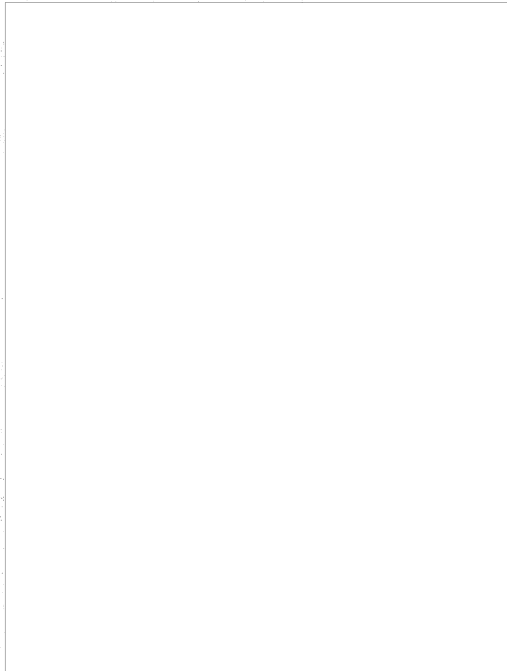


WILHELM LÖTSÖS LATHES
(Brochure issued by Ferrotechnika, Budapest)

50X1-HUM



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The competition on the world markets and the progress in modern social concepts force progressive factory managements to produce as rationally as possible and to achieve maximum production with a minimum of manual labor.

The result of this effort is the utilization of economic working tools, namely, heavy-duty machine tools. The manufacturer is putting his capital to best use when he keeps a strict eye on the economic aspects of his plant, even to the tiniest details. Not only must he employ machines and tools of greatest efficiency so that new labor forces may be released, but he must also utilize only the most advantageous machine in every step of the operation.

Thus in finishing operations we use no large machine tools, but small machines of modern design, that is, finishing lathes which, in addition to requiring little space, are relatively cheap.

We are concentrating our manufacture for the present on light and medium lathes in all models necessary for plant operations.

In the following we give the technical data and descriptions of the machines produced by us.

All cast pieces are subjected to an aging process recommended by the American Society for Metals and are used only after repeated inspection. All cast pieces, depending upon the construction demands, have a Brinell hardness of Hb - 180-220 kg/mm².

Where necessary, hardened gears of chrome-nickel alloy steel, finished on a MAAG system gear grinder, are installed throughout. If required, central lubrication or an oil bath can be furnished.

The principle of extensive interchangeability of parts is the prime consideration in our manufacturing process. Our process operates within the ISA Pass-System. The machines are produced on the most modern machine tools within the tolerance limits established by Professor Schlesinger. If the customer wishes, closer tolerances can be provided.

Every single part is tested as to quality, precision, and performance by an inspection system independent of the production department. The precision production machines, the jig drills, the thread-grinding machines, the special lathes for turning out exact lead screws, and also the testing apparatus are kept in rooms where the temperature is at a constant 20 degrees Centigrade.

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This assures the precision of manufacture and makes the exactness of the measurements independent of the time of day or year. The humidity is also controlled. The assembly shop is so organized that parts of one type are always assembled by the same group of workers.

The E 130 is the smallest lathe we produce. It is built on the construction-kit principle from standard elements; it has an infinitely variable transmission for spindle speeds from 60 to 1,200 rpm.

E 130 is the basic type, the so-called mechanic's lathe. All settings are made by hand.

E 130 F, the next model, has a simple hinge plate and rack so that longitudinal feed is possible by hand.

E 130 V has a draw bar, a rather simple feed box, and automatic longitudinal feed.

E 130 N has a Norton case and completely modern hinge construction. This is one of the most modern screw-cutting/ mechanic's lathes on the market.

E 130 R is the turret model of the above. Equipped with capstan or turret head, with or without retention of the above-listed characteristics, it can be used as a turret lathe.

Machine tools in this series are useful in a large plant as mechanic's lathes or as redressing lathes. They take up little space and are low-priced.

E 150 P is a production lathe. Height of centers is 150 mm; the machine has a turning length of 500 - 700 mm and a change-gear case. It has hydraulic feed which is infinitely variable at working operations of 0 to 4.5 m/min. (0.3mm to 2mm/rev); in reverse, the so-called high speed, the feed is infinitely variable up to 7 m/min. It is especially suitable for industrial mass production (electric motor parts, turning of shafts, etc.). The high limit of rotation speeds (2040/min) and the heavy construction make it particularly suitable for light metal machining. The multiple cutter design makes it a lathe with the greatest specific cutting power on the market.

E 160 HD. The development of modern industry obliges not only machine plants but also repair shops to pay special attention to the tools essential for their jobs. We produce the E 160 HD backing-off lathe with these particular needs in mind. With this lathe plants and workshops will themselves be able to produce

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the tools, end-milling cutters for various profiles, worm-cutters with right or left thread or with right or left grooves, etc. as they are needed. After the lathe is set, it backs off automatically. It can be used as a normal lathe and can thus perform all the necessary preliminary operations for making milling tools.

E 175. The large lathe for small industries. Our aim was to produce a relatively cheap precision universal lathe with large capacity for the more exacting plants. Of course, this lathe can also be used advantageously in manufacturing plants, particularly for tool making.

E 215. This heavy lathe, weighing approximately 1,300 kilograms, is designed for heavy industry as a thread-cutting lathe. It is completely enclosed, modern in form, and is produced in three models with turning lengths of 750, 1,000, and 1,500 mm, and with a center height of 215 mm.

E 250 is built like E 215 but has greater center height (250 mm). It can be delivered in three turning lengths: 1,000, 1,500, or 2,000 mm.

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Specifications

	E 250	E 215	E 175
Height of centers	250mm	215mm	175mm
Turning length	1,000; 1,500 or 2,000mm	750; 1,000 or 1,500mm	750 or 1,000mm
Spindle ϕ in main bearing	85mm	75mm	60mm
Length of main bearing	130mm	120mm	90mm
Spindle bore	50mm	38mm	30mm
Size of work chuck will hold			Morse No. 5
Bevel of main spindle	Metr. 1 : 20	Metr. 1 : 20	12
No. of main spindle revolutions	12	12	12
Main spindle rpm	12.5 - 560 25 - 1120	16 - 700	30 - 1,330
Face plate ϕ	450mm	380mm	
Morse taper of centers	No. 4	No. 3	No. 3
Bed width	380mm	305mm	265mm
Turning ϕ over bed	500mm	440mm	360mm
Turning ϕ over slide	280mm	250mm	200mm
Motor capacity (1400 rpm)	5-6HP	3HP	2HP
Greatest modulus in backing-off			
Greatest recovery			
Threading capacity (mm/rev)			
No. of slots			
Increase of slots (inches or cm)			
Approximate weight	1,700; 1,800; or 2,000 kg	1,200; 1,300; or 1,400 kg	600 or 700 kg
Greatest length	2,750; 3,250 or 3,750 mm	2,400; 2,650; or 3,150 mm	2,090 or 2,340 mm
Greatest width	1,100 mm	1,000 mm	800 mm
Crating size	3.84, 4.54 5.24 cubic meters	3.00, 3.32 3.94 cubic meters	1.9, 2.16 cubic meters

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E 160 HD	E 150 P	E 130
200mm	150 mm	130mm
320mm	500 or 750mm	500mm
60mm	74mm	44mm
110mm	112mm	90mm
20 mm	36 mm	23 mm
		ø 16 mm
Morse No. 3	Morse No. 5	Morse No. 4
8	6	
3 - 480	206, 322, 520, 810, 1,260, 2,050	
No. 3	No. 5	infinitely variable 60-1,200 No. 2
280 mm	420 mm	170 mm
380 mm	200 mm	260 mm
200 mm	150 mm	160 mm
2 HP	6 - 13 HP	2 HP
6 mm	infinitely variable hydraulic feed 0-4.5 m/min	
10 mm		
0.0635-96 mm		
1 - 40		
2-360/4-180		
1,200 kg	2,000 or 2,200 kg	400, 450, 480, or 500 kg
1,650 mm	2,100 or 2,350 mm	1,300 mm
800 mm	900 mm	650 mm
1.6 cubic meters	2.3 or 2.54 cubic meters	1.1 cubic meters

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