



AZ means Alvisè Zanrosso, captain of industry in the machine tool field for over 40 years; a name of international prestige for the production of engine rebuilding machines.

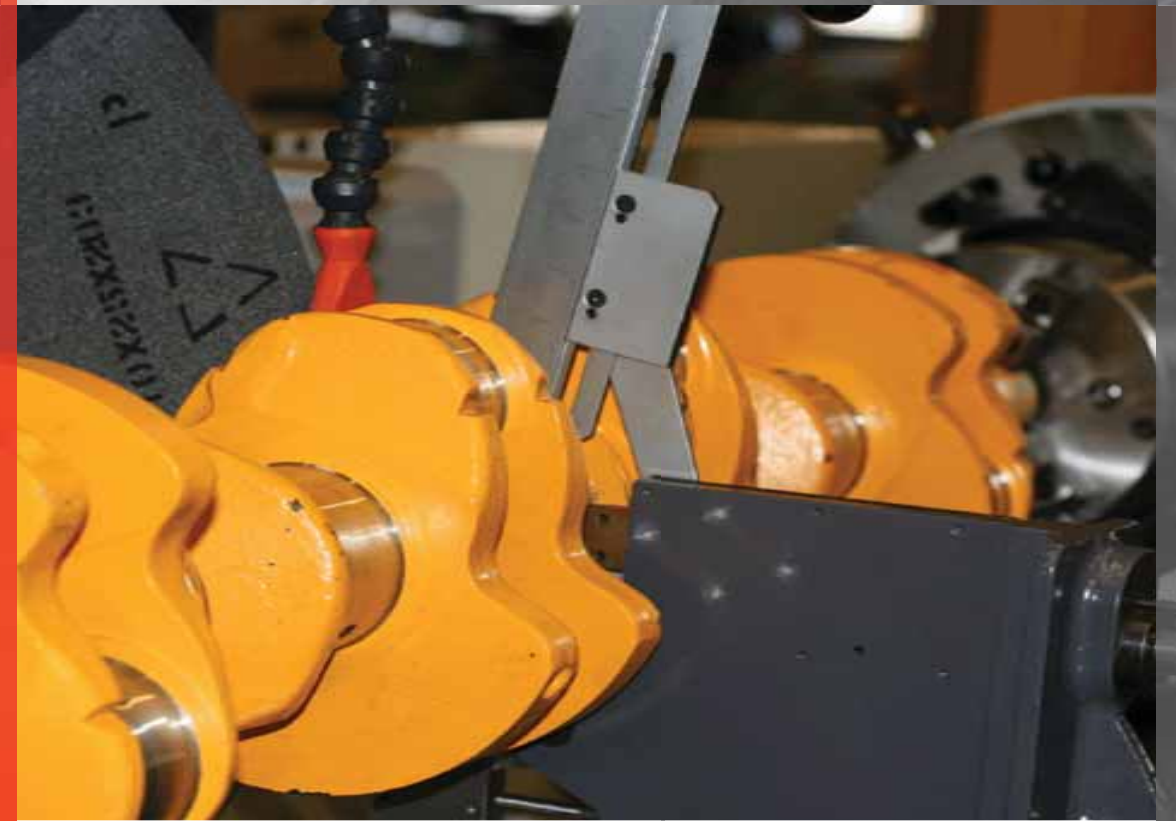
A qualified technical team, with great experience in the design, high vocation and knowledge of the demands of the different markets, has enabled AZ to elaborate, beside the traditional production, hydraulic and CNC controlled grinding machines for crankshaft and rolls of big dimensions. The presence of a large number of qualified and loyal customers and the presence of AZ in more than 80 countries proves its success.

Our products are guaranteed by 40 years experience in manufacturing engine rebuilding machinery and by the international certificate



## CG Crankshaft Grinder

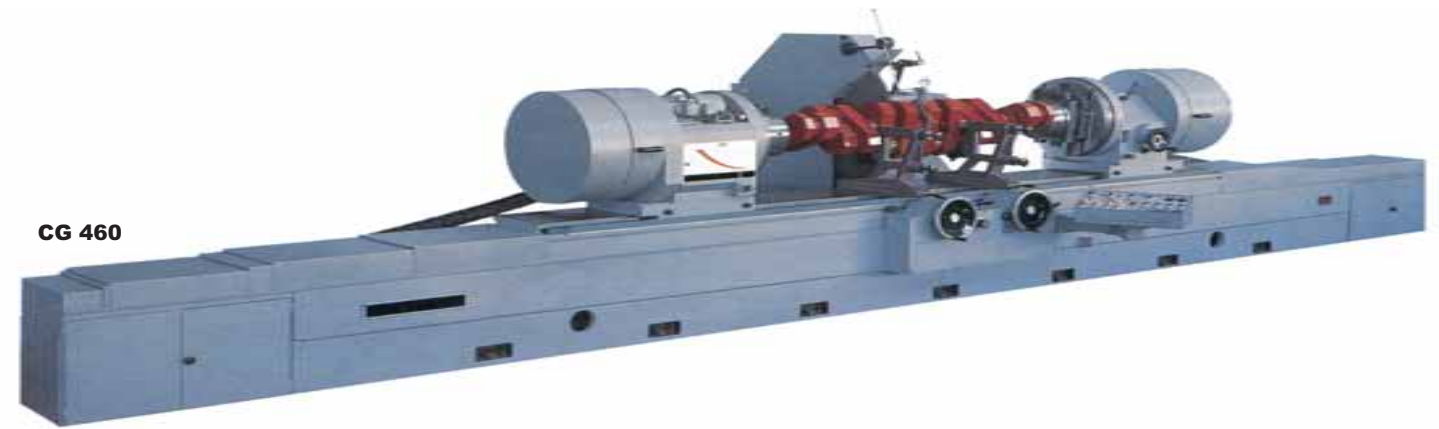
# AZ Machine Tools



Head offset centering device



CG 460



TECHNICAL SPECIFICATIONS

EQUIPMENTS

**PRECISION  
PERFORMANCES  
LONGEVITY**

make the AZ spa  
Crankshaft Grinders  
incomparable machines

**Technical specifications**

		CG 260	CG 270	CG 300	CG 360	CG 460	CG 575
HEIGHT OF CENTERS ON TABLE	mm.	260	270	300	360	460	575
MAX DISTANCE BETWEEN CENTERS	mm.	1500	2000	2200	3300	4100	4100
MAX DISTANCE BETWEEN SELF-CENTERING CHUCKS	mm.	1450	1950	2150	3250	4000	4000
MAX DIAMETER ADMITTED ON TABLE	mm.	520	540	600	720	920	1150
MAX HEAD OFFSET	mm.	80	120	140	170	220	240
MAX DIAMETER GROUND USING A NEW GRINDWHEEL	mm.	160	270	270	270	450	450
MAX DIAMETER ADMITTED ON STEADY REST	mm.	120	130	180	180	250	250
DIAMETER OF GRINDWHEEL	mm.	660	710	815	915	1140	1140
STANDARD GRINDWHEEL THICKNESS	mm.	25	25	25	25	40	40
MAX GRINDWHEEL THICKNESS	mm.	50	50	60	60	70	70
MIN GRINDWHEEL THICKNESS	mm.	20	25	25	20	25	25
MAX WEIGHT ADMITTED BETWEEN CENTERS	Kg.	80	300	300	600	1500	1500
MAX WEIGHT ADMITTED WITH STEADY RESTS	Kg.	200	600	600	1200	2500	2500
DIAMETER OF SELF-CENTERING CHUCKS	mm.	160	200	200	225	315	315
FAST GRINDHEAD FEED	mm.	120	210	210	210	210	210
MICROMETRIC GRINDHEAD FEED	mm.	160	200	240	240	260	260
GRINDHEAD FEED PER TURN OF HANDWHEEL	mm.	1	1	1	1	1	1
IMPULSE GRINDHEAD FEED	mm.	0,005	0,005	0,005	0,005	0,005	0,005
TABLE FEED PER TURN OF HANDWHEEL	mm.	5	5	5	5	5	5
FAST AUTOM. TABLE TRAVERSE SPEED	mm/1°	5000	5000	5000	5000	3000	3000
VARIABLE HEADSTOCK ROTATION SPEEDS	RPM.	45-95	0-90	0-100	0 - 80	0 - 60	0 - 60
GRINDHEAD MOTOR POWER	Kw.	4	4	7,5	7,5	11	11
HEADSTOCK MOTOR POWER	Kw.	0,5	0,75	1,2	1,2	2,2	2,2
HYDRAULIC UNIT MOTOR POWER	Kw.	0,75	1,2	1,2	1,2	2,2	2,2
TABLE MOTOR POWER	Kw.	0,33	0,5	0,5	0,5	-	-
PUMP MOTOR POWER	Kw.	0,15	0,15	0,15	0,15	0,25	0,25

<b>DIMENSIONS</b>							
LENGHT X WIDTH X HEIGHT (WITHOUT PACKING)	Cm.	320x160x150	475x207x158	480x215x168	660x220x180	1190x236x198	1190x236x198
LENGHT X WIDTH X HEIGHT (WITH PACKING)	Cm.	320x170x180	475x210x215	480x215x215	690x225x225	970x250x220	970x250x220
<b>WEIGHTS</b>							
WITHOUT PACKING	Kg.	2700	5100	5100	6600	14000	16000
WITH PACKING	Kg.	3100	5500	5950	7900	16100	18100
<b>SPECIFICATIONS VERSIONS (U)</b>							
TABLE AUTOMATIC DISPLACEMENT SPEED	mm/1°	/	/	0 - 5000	0 - 5000	0 - 5000	0 - 5000
AUTOMATIC CENTESIMAL INFEEED OF THE WHEEL							
EVERY TABLE TRAVERSE	mm	/	/	0 - 0,08	0 - 0,08	0 - 0,08	0 - 0,08

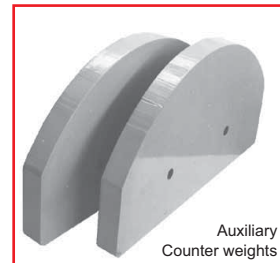
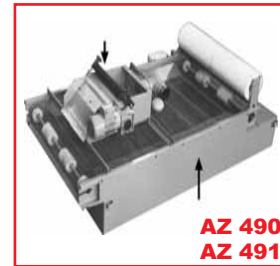
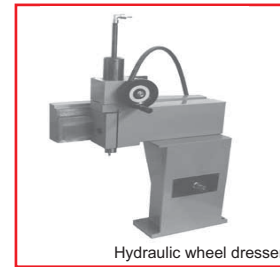
Data, weights and features are not binding and may be subject to changes

**(N) VERSION**  
Basic machine with pedal pneumatic index pins for heads positioning and tailstock sleeve pneumatic movement

**(U) VERSION**  
Basic machine with automatic table movement and grindwheel micrometric feed for cylindrical shafts grinding

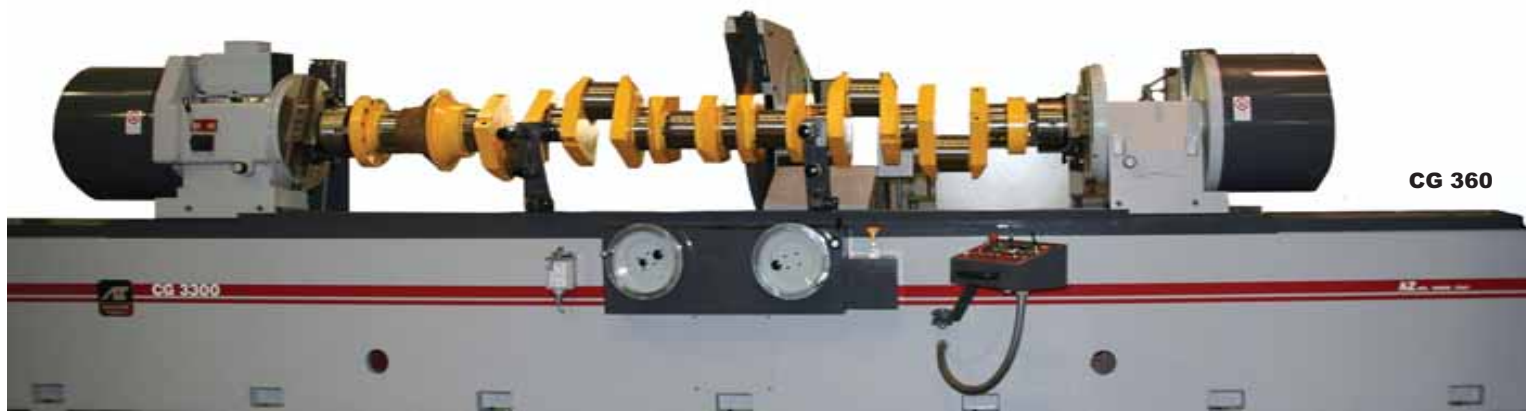
**(CNC) VERSION**  
Basic machine with electronic programming of grinding work-cycle (features on request)

Optional equipment



	CG 260	CG 270	CG 300	CG 360	CG 460	CG 575
<b>STANDARD EQUIPMENT</b>						
Low voltage electric controls (24 V)	x	x	x	x	x	x
Electronical variable speed of the headstok	x	x	x	x	x	x
Hydraulic system and coolant system	x	x	x	x	x	x
Centralized lubricant system	x	x	x	x	x	x
Crankshaft centering fixture with dial indicator	x	x	x	x	x	x
Crankshaft journal checking square	x	x	x	x	x	x
Stroke setting measuring device with indicator	x	x	x	x	x	x
Rotary and cross slide heads				x	x	x
Wheel face, side and radius dresser (diamond excluded)	x	x	x	x	x	x
No. 2 Self centering chucks 200 mm. diameter	x	x	x			
No. 2 Self centering chucks 225 mm. diameter				x		
No. 2 Self centering chucks 315 mm. diameter					x	x
Steady rests	1	1	2	2	3	3
No. 2 driving dogs capacity from 20 to 75 mm.	x	x	x			
No. 1 driving dogs capacity from 70 to 140 mm.	x	x	x	x	x	x
No. 1 driving dogs capacity from 140 to 200 mm.				x	x	x
No. 2 driving plates for drivers	x	x	x	x	x	x
No. 2 conic centers for workhead	x	x	x	x	x	x
No. 1 blunt center for workhead	x	x	x	x	x	x
No. 1 grinding wheel with pair of flanges	x	x	x	x	x	x
Wheel balancing arbor	x	x	x	x	x	x
Grindwheel hub puller	x	x	x	x	x	x
Service tools and Operating manual	x	x	x	x	x	x
<b>RECOMMENDED EQUIPMENT</b>						
Diamond and rest 1,5 C	AZ	410				
5 liters of emulsible fluid	AZ	390				
Pair of flanges	AZ	421	420	420	431	419
Continuous journal sizing gauge (25-110mm diameter capacity)	AZ	770				
Measuring fork, range rfrom 100 to 200 mm for AZ 770	AZ	771				
<b>OPTIONAL EQUIPMENT</b>						
Safety-guard kit conforming to CE standards	AZ	238	239	239	240	241
Set of auxiliary counter weights	AZ	500	401	402	403	-
Magnetic coolant cleaner	AZ	490				
Paper rool coolant cleaner	AZ	491	491	491	491	491/S
Wheel balancing stand (for static balancing )	AZ	415				
Portable belt superfinisher	AZ	416				
Self centering chuck 160 mm diameter	AZ	400	-	-	-	-
Wheel side tapering dresser (without diamond )	AZ	423	433	422	422	409
Hydraulic wheel dresser (without diamond)	AZ	425	430	426	427	427
Narrow steady rest with splash guard	AZ	480	486	481	488	489
Electronic in process measuring gauge	AZ	780				





# When experience becomes quality

40 years' experience in the machine tools field have enabled AZ spa to achieve, in the world wide market of engine reconditioning, the position of leader for the quality of his machines. Perfect dimensioning of parts combines advanced production technology with updates characteristics.

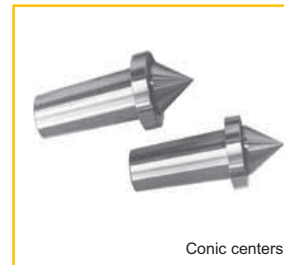
## CG Crankshaft Grinder

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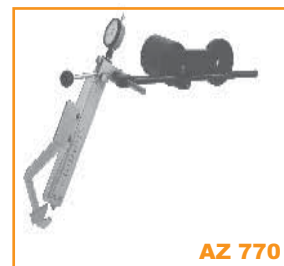
### GRINDING WHEELS AND EQUIPMENTS

### GENERAL CHARACTERISTICS

#### Standard equipment



#### Recommended equipment

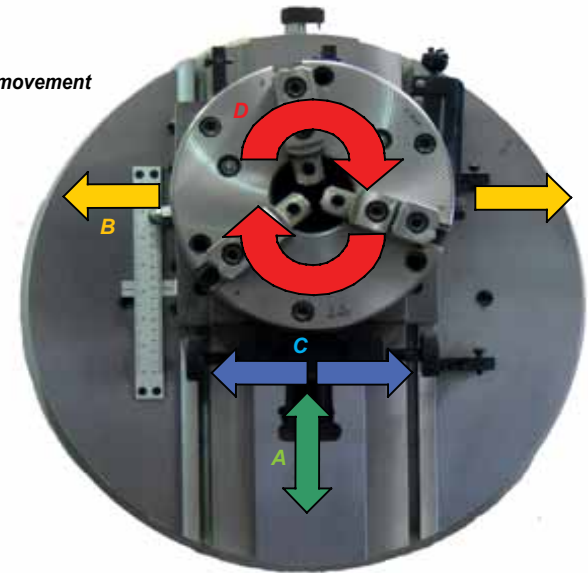


GRINDING WHEEL			CG 260	CG 270	CG 300	CG 360	CG 460	CG 575
Diameter (mm)	Thickness (mm)	Code						
660-203	20	AZ 460	x					
660-203	25	AZ 461	x					
660-203	32	AZ 462	x					
660-203	40	AZ 463	x					
660-203	50	AZ 464	x					
710-203	20	AZ 456		x				
710-203	25	AZ 457		x				
710-203	32	AZ 458		x				
710-203	40	AZ 459		x				
710-203	50	AZ 449		x				
815-203	20	AZ 450			x			
815-203	25	AZ 451			x			
815-203	32	AZ 452			x			
815-203	40	AZ 453			x			
815-203	50	AZ 454			x			
815-203	60	AZ 455			x			
915-305	25	AZ 440				x		
915-305	32	AZ 441				x		
915-305	40	AZ 442				x		
915-305	50	AZ 443				x		
915-305	60	AZ 444				x		
915-305	70	AZ 445				x		
1140-305	32	AZ 494					x	x
1140-305	40	AZ 495					x	x
1140-305	50	AZ 496					x	x
1140-305	60	AZ 497					x	x
1140-305	70	AZ 498					x	x



Continuous journal sizing gauge AZ 770 (recommended equipment) and hydraulic steady rest (optional equipment)

- A Offset movement
- B Cross movement
- C Micrometric swing movement
- D 360° rotary motion



The crankshaft grinder has four indexing locations. When reading the indicator to determine journal offset, the operator knows the crank is turned precisely to the desired position and the indicator is giving an accurate reading. He need not repeat this step to recheck the measurement.



CG 260 with electronic measuring device AZ 780 and hydraulic wheel dresser AZ 425 (optionals)

MACHINE AND ITS COMPONENTS

MACHINE AND ITS COMPONENTS

