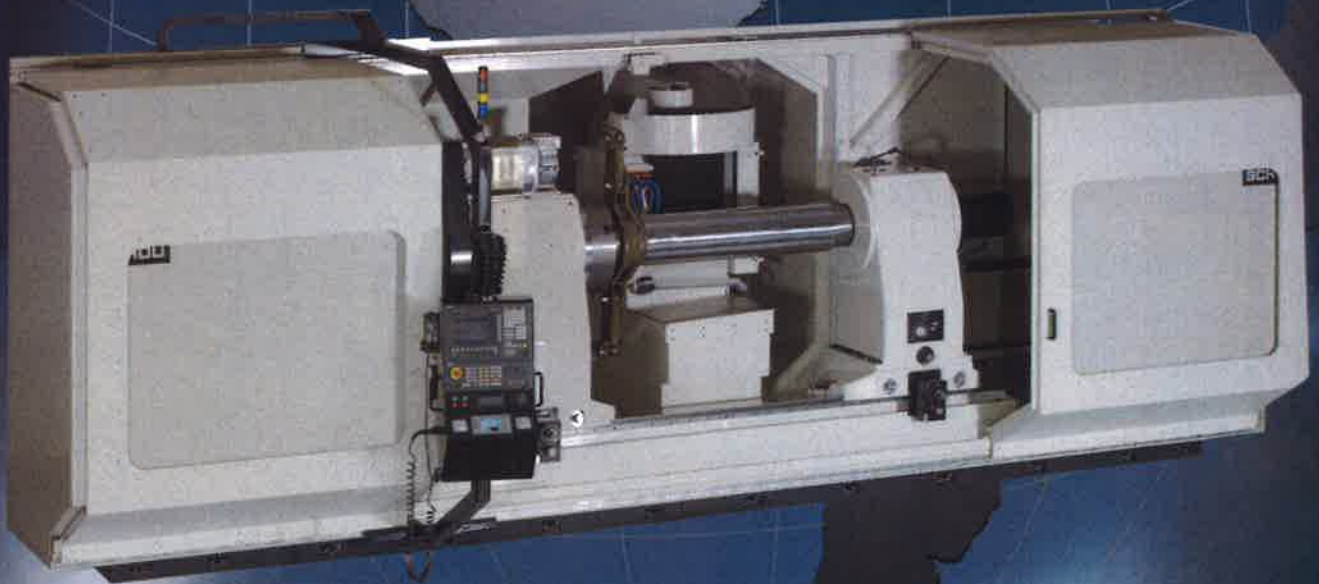




**AMC-SCHOU Cylindrical Grinding Machines
For Steel Grinding**



The Benefits of Precision

AMC-SCHOU CYLINDRICAL GRINDING MACHINES FOR STEEL GRINDING

The AMC-SCHOU cylindrical grinding machines are used in industries demanding the highest degree of accuracy and productivity.

Manufacturers seeking higher levels of precision, smoother surface finishes, and greater overall productivity can achieve significantly improved performance by utilizing AMC-SCHOU's cylindrical grinders.

AMC-SCHOU delivers many machines engineered to suit customers' individual specifications. Examples are machines with extra-large swing, special measuring equipment, setting up-systems etc.

All of the main components of the machines are made of high-quality castings. These are specially processed to avoid any build-up of internal stresses in the material.

The components are permitted to "rest" for several months prior to final machining work, so that any possible remaining stresses will have disappeared.

The end result is a highly stable machine that is entirely free of vibration,

AMC-SCHOU line of CNC- controlled grinding machines.

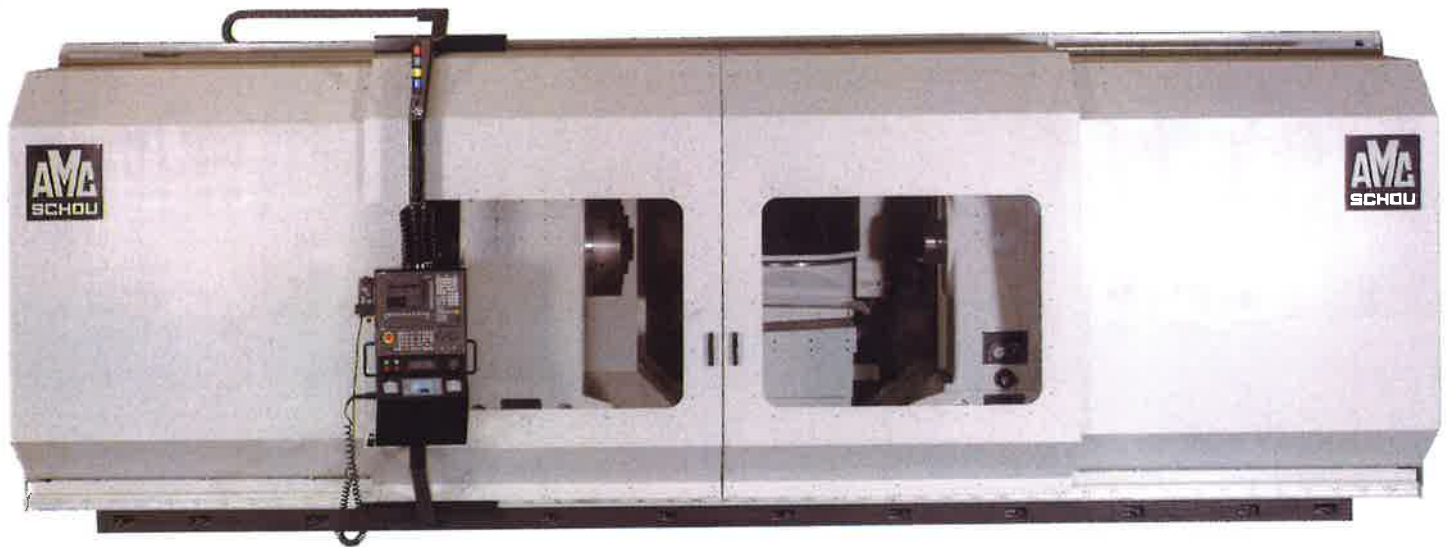
Index range -45 to +195° with various wheel head options.

Capable of grinding workpieces up to:

Length = 2000 mm/79"

Grinding diameter = 610 mm/24"

Max. workpiece weight = 5 tons/11020 lbs

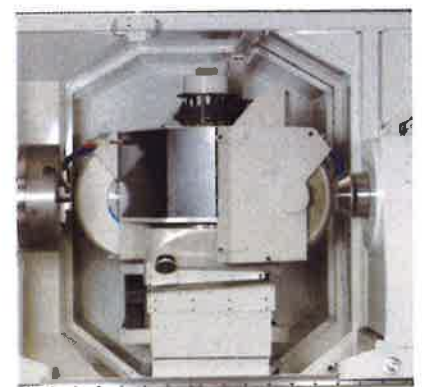
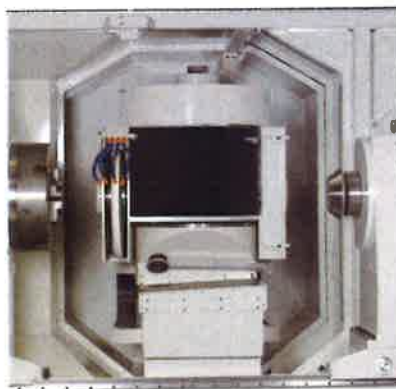
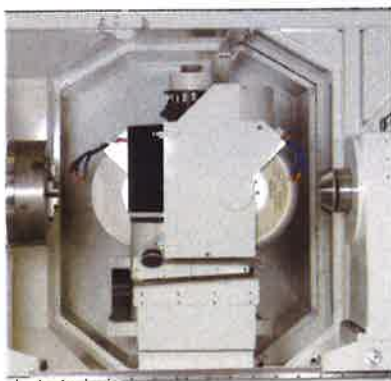


At AMC-SCHOU we cooperate with our customers on the final solution to design the most efficient, user-friendly and sturdy machines.

We received an enquiry from an American customer regarding a landing gear application.

The machinery has an extra-ordinarily high swing and is equipped with two grinding wheel mounted on a swivelable CNC B-axis for automatic positioning of wheelhead at any desired angle. Other features include measuring probes, airlifted head-and tailstock, auto-balancing and full enclosure.

CNC B-axis



OUR PARTNERSHIPS

Our close partnership with SIEMENS ensures that we always use the most recent and up-to date controls on our CNC machines.

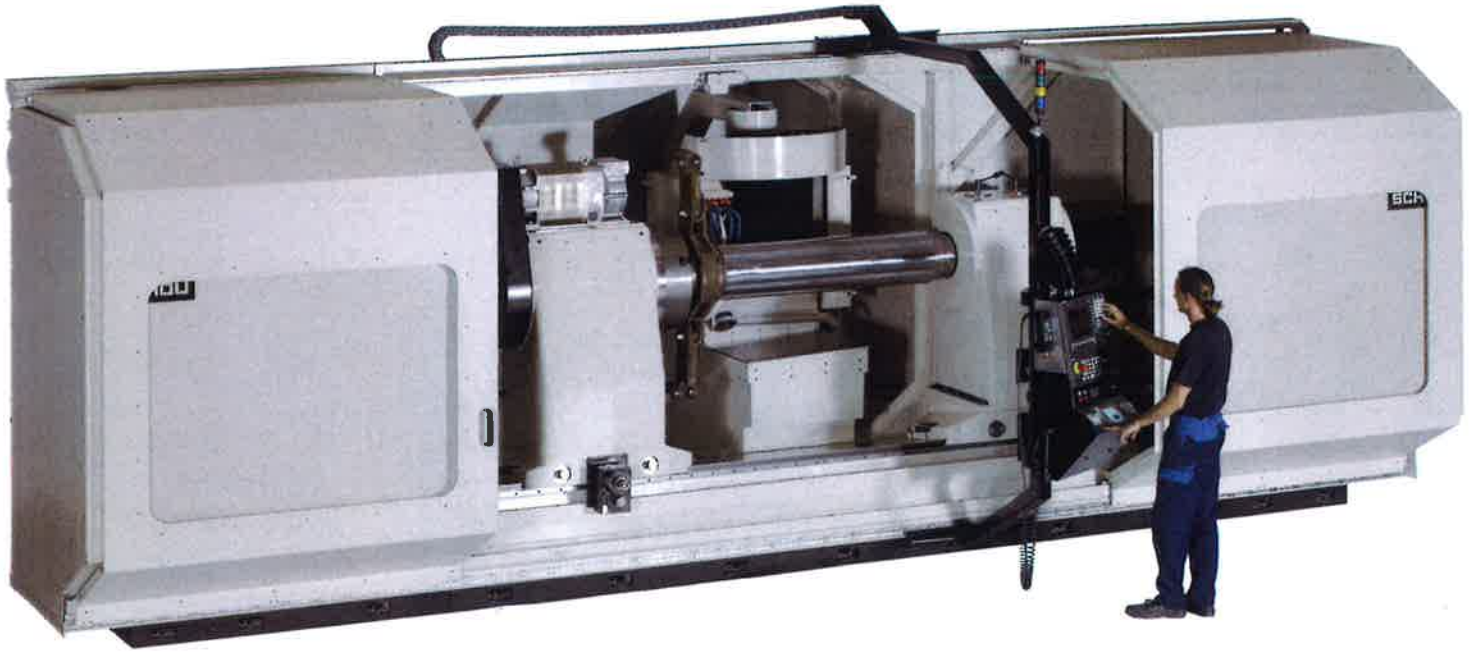
In addition, all our heavy duty machines are equipped with a WEISS spindle. WEISS is also an affiliated SIEMENS company.

SIEMENS Simodrive motors are used for powering the headstock and grinding wheel spindle.

With SIEMENS worldwide service and support, machine breakdowns are quickly dealt with and downtime is kept to a minimum.

We also use SKF and Rexroth high precision ball screws for X- and Z-axis ensuring smooth, accurate and trouble-free movements of the antifriction covered table and wheel slide.

Heavy duty SKF bearings in head- and tailstock ensure smooth and trouble-free rotation of even extra heavy work-pieces.



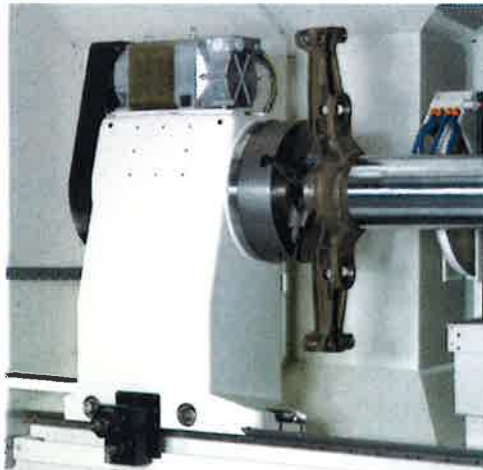
The machine can be equipped with acoustic sensors to prevent unforeseen and unintended movements and actions causing collisions with the work-piece, dresser, headstock, tailstock, etc.

A variety of measuring devices such as probes and in-process measuring equipment, can be mounted on the machines depending on end user requirements.

Electrical cabinet



Measuring devices (Extra equipment?)



AMC-SCHOU CYLINDRICAL GRINDING MACHINES FOR STEEL GRINDING



Retractable wheel guard is an option if excessive face grinding is required.

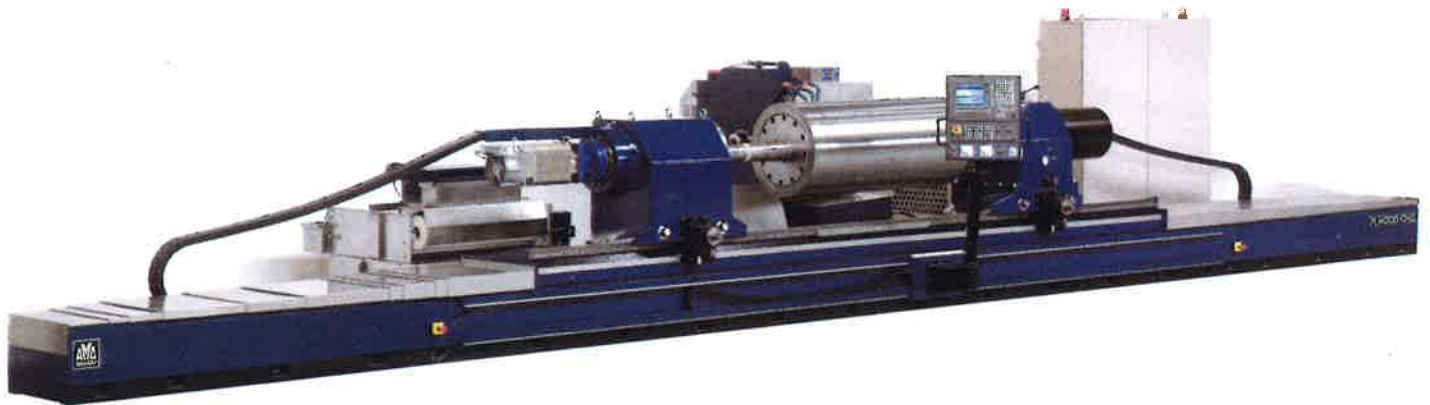


Enclosure in various designs can be fitted on the machines. (Extra equipment?)

AMC-SCHOU Heavy-duty line of CNC-controlled grinding machines.

Capable of grinding workpieces up to:
Length = 6000 mm/236"
Grinding diameter = 1100 mm/43"
Max. workpiece weight = 15 tons/33000 lbs

Model R-4000CNC HD



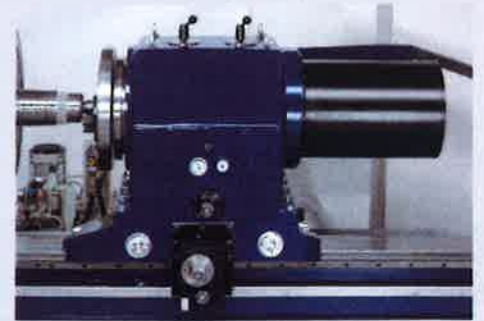
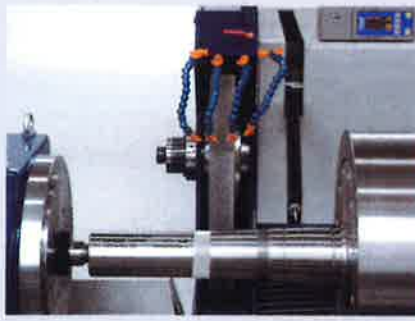
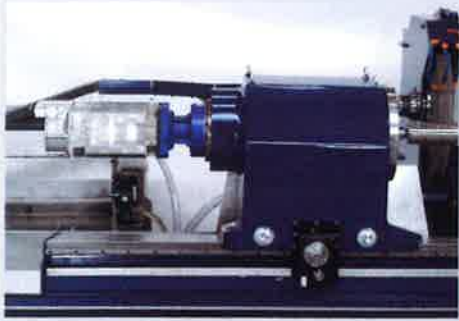
In today's modern manufacturing climate, companies must improve their research and development capacity, invest in high-efficiency machinery and equipment, implement LEAN manufacturing processes and focus on human resources if they are to stay one step ahead of the competition.

The modern steel grinder faces increasing demands for accuracy and surface finish.

New steel grades and alloys are developed at an ever increasing rate. This results in extra pressure on manufacturers in terms of flexibility and frequent changes to grinding parameters.



**AMC-SCHOU CYLINDRICAL GRINDING MACHINES
FOR STEEL GRINDING**

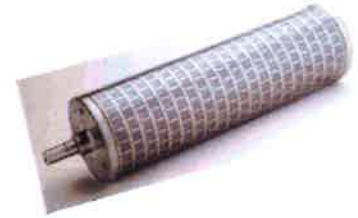


SKF and Deutsche Star Rexroth high-precision ball screws for X- and Z-axis.

Heavy duty SKF bearings in head- and tailstock

AMC-SCHOU line of CNC- controlled grinding machines.

Capable of grinding workpieces up to:
Length = 4000 mm/157"
Grinding diameter = 610 mm/24"
Max. workpiece weight = 2,5 tons/5510 lbs



The smallest machine in the program is the R-1800CNC

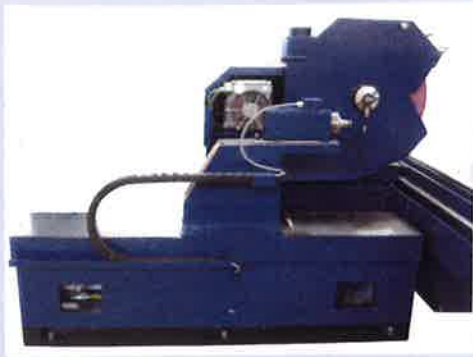
AMC-SCHOU also manufactures a conventional line of manual and semi-automatic grinding machines.

Capable of grinding workpieces of up to:
Length = 4000 mm/157"
Grinding diameter = 610 mm/24"
Max. workpiece weight = 2 ton/4408 lbs



**AMC-SCHOU CYLINDRICAL GRINDING MACHINES
FOR STEEL GRINDING**

EXTRA EQUIPMENT



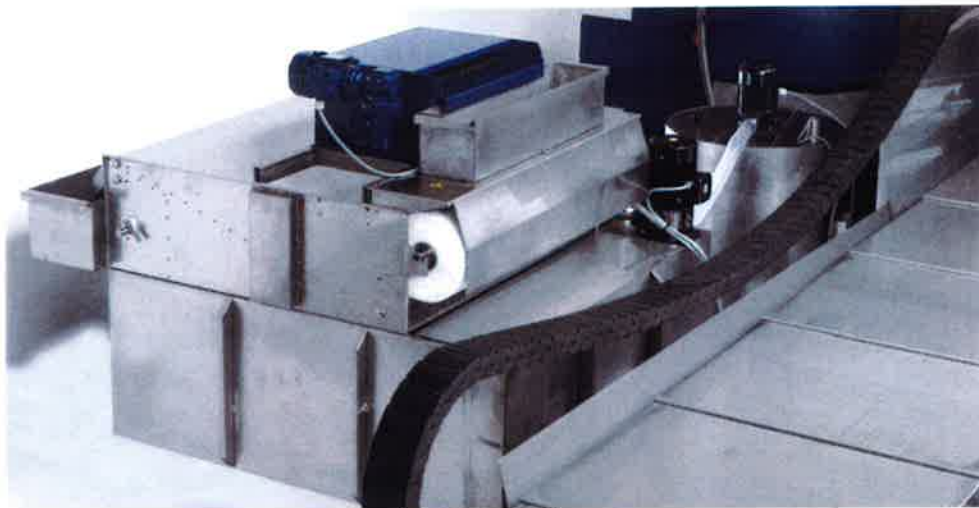
X-2 axis



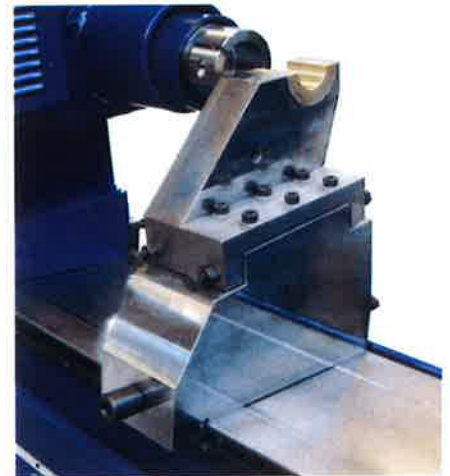
Self-centering chucks with adjustable jaws



Electronic safety light grid



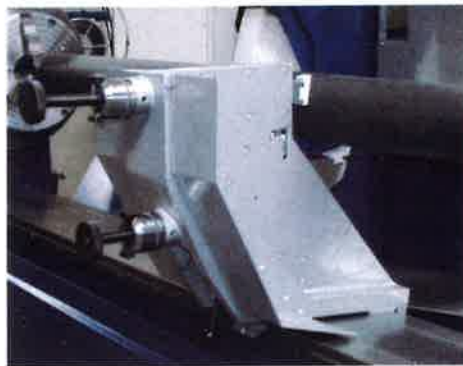
Coolant unit with band filter and magnetic separator



Journal supports



Air-condition in power supply box



Steady rest capacity diam. 30-180 mm



Heavy duty steady rest capacity diam. 50-300 mm



Centering device with dial gauge



Dressing fixture for radius dressing?

**AMC-SCHOU CYLINDRICAL GRINDING MACHINES
FOR STEEL GRINDING**

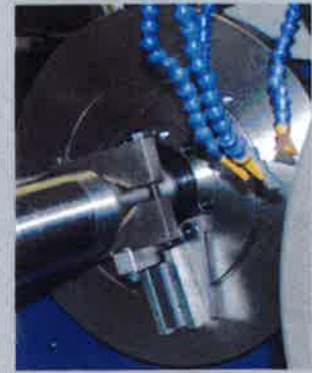
EXTRA EQUIPMENT



Dressing diamond, 10mm (0,4") shank
(on the wheel).



Automatic balancing system for grinding wheel,
incl. display



Driving dogs with copper shoes



Dressing fixture for face and side
dressing -- HD version



Dressing tools



Live tailstock centre Morse Taper No.6



Dead centre Morse Taper No. 6



Grinding wheel balancing stand



Grinding wheel hub HD diam.305mm (12")



Grinding wheel hub diam.305mm (12")

AFTER SERVICE

AMC-SCHOU is renowned for its commitment to servicing all machines –both old and new.

Our team of experienced service engineers provides installation, commissioning and training of local machine operators around the world.

CUSTOMER STATEMENTS

"We bought all nine cylindrical grinders from AMC-SCHOU. We consider them to be the most productive and accurate cylindrical grinders in the world. We are extremely happy with the service provided by AMC-SCHOU and the machines are working very well."

Lathia Rubber Mfg. Co.P.Ltd.
The Lathia Family
Mumbai, India

"The setting up of workpieces is very simple and these machines are very easy to work with. Ant not only that – they are also extremely productive."

Miller Graphics
Niels Henrik Engström
Sunne, Sweden

"Thanks to the AMC-SCHOU cylindrical grinder, we now obtain surfaces of an unprecedented quality, which makes subsequent polishing unnecessary. Thanks to the sophisticated Siemens control system, it is easy to grind difficult workpieces with different geometries."

Hannecard
Del Maire, Technical Director
Ronse, Belgium

AMC-SCHOU CYLINDRICAL GRINDING MACHINES - TECHNICAL SPECIFICATIONS

LINE OF CNC-CONTROLLED GRINDING MACHINES		R-1800CNC	R-2400CNC	R-3000CNC	R-4000CNC
Max. distance between chucks	mm	1850	2450	3050	4050
	inch	73	96	120	160
Max. length between centres	mm	1800	2400	3000	4050
	inch	71	94	118	160
Max. swing over table	mm	680	680	680	680
	inch	27	27	27	27
Max. weight of workpiece between chucks	kg	2500	2500	2500	2500
	lbs	5510	5510	5510	5510
Max. grinding length	mm	1800	2400	3000	4000
	inch	71	94	118	157
Max. grinding diameter with new grinding wheel	mm	610	610	610	610
	inch	24	24	24	24
Table speeds	mm/min	1-4000	1-4000	1-4000	1-4000
	inch/min	0.04-157	0.04-157	0.04-157	0.04-157
Headstock spindle speeds, variable	rpm	2-500	2-500	2-500	2-500
Headstock motor	kW	7	7	7	7
	hp	9.5	9.5	9.5	9.5
Grinding wheel motor	kW	17	17	17	17
	hp	23	23	23	23
Max. grinding wheel diameter	mm	813	813	813	813
	inch	32	32	32	32
Max. grinding wheel width	mm	80	80	80	80
	inch	3.2	3.2	3.2	3.2
Diameter of grinding wheel bore for hub	mm	305	305	305	305
	inch	12	12	12	12
Max. tailstock quill	mm	70	70	70	70
	inch	2.8	2.8	2.8	2.8
Working space (working machine)	mm	6100x2900	7800x2900	9800x2900	12800x2900
	inch	240x114	307x114	386x114	504x114
Net weight of basic machine	kg	4500	5300	6300	7700
	lbs	9923	11687	13891	16979
Gross weight of basic machine	kg	5300	6300	7400	9000
	lbs	11687	13891	16317	19841

LINE OF CONVENTIONAL GRINDING MACHINES		R-1800Conv.	R-2400Conv.	R-3000Conv.	R-4000Conv.
Max. distance between chucks	mm	1850	2450	3050	4050
	inch	73	96	120	160
Max. length between centres	mm	1800	2400	3000	4050
	inch	71	94	118	160
Max. swing over table	mm	680	680	680	680
	inch	27	27	27	27
Max. weight of workpiece between chucks	kg	2500	2500	2500	2500
	lbs	5510	5510	5510	5510
Max. grinding length	mm	1800	2400	3000	4000
	inch	71	94	118	157
Max. grinding diameter with new grinding wheel	mm	610	610	610	610
	inch	24	24	24	24
Table speeds	mm/min	30-4000	30-4000	30-4000	30-4000
	inch/min	1.2-157	1.2-157	1.2-157	1.2-157
Headstock spindle speeds, variable	rpm	5-500	5-500	5-500	5-500
Headstock motor	kW	7	7	7	7
	hp	9.5	9.5	9.5	9.5
Grinding wheel motor	kW	15	15	15	15
	hp	20	20	20	20
Max. grinding wheel diameter	mm	813	813	813	813
	inch	32	32	32	32
Max. grinding wheel width	mm	80	80	80	80
	inch	3.2	3.2	3.2	3.2
Diameter of grinding wheel bore for hub	mm	305	305	305	305
	inch	12	12	12	12
Max. tailstock quill	mm	70	70	70	70
	inch	2.8	2.8	2.8	2.8
Working space (working machine)	mm	6100x2900	7800x2900	9800x2900	12800x2900
	inch	240x114	307x114	386x114	504x114
Net weight of basic machine	kg	4500	5300	6300	7700
	lbs	9923	11687	13891	16979
Gross weight of basic machine	kg	5300	6300	7400	9000
	lbs	11687	13891	16317	19841

AMC-SCHOU CYLINDRICAL GRINDING MACHINES - TECHNICAL SPECIFICATIONS

HEAVY-DUTY LINE OF CNC-CONTROLLED GRINDING MACHINES		R-2000CNC HD	R-4000CNC HD	R-6000CNC HD
Max. length between chucks	mm inch	2000 79	4000 157	6000 236
Max. length between centres	mm inch	2000 79	4000 157	6000 236
Max. swing over table	mm inch	1100 43	1100 43	1100 43
Max. weight of workpiece between chucks	kg lbs	15000 33069	15000 33069	15000 33069
Table speeds	mm/min inch/min	1-3000 0.04-118	1-3000 0.04-118	1-3000 0.04-118
Headstock spindle speeds, variable	rpm	2-140	2-140	2-140
Headstock motor	kW hp	17 23	17 23	17 23
Grinding wheel motor	kW hp	37 50	37 50	37 50
Max. grinding wheel diameter	mm inch	1000 40	1000 40	1000 40
Max. grinding wheel width	mm inch	100 4	100 4	100 4
Diameter of grinding wheel bore for hub	mm inch	305 12	305 12	305 12
Max. tailstock quill	mm inch	90 3.5	90 3.5	90 3.5
Working space (working machine)	mm inch	8700x3500 343x138	12500x3500 492x138	16500x3500 650x138
Net weight of basic machine	kg lbs	15600 34391	20700 45636	24100 53131
Gross weight of basic machine	kg lbs	17600 38801	22700 50045	26500 58202

LINE OF CNC CONTROLLED MACHINES WITH B-AXIS		R-2000CNC B
Max. distance between chucks	mm inch	2000 79
Max. swing over table	mm inch	2000 79
Max. weight of workpiece	kg lbs	5000 11023
Table speeds	mm/min inch/min	1-3000 0.04-118
Headstock spindle speeds, variable	rpm	1-100
Headstock spindle motor	kW hp	12 16
Grinding wheel motor	kW hp	15 20
X-axis motor	Nm Ft lbf	15 11
Z-axis motor	Nm Ft lbf	70 52
Tailstock quill	mm inch	90 3.5
Max. centre pressure	N Lbf	32000 7200
Max. grinding wheel diameter	mm inch	800 31.5
Max. grinding wheel width	mm inch	100 4
Working space (working machine)	mm inch	8100x4800 319x189
Height of highest point	mm inch	3100 122
Height of workpiece center	mm inch	1670 66
Net weight of basic machine	kg lbs	15600 34391

AMC-SCHOU – CYLINDRICAL GRINDING MACHINES FOR STEEL GRINDING

CURRENT STANDARD MODELS

Model	Swing	Grinding length	Weight between centres/chucks
R-1800	680 mm / 26.7"	1800 mm / 71"	800/2500 kg / 1764/5510 lbs
R-2400	680 mm / 26.7"	2400 mm / 94"	800/2500 kg / 1764/5510 lbs
R-3000	680 mm / 26.7"	3000 mm / 118"	800/2500 kg / 1764/5510 lbs
R-4000	680 mm / 26.7"	4000 mm / 157"	800/2500 kg / 1764/5510 lbs
R-1800 CNC	680 mm / 26.7"	1800 mm / 71"	800/2500 kg / 1764/5510 lbs
R-2400 CNC	680 mm / 26.7"	2400 mm / 94"	800/2500 kg / 1764/5510 lbs
R-3000 CNC	680 mm / 26.7"	3000 mm / 118"	800/2500 kg / 1764/5510 lbs
R-4000 CNC	680 mm / 26.7"	4000 mm / 157"	800/2500 kg / 1764/5510 lbs
R-2000 CNC HD	1100 mm / 43.3"	2000 mm / 79"	15000 kg / 33000 lbs
R-4000 CNC HD	1100 mm / 43.3"	4000 mm / 157"	15000 kg / 33000 lbs
R-6000 CNC HD	1100 mm / 43.3"	6000 mm / 236"	15000 kg / 33000 lbs
R-2000 CNC B-axis	2000 mm / 79"	2000 mm / 79"	5000 kg / 11023 lbs

As we are continuously improving our machines, descriptions, dimensions and illustrations are not binding in detail.



The Benefits of Precision

AMC-SCHOU AS

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