulley for reduced diameters of grinding wheel
- Service tools and Operating manual



GRINDING WHEELS

- CG270-2000: 710-203 mm. dia 25 mm. thickness
- CG300-2200: 815-203 mm dia 25 mm. thickness
- CG360-3300: 915-305 mm. dia. 32 mm. thickness

DIAL GAUGE FOR STANDARD EQUIPMENT

- AZ708 Dial gauge diam 40 mm
- AZ708P Inches dial gauge diam 1.57in resol 0.001in



RECOMMENDED EQUIPMENT *

- AZ410 Diamond and taper rest 1,5 kt
- AZ420 Pair of flanges 203 mm hole
- AZ431 Pair of flanges 305 mm hole
- AZ770 Continuous journal sizing gauge with 25-110 mm fork
- AZ707 Dial gauge diam 60 mm resolution 0.01mm A
- AZ707P Inches dial gauge diam 2.36 in resolution 0.0005 in
- AZ771 Measuring fork, range from 100 to 200 mm for AZ770 and AZ776
- AZ491 Paper filtering system 50 Liters
- AZ413 Wheel balancing stand for static balancing H=750mm



OPTIONAL EQUIPMENT *

N Version: with pneumatic bolts

Machine with pneumatic bolts operated by pedal switch for head positioning and sleeve movement of the tailstock

U VERSION: automatic movement of table and grinding wheel Machine with automatic movement of table and grinding wheel for cylinder grinding

AZ787 Linear encoders for X-Z axis and digital readout XYZ for CG270-CG300

AZ788 Linear encoder for X-Z axis and digital readout XYZ for CG360

AZ780 Electronic in process grinding gauge for AZ770

AZ490 Magnetic coolant cleaner 50 Liters (for AZ491)

AZ385 Combined paper and magnetic cleaner 50 Liters

AZ416 High speed portable belt superfinisher

AZ350 Wheel side tapering dresser for CG270

AZ351 Wheel side tapering dresser for CG360

AZ430 Hydraulic wheel tapering dresser for CG270

AZ426 Hydraulic wheel dresser for CG300

AZ427 Hydraulic wheel dresser for CG360

AZ401 Set of auxiliary counterweights CG270-CG300

AZ403 Set of auxiliary counterweights CG360-3300

AZ486 Narrow steady rest dia 20-105 mm for CG270

AZ481 Narrow steady rest dia 50-180 for CG300

AZ488 Narrow steady rest dia 20-200 mm for CG360

CG2719 Standard steady rest dia 25-155 mm for CG270



CG0119 Standard steady rest dia 50-180 mm for CG300

CG0419 Standard steady rest dia 30-200 mm for CG360-CG360CNC

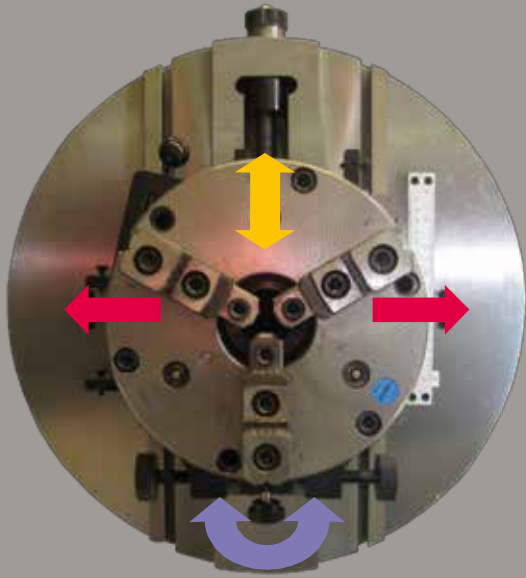
AZ708 Dial gauge diam 40 mm

AZ708P Inches dial gauge diam 1.57in resol 0.001in

AZ725 Deflection Gauge for cranks shafts

		GRINDING WHEELS		
		CG270-2000	CG300-2200	CG360-3300
DIAMETER	THICKNESS			
710-203 mm	20 mm	AZ456	-	-
710-203 mm	25 mm	AZ457	-	-
710-203 mm	32 mm	AZ458	-	-
710-203mm	40mm	AZ459	-	-
710-203 mm	50 mm	AZ449	-	-
815-203 mm	20 mm	-	AZ450	-
815-203 mm	25 mm	-	AZ451	-
815-203 mm	32 mm	-	AZ452	-
815-203 mm	40 mm	-	AZ453	-
815-203 mm	50 mm	-	AZ454	-
815-203 mm	60 mm	-	AZ455	-
915-305 mm	25 mm	-	-	AZ440
915-305 mm	32 mm	-	-	AZ441
915-305 mm	35 mm	-	-	AZ446
915-305 mm	40 mm	-	-	AZ442
915-305 mm	50 mm	-	-	AZ443
915-305 mm	60 mm	-	-	AZ444
915-305 mm	70 mm	-	-	AZ445

***Diamonds and dial gauges are not included in the equipment**



MOTION AND ADJUSTMENT OF CHUCKING FIXTURES

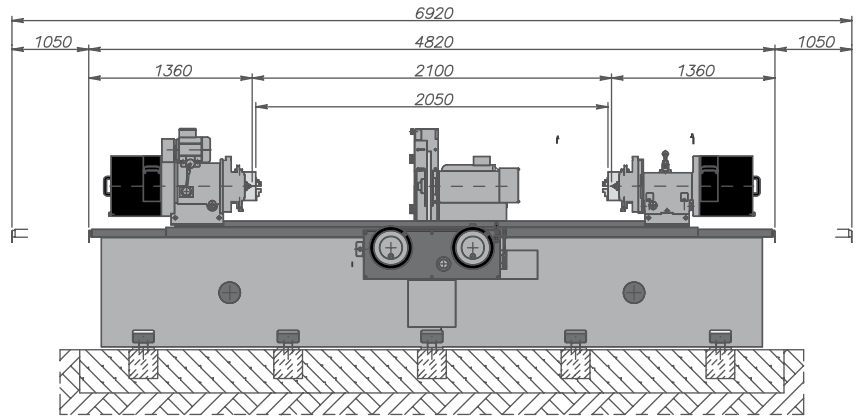
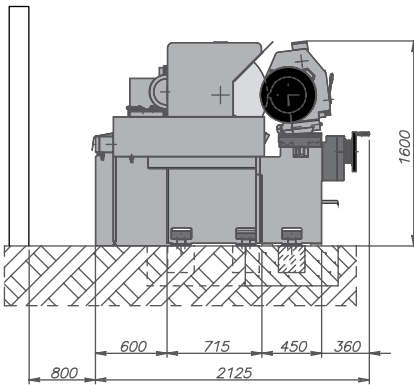
Sturdy universal chucking fixtures of latest design, guarantee the highest machining precision, fast centering and easy operating.

- Radial adjustment
- Cross adjustment
- Micrometric angular adjustment
- 360° rotation with twelve 30° click stops to obtain immediate selection of centering angle.
- Three indexing locations to avoid measurements rechecking and the consequent waste of time.
- If required, these locking pins can also be pneumatic.
- Possibility of adjusting the axis of central heads
- Trim adjust for rapid and fine radial adjustments.
- Possibility of micrometric rotation of the workpiece chuck.

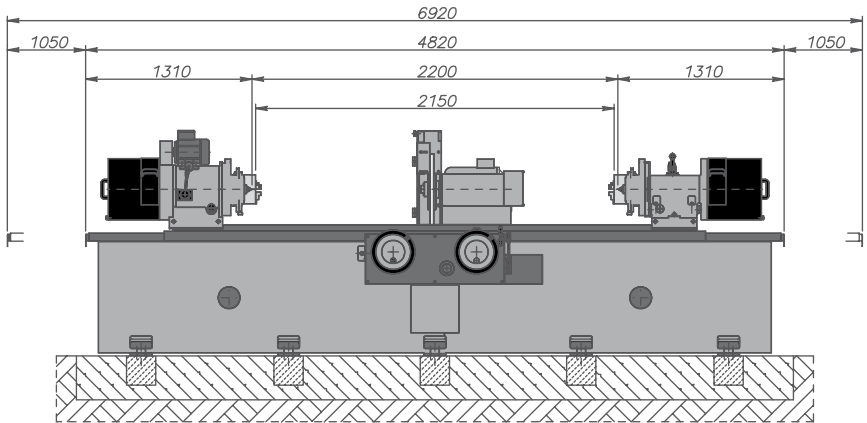
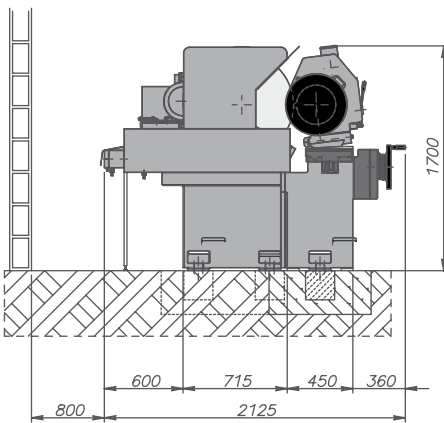


DIMENSIONS

CG270-2000



CG300-2200



CG // Crankshaft Grinding machine



WORKING CAPACITY

Height of centres on table	360 mm	300 mm	270 mm
Max distance between centers	3300 mm	2200 mm	2000 mm
Max. distance between self-centring chucks	3250 mm	2150 mm	1930 mm
Swing over table	720 mm	600 mm	540 mm
Max head offset (stroke/2)	170 mm	140 mm	120 mm
Max diameter admitted on std steady rests	180 mm	180 mm	130 mm
Max workpiece diameter-new wheel	270 mm	270 mm	270 mm
Max weight admitted between centers	600 kg	300 kg	300 kg
Max weight admitted with steady rests	1200 kg	600 kg	600 kg

MACHINE SPECIFICATIONS

Z AXIS			
Max table speed	5000 mm/min	5000 mm/min	5000 mm/min
Table motor power	0,5 KW	0,5 KW	0,5 KW
X AXIS			
Fast grindhead feed	210 mm	210 mm	210 mm
Micrometric grindhead feed	240 mm	240 mm	200 mm

WHEEL UNIT

Diameter of grinding wheel	915 mm	815 mm	710 mm
Max grinding wheel thickness	60 mm	60 mm	50 mm
Standard grinding wheel thickness	32 mm	25 mm	25 mm
Min grinding wheel thickness	20 mm	20 mm	20 mm
Grinding wheel peripheral speed	33 m/s	33 m/s	33 m/s
Wheel rotation motor power	7,5 KW	7,5 KW	4 KW

WORKHEAD

Stepless rotation speed	0-80 RPM	0-90 RPM	0-90 RPM
Diameter of chucks	225 mm	200 mm	200 mm
Headstock rotation motor power	1,2 KW	1,1 KW	1,1 KW

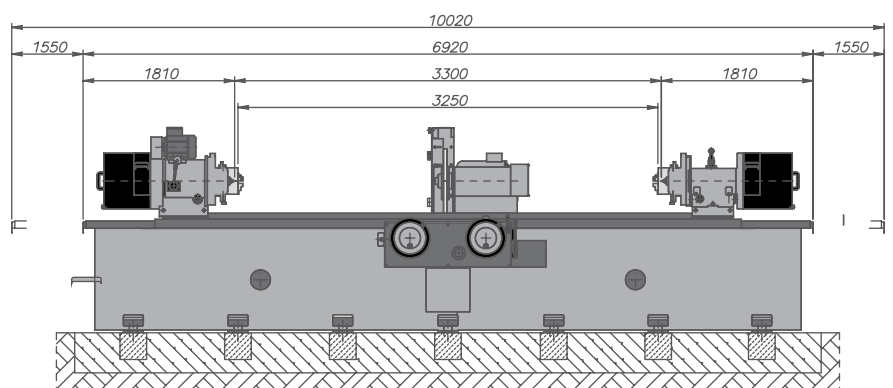
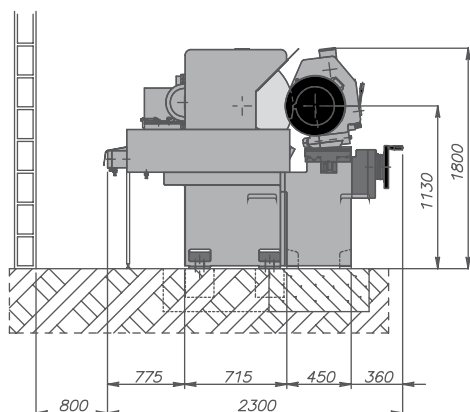
LUBRICATION UNIT

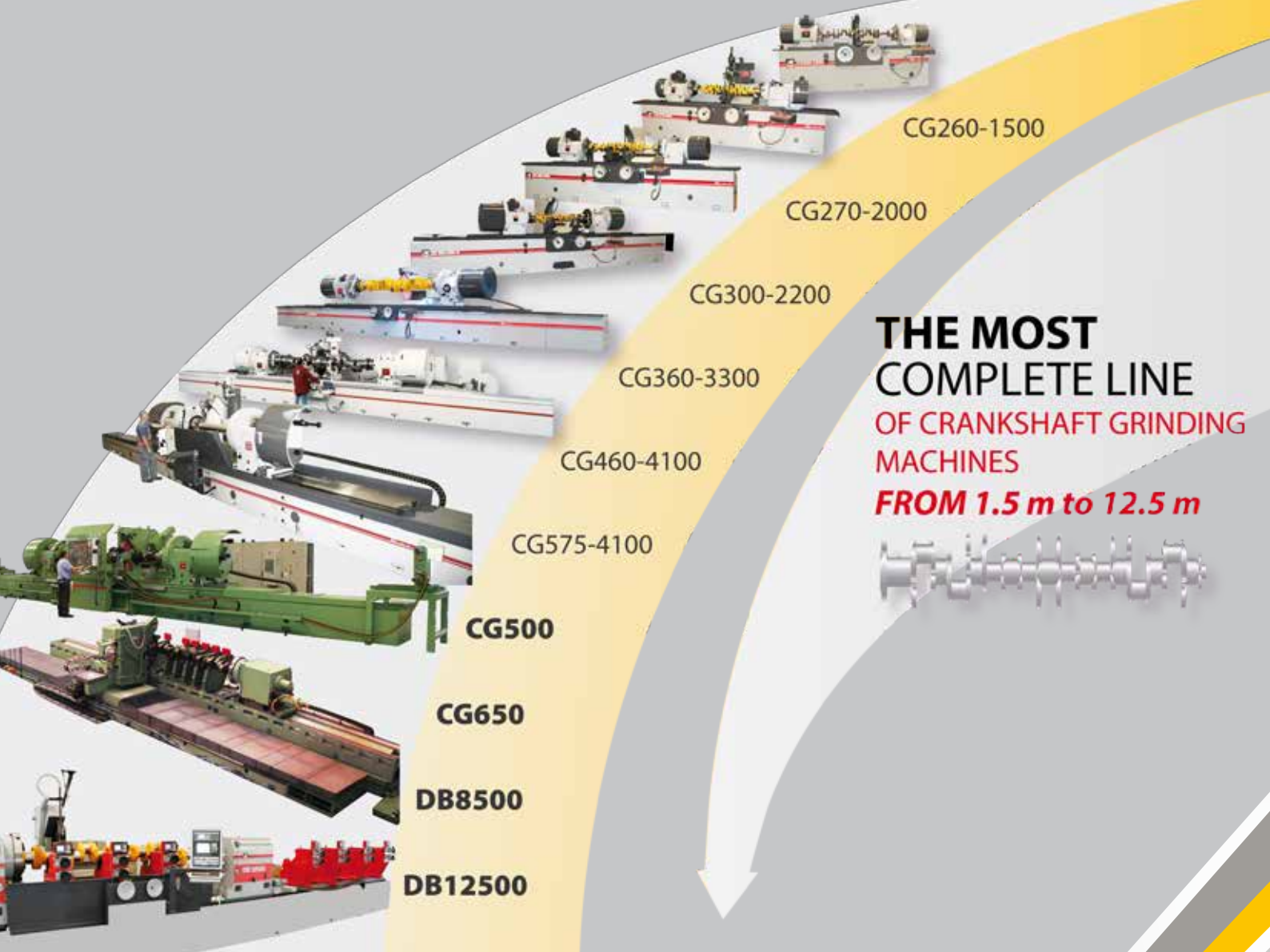
Tank capacity	1 lt	1 lt	1 lt
Pump motor power	Manuale	Manuale	Manual

HYDRAULIC UNIT

Tank capacity	50 lt	50 lt	50 lt
Motor	1,2 kw	0,75 kw	0,75 kw

CG360-3300





CG260-1500

CG270-2000

CG300-2200

CG360-3300

CG460-4100

CG575-4100

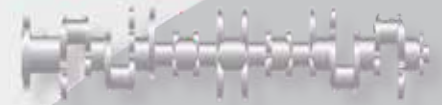
CG500

CG650

DB8500

DB12500

**THE MOST
COMPLETE LINE
OF CRANKSHAFT GRINDING
MACHINES**
FROM 1.5 m to 12.5 m



CG - CRANKSHAFT GRINDING MACHINES

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