

graziano

SAG



12S

SAG 12S

The Sag 12S has been planned, like all the Sag lathes, in order to get a performance of high efficiency and precision, but above all to allow the operator the easiest and quickest possibility of operating. Its production meets the needs of the industry and also of the vocational schools where the improvements of the controls can be better appreciated because of the simplicity of operation.



CONTROL CABINET

On one cabinet placed sideways the main carriage, there are the controls of the machine: spindle rotation direction selector, brake push-button, speed variation pushbuttons and the revolution counter.

HEADSTOCK AND CONTROLS

For the ultimate in simplicity, the headstock of the Sag 12 S has just three levers: one for backgears, one for reversing the lead screw and

feed rod and the last one for feed and thread selection.

All splines and shafts are chrome-nickel steel, hardened and ground. The spindle in high quality steel is mounted on high precision tapered roller bearings, lubricated under pressure by a filter easily stripped from outside for cleaning. All gears rotate in a constant oil bath.

The headstock, base and gear box are constructed as a single integral unit which helps to reduce tool vibration.

Cam-lock attack type D1-4". This feature insures the interchangeability on all lathes without special faceplates and guarantees the best quickness and reliability in mounting and dismounting the chucks.



SPEED CONVERTER

It consists of: one driving pulley at mechanical control, one self-adjustable driven pulley and one toothed V-type belt. The converter drive is controlled directly from the cabinet: one motoreducer controls the driving

pulley that drags in the movement the self-adjustable driven pulley to which is connected by means of the V-belts and determines the speed change.

THE GEAR BOX

The fully-enclosed gear box has a

simple 10-position handwheel. Two others levers provide 30 Whitworth and 30 Metric threads without a gear change. All gears in steel rotate in an oil bath and run on hardened and ground spline shafts.



BED AND CARRIAGE

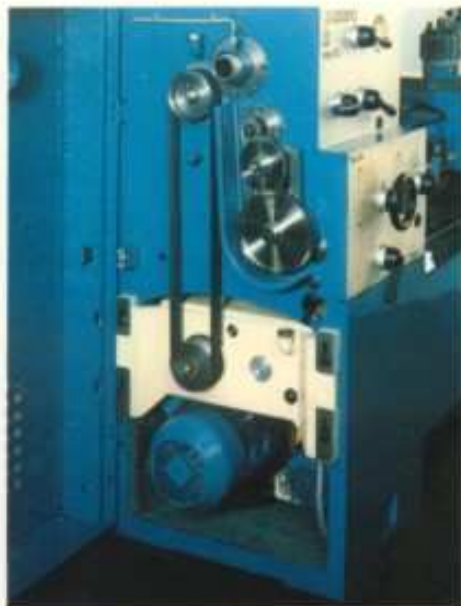
The bed, made of Meehanite and cast iron, maintains the same characteristics of the Sag lathes: carriage ways are lower than the tailstock ways and protected by two steel plates, a wide and deep natural gap produced by the tailstock stop at a certain distance from the headstock.

The longitudinal slide slides on wide dimensioned ways which insures an uniform and accurate movement. The cross slide and compound are made in steel and fitted with tapered gibs for backlashes. Leadscrews have easy-reading graduate dials.

APRON

The box-shaped apron is totally enclosed with gears and shafts running in an oil bath.

All components are lubricated at splash. A clutch device disengages all feeds in case of excessive stress.



THE TAILSTOCK

The rugged tailstock has an hardened sleeve and a quick-acting lock by lever.

The tailstock projects well over the ways so that short workpieces can be accomodated without excessive extension of the sleeve.

It can be cross adjusted for the machining of taper workpieces.

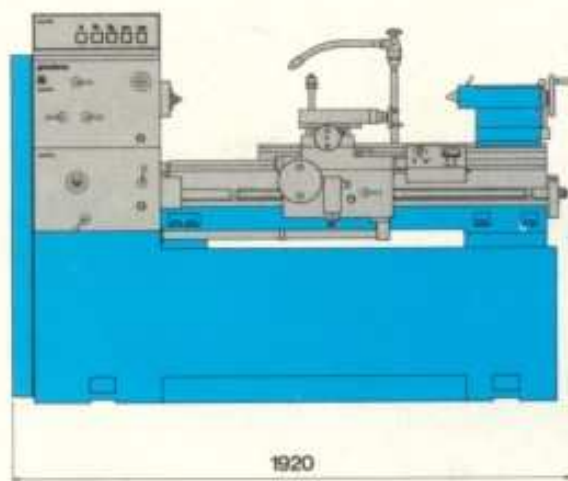
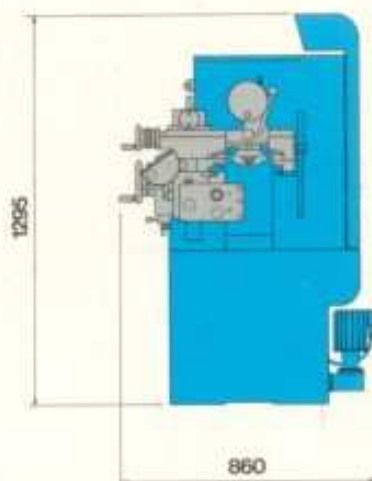
A graduated dial permits the measurement of cut depth.

COOLANT UNIT

The coolant unit includes: the selfpriming electropomp, pipes, connections, cock, chip pan and a built-in tank with gauge for coolant.

SAG12S

MAIN FEATURES AND SPECIFICATIONS



GENERAL FEATURES

Height of centers over bed	mm	153	6"
Distance between centers	mm	800	32"
Swing over carriage	mm	166	6 1/2"
Swing over natural gap	mm	440	17 5/16"

BED			
Width of bed	mm	245	9 5/8"
Length of the natural gap in front of the dog plate	mm	230	9 1/16"

HEADSTOCK			
Spindle bore	mm	41	1 5/8"
Cone Morse	N.	5	
Spindle nose	Cam-Lock	D1-4"	

SPINDLE SPEED			
Two available speed ranges:			
continuous variation	Rpm	55-360	55 to 360
		310-2000	310 to 2000
continuous variation	Rpm	80-470	80 to 470
		470-2600	470 to 2600

FEEDS AND THREADS			
60 longitudinal feeds	mm	0.05-0.58	.0019 to .023
60 cross feeds	mm	0.02-0.29	.0009 to .011
30 Whitworth pitches	TPI	46-6	46 to 6
30 metric pitches	mm	0.75-5.75	0.75 to 5.75

30 pitch	Pitch	92-12	92 to 12
30 Modular pitches	Mod.	0.375-2.875	0.375 to 2.875
Lead screw pitch	TPI	4	4

CROSS SLIDE			
Length	mm	459	18 1/16"
Width	mm	150	5 7/8"
Maximum travel	mm	180	7 1/8"

TOOLPOST SADDLE			
Length	mm	244	9 5/8"
Width	mm	100	3 15/16"
Maximum total travel	mm	110	4 5/16"
Rotation angle		360	360
Maximum tool section	mm	20 x 20	3/4"

TAILSTOCK			
Sleeve bore	mm	50	1.968
Max length of sleeve	mm	225	8 7/8"
Maximum sleeve travel	mm	145	5 11/16"
Cone Morse	N.	3	3
Support length on bed	mm	222	8 3/4"

MOTOR			
	HP	4	4
Approximate weight	Kg.	1000	Lbs 2208