STAT

The following is a complete translation of the introduction to the Hungarian Machine Tool Catalogue "Szerszamgep 1," STAT and of the description and specifications of the eight Polish make machine tools included in the catalogue.

INTRODUCTORY

The pages of this collection have been arranged according to the system of the machine cadaster (gepkataszter) issued by the Ministry of Metallurgy and Machine Building Industry. This arrangement conforms to the system of the new price list which is to be employed in planning for 1952. Accordingly, the present collection is suitable for use in planning work in connection with the price list.

On most pages the item and code numbers of the machines are printed in red. The first three digits denote the number of the price list and indicate that the item in the price list is a mchine tool. (The three digits replace the two letters used previously.) The following four digits -- which are identical with the first four digits of the machine cadaster -- denote category within the group of the machine tools. The last two digits denote the size of the machine. On the basis of this cipher system, machines of the same kind and size may be arranged side by side and supplementary pages may be inserted where they belong.

The collection includes machine tools made in friendly states as well as Hungarian manufactures. The country of origin is denoted by a specific color band. Machines of identical size are arranged in the following sequence: Hungarian, Soviet, Polish, Czechoslovak, and East German.

Supplements to the collection will be issued from time to time. The new pages should be inserted according to the system described in the foregoing, while strips containing corrections, supplementary text, or prices should be pasted in the appropriate place. Notice will also be issued of the discontinuance of certain models, in which case the page in question should be removed.

Subscriptions for supplements are to be sent to Tervgazdasagi Konyvkiado (Enterprise for Planning Publications), Budapest V, Szent Istvan-ter 4.

The object of this collection is to facilitate the work of planners. It will be appreciated if comments, criticism, and wishes in connection with the use of the present collection in planning work will be brought to the attention of the publishers.

Budapest, 1951.

[Photographs of the machines described below are included in the original document.]

UNIVERSAL TOOL GRINDER

1 S A B
Manufacture's Type Number

C N 68
Unified Item Number

The machine is used for grinding miscellaneous straight-toothed and spiral-toothed tools. Due to its up-to-date construction, the machine is easy to operate and has high productivity. The strong and heavy frame assures vibration-free operation. The head is sturdy, is mounted on a swivel, and can be locked in any position; the angle may be read from a 90-degree scale. The grinding spindle is of hardened and finished chromium-nickel steel and is driven by a motor through a belt. The driving belt can be easily tightened by moving the motor downward. The spindle ball-bearings are protected against dust. The vertical movement of the grinding-head can be adjusted on a one-millimeter scale to an accuracy of 0.02 millimeter. Due to longitudinal and transversal roller movement, the work table is easy to operate. The upper part of the work table can be swiveled vertically, which permits taper grinding. Position adjustment is made on a scale calibrated in angles. The chuck can be set in any position. The T-shaped grooves of the chuck serve to secure the supports when the sides of the teeth are ground. The spindle is tapered to 50 metric and 3 Morse pitch. The faceplate is divided into degrees. The saddle can be easily disconnected by a crank.

SPECIFICATIONS

Work surface of table	915 x 135 mm
Maximum distance between centers	685 mm
Maximum distance between the chuck and the headstock center	535 mm
Height of centers	125 mm
Maximum dimensions of the faceplate	ø 150 x 12 mm
Longitudinal movement of the table	410 mm
Transverse movement of the table	205 mm
Table swivel	360°

Cadaster Code Number 596148

Unified item number for 1952 planning 272 59 61

National machine cadaster number 59 61 48

Maximum distance between the table and the spindle axis	250 mm
Vertical movement of the spindle	190 mm
Angle of spindle in either direction	120°
Speed of the ~~grinding~~ finishing spindle	3,850/5,780 rpm
Power output of electric motor	0.7 hp

Tentative price f. o. b. Budapest, crated, including all expenses [blank] forints

STANDARD EQUIPMENT

One electric motor. One universal chuck with three reducing cones. One triangular Morse cone. One right-hand head. One left-hand head. One spindle-extension pin. One support for grinding tooth sides. One support for small blanks. Grinding discs. Regulating mechanism (without diamond). Three protective covers. Two sets of cutters. Operating instructions.

SPECIAL ACCESSORIES

Dustproofing attachment. Grinding attachment for cutters with handles and module cutters. Grinding attachment for cover cutters. Grinding attachment for disk cutters. Grinding attachment for frictional punches. Grinding attachment for spiral drills. Spherical vise for flat grinding. Round-grinding attachment. Interior-grinding attachment. Support sheet for small blanks. Gauges. Universal disk-angle control attachment. Dividing head. Grind-stone centering attachment. Grinding attachment for frictional rough punches. Profile-grinding attachment.

Prices and specifications are approximate.

RESTRICTED
SECURITY INFORMATION

CIRCULAR SAW

C R 71
Manufacturer's type number

C N 66
Unified item number

A high-duty circular saw, which can be used to cut stock of various shapes (round, square, and strip). Exact and rapid work is assured by the easy mode of operation, high speed, great range of feeding, and rugged construction.

The heavy bed, which holds the hydraulically controlled vise, constitutes, together with the guide posts and the crossbeam, a closed, stiff frame.

The gear box, driven by an electric motor, has six speeds.

The power is transmitted directly to the blade by helical gear and worm drive. The hydraulic feed is regulated by a stepless mechanism and permits quick advance of the ~~block~~ blade to the ~~blade~~ stock. After cutting the stock, the blade returns quickly and automatically to its original position.

The speeds are changed by a lever. A throttle regulates the feed.

All other operations of the machine, such as engaging the feed, clamping the stock into the vise, and mechanical feeding on the roll table, are controlled by three adjacent arms. To avoid wrong connections, these three arms are separated safely from one another.

The roll table is also hydraulically operated.

Cadaster Code Number
312272. 73,74

Unified item number for 1952 planning 272 31 22

National machine cadaster code number 31 22 72-73-74

SPECIFICATIONS

Diameter of blade	610, 660, 710 mm
Maximum round stock	200, 225, 250 mm
Maximum square stock	200, 225, 240 mm
Maximum double T [I-bar?] stock	20, 30, 40 profile [?]
Six cutting speeds	15-35, 16-38, 17-40 m/min
stepless feed regulation	0-500 mm/~~m~~ min
Rapid feed	0-2,500 mm/~~m~~ min

RESTRICTED

Height of bed	700 mm
Power output of saw-driving motor	7.5 kw
Speed of saw-driving motor	1,430 rpm
Power output of gear box motor	1.5 kw
Speed of gear box motor	1,430 rpm
Power output of oil pump motor	1.5 kw
Speed of oil pump motor	1,430 rpm
Dimensions	800 x 1,500 x 2,100 mm
Weight of machine	3,000 kg
Weight of electrical equipment	150 kg
Weight of conveyor table	550 kg

Tentative price f. o. b. Budapest, crated, incl. all expenses 85,000 Forints

STANDARD EQUIPMENT

Complete electrical equipment. Electric coolant pump. One set of keys.

SPECIAL ACCESSORIES

Hydraulic guide table

One circular saw blade

The prices and specifications are approximate.

VERTICAL TURRET LATHE

K O 10
Manufacturer's Type Number

54
C N 55
Unified Item Number

The machine is used for machining wheel rims and is characterized by high efficiency. The work table has six speeds, ranging from 4 to 40 revolutions per minute. The change gears permit an increase in speed to 72 revolutions per minute. The tools can be placed in the turret head: on one side the rough cutters and on the other side the finishing cutters. The four-step feed is actuated by the main motor. The right-hand head performs rough cutting and finishing. The head has eight vertical feeds and rapid travel in both directions. The right-hand [sic] head machines the bore [hub] and grooves of the clamp rings. The heads have vertical rapid travel. Tool feed is automatic as soon as the left-hand head reaches the rim.

SPECIFICATIONS

Maximum interior diameter of rim	1,000 mm
Minimum interior diameter of rim when both heads are used	700 mm
Minimum interior diameter of rim when one head is used	500 mm
Table diameter	1,500 mm
Number of table speeds	6
Range of table speeds	4-40 rpm
Range of table speeds when extra change gear is used	72 rpm
Vertical feeds of right-hand head:	
four finish feeds	0.2-0.6 mm/rev
four rough feeds	0.7-2 mm/rev
Tool feeds of left-hand head	0.12-0.3 mm/rev
Maximum load of lifting mechanism	500 kg
Lifting speed	6 m/min
Power output of main driving motor	45 hp
" " of vertical high-speed motor of left-hand head	4 hp
" " of vertical high-speed motor of right-hand head	3 hp
" " of the vertical high-speed motor of the heads	3 hp

Cadaster Code Number
fl 515780

Unified item number for 1952 planning 272 51 57
National machine cadaster number 51 57 80

Power output of the motor of the lifting mechanism	3 hp
" " of water-pump motor	0.5 hp
Weight of machine	20,150 kg
Tentative price f. o. b. Budapest, crated, including all expenses	392,000 forints

STANDARD EQUIPMENT

Complete electrical equipment. One pair extra change gears. Coolant equipment. Cranks. Keys. Covers. Operating instructions.

SPECIAL ACCESSORIES

In ordering extras, detailed specifications are required.

The prices and specifications are approximate.

LATHE FOR NORMAL-GAUGE LOCOMOTIVE AND TENDER WHEELS

3 T C H
Manufacturer's type number

C N 54
Unified item number

Used for machining new or worn-out wheel rims.

Practical construction and elimination of machine vibration reduce the machining time considerably.

The lathe consists of a main frame and a two-sectional auxiliary bed which holds the four slides. The two front slides perform rough cutting and the two rear slides are used for profiling. The tailstock is equipped with a face plate which is driven through the gear shift box.

Each slide is equipped with a rapid-feed mechanism driven by reversing motors. Forward and backward travel of the four slides is accomplished by push-button switches. The lathe is equipped with a measuring device for reading the tread diameter. Readings are taken from the scale located on the upper slide, while the lower parts of the slide must be equipped with buffer bars.

Cadaster Code Number
[blank]

Unified item number for 1952 planning 272 51 54

National machine cadaster code number 51 54 84

SPECIFICATIONS

Height of centers	1,100 mm
Maximum diameter of the wheel rim that can be machined	2,300 mm
Minimum diameter of the wheel rim that can be machined	2,250 mm
Maximum diameter of the wheel flange that can be machined	950 mm
Maximum distance between face plates	3,000 mm
Total bed length	7,200 mm
Number of spindle speeds	12
Range of spindle speeds	0.4 - 5.8 rpm
Longitudinal feeds of roughing slide	0.45 - 2.7 rpm
Transverse feeds of roughing slide	0.5 - 3.1 rpm

Feed range of former slides	0.45 - 3.65 rpm
Radius of the cutter for machining the wheel flange	16 mm
Power output of main driving motor	50 hp
Speed of main driving motor	1,500 rpm
Power output of reversing motor in driving the headstock and tailstock	7.5 hp
Speed of the reversing motor	1,500 rpm
Power output of the motor driving the slides (1-1) at high speed	0.7 hp
Speed of the high-speed motor	3,000 rpm
Approximate weight of machine	50,000 kg
Actual production during 8 hours (worn-out wheel pairs with a diameter of 1,700 millimeters)	8 pairs
Tentative price f. o. b. Budapest, crated, including all expenses	997,000 Forints

STANDARD EQUIPMENT

Complete electrical equipment. Hard-metal cutter holder for the former slides. Master form for setting the hard-metal cutters in the former slides. Set of profile master forms for grinding of the cutters. Holder set for mushroom-headed cutters for the former slides. Sample iron mushroom. Tapering gauge for the manufacture of mushroom-headed cutters. Set of pattern lining for the normal-profile former slides. Gauge for positioning the cutters on the front slide. Set of keys. Cutter drawings. Iron cutter samples. Set of cutter holders for machining new wheels. One greaser. One set of buffer bars. Operating instructions.

SPECIAL ACCESSORIES

To avoid overload, a frictional switch can be supplied instead of the securing shearing bolt. The rotating stabilizer of the frictional switch can be adjusted to the wheel diameter.

The regulation front slides having slanting feed movement relative to the axis of the machine may be replaced by slides travelling parallel to the

axis, which are suitable for machining wheel rims without wheel flanges.

The disconnecting attachment for the stroke disc of the former slides will be supplied on special order.

If desired, the head- and tailstocks can be supplied with automatic clamps on special order.

The prices and specifications are approximate.

ROLL AND PRESSURE-POLISHING LATHE
(for Railroad Car Wheels)

T B G
Manufacturer's type number

C N 55
Unified item number

The machine satisfies all up-to-date requirements relative to the machining of railroad car wheels. Pressure-polishing offers the following advantages compared with grinding: it makes the journal diameter accurate and permanent over the entire length, makes the surface evenly smooth and polished, and hardens the journal surface. The mechanism is characterized by turning equipment which permits machining of the curvature to an accurate radius. Pressure-polishing is done by profiled rollers. The rollers are located on two strong arms and the pressure mechanism produces a pressure of 2-3,000 kilograms. Besides the rollers used for machining the journals, each slide has special rollers for machining the guide rail and neck. The lathe has two feeds; when running without load, the slide travels at high speeds. The bed and head- and tail-stocks are made of a single casting and, therefore, form a resistance unit against vibrations. The wheels can be locked between two center chucks and, together with the centers located in the two stocks, can be moved by hand wheels. Positioning and release are effected by a slide mechanism driven by a separate electric motor.

Cadaster Code Number
515677

Unified item number for 1952 planning 272 51 56

National machine cadaster code number 51 56 77

SPECIFICATIONS

Height of centers	635 mm
Maximum distance between centers	2,480 mm
Maximum tread diameter	1,100 mm
Largest journal	180 mm
Smallest journal	70 mm
Number of turning speeds	2

ROLL AND PRESSURE-POLISHING LATHE
(for Railroad Car Wheels)

T B G
Manufacturer's type number

C N 55
Unified item number

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Cadaster Code Number
515677

Unified item number for 1952 planning 272 51 56

National machine cadaster code number 51 56 77

SPECIFICATIONS

Height of centers	635 mm
Maximum distance between centers	2,480 mm
Maximum tread diameter	1,100 mm
Largest journal	180 mm
Smallest journal	70 mm
Number of turning speeds	2

Number of revolutions of belt pulley	375 and 750 rpm
Number of revolutions of wheels with 1,000 mm tread diameter	75 and 750 rpm
Turning speed of 1,000-millimeter tread diameter and 115-millimeter journal	27 m/pm
Turning speed of 1,000-millimeter tread diameter and 115-millimeter journal during pressure polishing	54 m/pm
Turning feed at 1,000 millimeter tread diameter	0.25 mm/rev
Feed in Pressure-polishing at 1,000-millimeter tread diameter	1.00 mm/rev
Power output of main driving motor	6.5 kw
Speed of main driving motor	3,000/1,500 rpm
Power output of lifting-mechanism motor	1.1 kw
Speed of lifting-mechanism motor	1,500 rpm
Power output of high-speed motor	0.5 kw
Speed of high-speed motor	3,000 rpm
Weight of machine	8,500 kg
Floor space required	3,300 x 6,600 mm
Tentative price f. o. b. Budapest, crated, including all expenses	[blank] forints

STANDARD EQUIPMENT

One set of rollers for the pressure-polishing of the guide rail. One set of rollers for the pressure-polishing of the neck. One set of centers. One set of keys. One series of cutter drawings. One iron cutter sample. One greaser. One machine book.

SPECIAL ACCESSORIES

A list of the required special accessories, together with details and technical specifications, should be enclosed with the order.

The prices and specifications are approximate.

FACE

SINGLE-FRAME [redacted] LATHE
TURRET BENCH

K N 8 and K N 11
Manufacturer's Type Number

C N 54
Unified Item Number

The machine has unusually high efficiency due to sturdy construction, easy setting of the stock to the faceplate, large range of revolutions (12 speeds) of the faceplate, automatic feeds, vertical hexagonal swivel turret head, and horizontal turret head.

By moving the horizontal side slide downward it is possible to machine stock which is larger than the vise.

Each of the two slides is driven by a separate motor; as a result, the stock can be machined on different sides simultaneously at different feeds.

Cadaster Code Number 134375, 77

Unified item number for 1952 planning 272 13 43

National machine cadaster number 13 43 75-77

SPECIFICATIONS	K N 8	K N 11
Maximum diameter that can be turned without side slide	1,000	1,250 mm
Maximum diameter that can be turned with side slide	900	1,100 mm
Maximum height that can be turned	800	1,000 mm
Maximum distance between table surface and rim of lower head at the highest position of cross vise and turret head	1,000	1,250 mm
Table diameter	800	1,100 mm
Number of speeds	12	12
Range of revolutions in first speed	5-125	5-125 rpm
Range of revolutions in second speed	2.5-62.5	2.5-62.5 rpm
Vertical feed of turret head	700	700 mm
Number of tool-holding bores	6	6
Diameter of tool-holding bores	60	60 mm
Maximum distance between the table and the lower rim of the turret holder of the side slide	650	650 mm
Maximum horizontal distance between the front rim of the turret holder and the table	650	650 mm
Number of slide feeds	12	12

	K N 8	K N 11
Number of tool-holding bores of the side slide	4	4
Range of vertical, horizontal, and slanting feeds of slides per revolution of table	0.2-10	0.2-10 mm
High speed of slide	1,800	1,800 mm/min
High speed of cross vise	500	500 mm/min
Size of shavings at 16 m/min cutting speed for 50-60 kg/sqm steel	25	25 sq mm
Ditto for cast iron	40	40 sq mm
Power input for main drive	25	25 hp
Power input for rapid feed [?]	6	6 hp
Net weight of machine	9,200	10,000 kg
Tentative price F. O. B. Budapest, crated, including all expenses	[blank]	

STANDARD EQUIPMENT

Complete electrical equipment. Operating instructions.

SPECIAL ACCESSORIES

Faceplate chucks	[blank]	forints
Lathe chuck	"	"
Attachment for taper turning	"	"
Attachment for thread cutting	"	"
Coolant attachment	"	"
Electric hoist for 500-750-1,000 kg, as ordered	"	"

Prices and specifications are approximate.

CIRCULAR-SAW GRINDING MACHINE

O C R 140
Manufacture's Type Number

C N 68
Unified Item Number

The machine is used to sharpen saw blades equipped with regulation and high-speed steel segments. Simple and rugged construction and easy handling assure economic operation wherever circular saws are employed.

In ordering grind stones and indexing plates the arrangement and number of the teeth and the external diameter of the saw blade must be specified.

The machine is automatic.

SPECIFICATIONS

Diameter of blade	350-1,400 mm
Arrangement of teeth	5-45 mm
Grinding depth limits	0-0.6 mm
Cutting angle of blade	0-25°
Diameter of clamp	35 mm
Diameter of grind stone	300 mm
Number of strokes at low speed	30/minute
Number of strokes at high speed	60/minute
Power output of driving motor	0.8 kw
~~Speed~~ Revolutions of driving motor	1,400/minute
Dimensions (length, width, height)	780 x 520 x 1,700 mm
Approximate weight	400 kg
Tentative price f. o. b. Budapest, crated, including all expenses	20,000 Forints

STANDARD EQUIPMENT

Complete electrical equipment. One fan. One set of keys. Operating instructions.

Cadaster Code Number
596780

Unified item number for 1952 planning 272 59 67

National machine cadaster number 59 67 80

SPECIAL ACCESSORIES

Grind stone 300-millimeters diameter. Indexing plates

The prices and specifications are approximate

HIGH-DUTY SEMI-AUTOMATIC LATHE FOR RAILROAD CAR AND TENDER WHEELS

1 T C H
Manufacture's Type Number

C N 55
Unified Item Number

The machine is used for turning new and worn-out railroad car and tender wheels and satisfies up-to-date requirements. The machine is equally suitable for machining normal-gauge and broad-gauge wheel pairs. The interior cavity of the bed is filled with a material which has vibrating properties different from those of cast iron, thus assuring quiet operation.

A hand wheel located between the motor and the gear box facilitates gear shifting when the machine is not running. A hand brake, located at the same place, is used for setting the faceplate.

A center support which can be driven by a motor is located in the center bore of the saddle. Power is transmitted to the main spindle by a spur gear fastened to the faceplate and driven by the main drive. When the wheel pairs are placed on the machine or are removed, the saddle can be advanced longitudinally by a shaft built into the bed.

The roughing tool slides are used for the following purposes: 1) for facing, chamfering, and grooving (wheels of new) rims and 2) for roughing the running surfaces and the wheel flanges of worn-out wheels to facilitate finishing with former slides. Both slides can be advanced mechanically in either direction, namely, perpendicularly to the axis for facing and parallel to the taper of the rim profile.

When the saddle is moved, the journal first sinks into the tapering bore of the saddle. When the movement is continued the wheels, together with the support, ~~is~~ are advanced until a switch stops the saddle. The wheel pair always remains in the same position relative to the saddle and locks the saddle in this position. If the center support of the ~~spindle saddle~~ tailstock is subsequently moved, the wheels ~~is~~ are centered and locked. After placing the rotating mechanism in the appropriate position the machine can be started.

The main driving motor, the motor used for moving the saddle, and the center-support motor located in the saddle are controlled by a push-button switch which is located on the roughing-tool slides, while the motor which moves the slides can be controlled from any position of the slide.

Cadaster Code Number
515477

Unified item number for 1952 planning 272 51 54

National machine cadaster number 51 54 77

SPECIFICATIONS

Height of centers	600 mm
Maximum tread diameter that can be turned	1,100 mm
Maximum wheel flange diameter that can be turned	1,150 mm
Minimum tread diameter (worn-out wheel pairs) that can be turned	850 mm
Maximum journal distance	2,430 mm
Normal gauge	1,435 mm
Length of main bed	5,800 mm
Number of speeds	12
Number of revolutions of faceplate	1.46-14.8 mm/min
Advance of roughing tool slides in longitudinal machining	0.47-3.3 mm/rev
Advance of roughing tool slides in side machining	0.32-2.56 mm/rev
Chamfering radius of cutters in wheel-flange machining	16 mm
Average productivity (number of worn-out wheel pairs in 8 hours)	24 pr
Power output of main driving motor	55 hp
Number of revolutions of main driving motor	1,300 rpm
Power output of motor used for moving the saddle	10 hp
Number of revolutions of motor used for moving the saddle	1,500 rpm
Approximate weight	35,000 kg
Tentative price f. o. b. Budapest, crated, including all expenses	686,000 forints

STANDARD EQUIPMENT

One set of hard-metal cutter holders. One pattern for setting the hard-metal cutters. One set of profile patterns for polishing hard-metal cutters. One set of mushroom-headed cutter holders. One taper gauge for the manufacture of mushroom-headed cutters. One sheet pattern for making mushroom-headed cutters. One set of cutter holders for the machining of new wheels. One set of brakeshoes with 780-880 diameter for worn-out wheels. One set of brakeshoes for new wheels. One set of chucks for journals with

a diameter of 115-105. One set of centers and center holders. One set of lining patterns for the pattern slides for normal rim profile. One gauge for setting the cutters in the front slides. One set of keys. One set of drawings for cutter making. One greaser. One iron sample cutter.

SPECIAL ACCESSORIES

Besides the above accessories which are regularly supplied with the machine, spare parts which are indispensable in machining wheel pairs can be furnished at an additional charge. For this reason, drawings of the wheel pairs to be turned on the machine should be enclosed with the order.

The prices and specifications are approximate.

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