Logan

LATHES • SHAPERS • ACCESSORIES

LOGAN ENGINEERING CO. LAWRENCE AND LAMON AVE. CHICAGO 30, ILL.

LOOK TO LOGAN FOR BETTER LATHES AND SHAPERS
COMBINE LOGAN SUSTAINED ACCURACY
WITH MORE CAPACITY AND MORE POWER

At spindle speeds that take full advantage of high speed carbide tools, or for hogging out a heavy cut, the Logan 12” Lathe produces precise results. The oversize ball bearing spindle provides sustained accuracy through its range of 16 speeds, from 38 to 2169 rpm. A massive headstock, the extra heavy spindle, wide spaced ball bearing spindle mountings, the outboard double V-Belt drive, and the rugged overall proportions of the lathe combine to assure smooth power and precision results on every type of lathe operation. The 12” swing, 1” collet capacity, and the 1½” spindle hole are indicative of its ability to handle the bulk of any shop’s lathe work.

These features are common to all Logan 12” Lathes:

DOUBLE V-BELT, "OUTBOARD" DRIVE . . . assures more efficient transmission of power from countershaft to headstock, and simplifies belt replacement and adjustment. Uses ⅜ or 1 HP motor.

BALL BEARING SPINDLE
Made of 52100 heat treated steel, and massed proportioned for extreme rigidity on heavy cuts, the Spindle turns on oversize New Departure precision pre-lubricated ball bearings.

MASSIVE HEADSTOCK . . .

NEWEST, FINEST CARRIAGE DESIGN . . .
Carriage moves as close to headstock as job requires. Simple, convenient, lever-operated, disc type clutch. New large threading dial. Extra large compound and cross feed dials with graduations well separated and sharply defined for easy reading. Prestressed for quick adjustment. Direct reading for each thousandth of radius cut, and wide separation of graduations permit accurate estimation of quarters-thousandths. Tool room quality dials. Accurately machined and ground top surfaces on cross slide and saddle permit mounting fixtures and use of magnetic indicators. Cross slide designed for direct application of taper attachment. Extra wide end long bearing surface on cross feed slide. Adjustable gib on cross slide and compound. Extra large supports throughout for tool rigidity. Apron operates in both of oil.
SPECIFICATIONS
FOR 12 INCH LOGAN LATHES

CAPACITY
Swing over bed and saddle wings......................... 12"
Swing over saddle cross slide............................... 6-9/16"
Distance between centers.......................... 23" (2957-35")

CROSS SLIDE AND COMPOUND REST
Cross Slide Travel 6¼"
Compound Rest Travel 2¼"
Compound Rest graduated 90° in both directions
Tool Post Opening for Tool Holder ½" x ¾"
Size of cutter bits ¼" sq.

HEADSTOCK AND SPINDLE
Spindle Bearings (4) Seated, Precision New Departure
Hole through Spindle 1½"
Spindle Nose diameter and threads per inch 2¼"-8
Drive Plate Diameter 6"
Number of Spindle Speeds 16
Spindle Speeds, direct drive — 235, 225, 215, 205, 185, 150, 125, 100
Spindle Speeds, Back gears engaged — 38, 60, 70, 85, 97, 115, 134, 210
Spindle Nose Adapter to #2 Morse

BED
Width of bed across ways 6-15/16"
Length of bed................................. 43½" (2957-55½")
Precision ground ways, 2 prismatic "V" ways and 2 flat ways

TAILSTOCK
Spindle Travel .......................................................... 4"
Spindle Graduations .............................................. 1/16"
Morse Taper Center ............................................ #2
Tailstock set-over for Taper turning.................. 11/16"

UNDERNEATH DRIVE
Two step drive—Motor Pulley to Countershaft
V-belt B section Belt size 40 x 3/8 inches
Four step drive Countershaft to Jackshaft
V-belt B section Belt size 30 x 5/8 inches
Double V Belt Drive—Jackshaft to Spindle
B section belt, belt size 60 x 3/8 inches
Jackshaft and Countershaft mounting—Ball Bearings

THREADS AND FEEDS
Quick Change Gear Box and Automatic Apron
Worm Drive from lead screw spline for Power feeds
Longitudinal feed .0015" to .0005" per spindle revolution
Cross feed .25 times longitudinal feed
Half nut drive from lead screw thread for thread cutting
Threads 48 selections RH or LH—4 to 224 per inch
Lead screw diameter and threads per inch—3¼"-8

MOTOR AND SWITCH
Use ¾ or 1 HP motor 1750 rpm
Drum type reversing switch furnished

LATHE EQUIPMENT INCLUDED WITH LATHE
1 6" Drive Plate 1 #2 Morse Taper Adapter Sleeve
2 60° Centers 1 Tool Post and Wrench
1 Tapering Dial 1 Taperlock Wrench
1 Threading Chart 1 Drum Reversing Switch
Parts List and Instruction Book

OVERALL DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>²955</th>
<th>²957</th>
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</thead>
<tbody>
<tr>
<td>Length</td>
<td>58&quot;</td>
<td>70½&quot;</td>
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<tr>
<td>Width</td>
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<td>21&quot;</td>
</tr>
<tr>
<td>Height</td>
<td>49&quot;</td>
<td>49&quot;</td>
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</table>

Screw Cutting Lathes

<table>
<thead>
<tr>
<th>Lathe No.</th>
<th>Description</th>
<th>Ship. Wt. (Lbs.)</th>
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<tbody>
<tr>
<td>²955</td>
<td>Quick Change, Pedestal Cabinet Model, 23&quot; Centers, V-Belt Drive</td>
<td>950</td>
</tr>
<tr>
<td>²957</td>
<td>Quick Change, Pedestal Cabinet Model, 35&quot; Centers, V-Belt Drive</td>
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Turret Lathes

<table>
<thead>
<tr>
<th>Lathe No.</th>
<th>Description</th>
<th>Ship. Wt. (Lbs.)</th>
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</thead>
<tbody>
<tr>
<td>²935</td>
<td>Quick Change, Pedestal Cabinet Model, 43&quot; Bed, Lever Turret, V-Belt Drive</td>
<td>1105</td>
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<tr>
<td>²935-2</td>
<td>Quick Change, Pedestal Cabinet Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>1115</td>
</tr>
</tbody>
</table>

(²935 and ²935-2 are same construction as ²955 but with turret and double tool post cross slide in place of tailstock and compound rest)
Logan 11" SWING LATHES

Typical Advanced Design Features

- 16 Speed V-Belt Drive
- Ball Bearing Headstock
- Ball Bearing Countershaft
- Precision Ground V-Way Bed
- Automatic Apron with lever operated disc type clutch

Accurate, Versatile, Durable, Convenient

These lathes have the capacity that goes with 11" swing, 1" collet, 1½" spindle hole, and center distances of 24" and 36". They have the sustained accuracy that results from the Logan ball bearing spindle, and the rugged, two-V-way, two flat way bed with ways precision ground to a tolerance of .0005". They have the advanced design and rugged construction that insure the extra long service life for which Logan Lathes are known.
SPECIFICATIONS
FOR 11 INCH LOGAN LATHEs

CAPACITY OF LATHE
- Swing over bed and saddle wings: 11½"
- Swing over saddle cross slide screw cutting lathes: 6½"
- Swing over saddle cross slide turret lathe: 4½"

THREADS AND FEEDS
- Quick change gear box and automatic apron
- Wear drive from lead screw spline for power feeds
- Friction clutch on power feeds
- Longitudinal feed: .0018" to .0000" per spindle revolution
- Cross feed: 25 times longitudinal feed
- Half nut drive from lead screw thread for thread cutting
- Threads: 48 selections RH or LH—4 to 224 per inch
- Lead screw diameter and threads per inch: 3/4"-8

BED
- Width of bed across way: 6.15/16"
- Length: 43¼" and 55½"
- Precision ground ways: 2 prismatic "V" ways and 2 flat ways

HEADSTOCK AND SPINDLE
- Spindle Bearings: Sealed New Departure Ball Bearings, precision type with preloading
- Hole through spindle: 1½"-8
- Draw-in collet capacity: 1"
- Spindle Nose Diameter and threads per inch: 2¾"-8
- Width of face of bull gear and back gears: 1¼"
- Face plate diameter: 6"
- Number of spindle speeds: 16. 45-1500 rpm

CROSS SLIDE AND COMPOUND REST,
SCREW CUTTING LATHE
- Cross Slide Travel: 6¾"
- Cross Slide graduated in thousandths
- Cross feed screw mounted on self lubricating bronze bearings
- Compound Rest Travel: 2¼"
- Compound rest graduated in thousandths
- Compound swivel graduated 90° in both directions
- Tool post opening for tool holder shank: 3/4" x 3/4"
- Size of cutter bits used: 1¼" sq.

CROSS SLIDE, TURRET LATHE
- Cross Slide Travel: 6" (not graduated in thousandths)
- Cross feed screw mounted on self lubricating bronze bearings
- Adjustable double tool post with adjustable wedges
- Tool post slots: 7/16" x 1 3/16"

TAILSTOCK
- Spindle Travel: 4" (not graduated in thousandths)
- Spindle Graduations: 1/16"

Morse Taper center: No. 2
Tailstock set-over for taper turning: 11/16"

TURRET
- Distance across flats: 5¼"
- Six position, self indexing with adjustable stops
- Turret holes, diameter: 9/16" regular—¾" on special order
- Turret holes bored from headstock of lathe
- Maximum stroke of turret: 4¼"

COUNTERSHAFT ASSEMBLY—
FLOOR AND BENCH MODELS
- All "V" belt drive
- Two step motor pulley—Four step countershaft pulley
- Countershaft mounted on ball bearings
- Adjustable motor mounting bracket
- Countershaft assembly independently supported on patented 3 point suspension
- Countershaft assembly completely insulated with rubber to prevent vibration being transmitted to lathe
- Countershaft and all pulleys completely enclosed and guarded
- Automatic belt tension release when guard for cone pulleys is raised to change belt steps

UNDERNEATH DRIVE (Pedestal Models)
- Two step motor pulley to countershaft drive, B section V-belt
- Belt size: 40" x ½"
- Four step countershaft to jackshaft drive, B section V-belt
- Belt size: 30" x ½"
- Double V-belt drive, jack shaft to spindle. A section V-Belts
- Belt sizes: 49" x ½"
- Jack shaft and countershaft mounting—Ball Bearing

LATHE EQUIPMENT
- 1 6" Face Plate
- 1 Spindle Nose Taper Adaptor
- 2 60° Centers
- 2 No. 2 M.T.
- 1 Threading Dial
- 1 Tool Post Holder and Wrench
- 1 Threading Chart
- 1 Tailstock Wrench
- Parts List and Instruction Book

OVERALL DIMENSIONS
- Model 1920 — L 54" W 30" H 48½"
- Model 1922 — L 66" W 30" H 48½"
- Model 1955 — L 59" W 21" H 48½"
- Model 1957 — L 70½" W 21" H 48½"

MOTOR
- Use ¾ HP, 1750 RPM Motor
- If lathe is ordered without motor, specify bore of motor pulley to be furnished with lathe

Screw Cutting Lathes

<table>
<thead>
<tr>
<th>Lathe</th>
<th>Ship, Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Lbs.)</td>
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<tr>
<td>1915</td>
<td>505</td>
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<tr>
<td>1917</td>
<td>550</td>
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<tr>
<td>1920</td>
<td>615</td>
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<tr>
<td>1922</td>
<td>665</td>
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<tr>
<td>1955</td>
<td>680</td>
</tr>
<tr>
<td>1957</td>
<td>870</td>
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Turret Lathes

<table>
<thead>
<tr>
<th>Turret Lathes</th>
<th>Ship, Wt.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(Lbs.)</td>
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<tr>
<td>1935</td>
<td>865</td>
</tr>
<tr>
<td>1935-2</td>
<td>875</td>
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<tr>
<td>(1935 and 1935-2 are same as 1955 but with turret and double tool post)</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>670</td>
</tr>
<tr>
<td>1940-2</td>
<td>680</td>
</tr>
<tr>
<td>(1940 and 1940-2 are same as 1920 but with turret and double tool post)</td>
<td></td>
</tr>
</tbody>
</table>
Logan 10" SWING LATHES

FOR SMALL TO MEDIUM WORK IN INDUSTRY AND SCHOOLS

Industrial shops and production lines reduce costs and improve efficiency by concentrating small and medium work on Logan 10" Lathes. School shops find these versatile, rugged tools ideal for training. Ball bearing spindle mountings; rugged two-way, two-flat-way beds precision ground to a tolerance of .0005"; self-lubricating bronze bearings at vital wear points...are typical of the features that make these 10" Logans outstanding performers.

Specifications

\[ \text{CAPACITY OF LATHE} \]
- Swing over bed: 10\ otherwise
- Swing over saddle cross slide: \( \frac{3}{4} \)
- Distance between centers: 21" or 31"

\[ \text{THREADS AND FEEDS} \]
(Quick Change Models)
- Quick change gear box and automatic apron
- Worm drive from lead screw
- Split spindles for power feeds

\[ \text{THREADS} \]
- Longitudinal feed: \( \frac{3010}{1000} \) to \( \frac{1000}{10000} \) per spindle revolution
- Cross feed: 15 times longitudinal feed
- Half nut drive from leadscrew thread for thread cutting

\[ \text{THREADS} \]
- Threads: \( \frac{4}{8} \) to \( \frac{1}{4} \) to 20 per inch

\[ \text{HEADSTOCK AND SPINDLE} \]
- Front bearing: double-throw ball bearing
- Rear bearing: single throw ball bearing
- Hole through spindles: \( \frac{3}{4} \)
- Draw-in collet capacity: \( \frac{3}{16} \)
- Morse Taper with adapter: No. 5 to No. 3
- Size of centers: \( 1 \frac{1}{2} \) to \( 3 \frac{1}{4} \)
- Morse Taper: No. 5 to No. 3
- Spindle nose diameter and threads per inch: \( 1 \frac{3}{4} \)
- Number of spindle speeds: 12
- Spindle speeds: \( 700 \) to \( 1800 \) rpm

\[ \text{CARRIAGE AND COMPOUND REST} \]
- Cross slide graduation: in thousandths
- Travel of carriage: \( 6 \frac{1}{2} \)
- Compound rest top slide graduation: in thousandths
- Compound rest swivel: \( 90° \)
- In both directions
- Tool post: \( \frac{3}{4} \) x \( \frac{3}{4} \)
- Size of cutter bits used: \( \frac{3}{4} \)

\[ \text{TAILSTOCK} \]
- Spindle travel: \( 2 \)
- Spindle graduations: \( 1 \)
- Morse Taper center: No. 2

\[ \text{COUNTERSHAFT ASSEMBLY} \]
(Floor or Bench Models)
- All \( \frac{3}{4} \)" drive
- Two step motor pulley—Three step counter-shaft pulley
- Countershaft mounted on ball bearings
- Adjustable motor mounting
- Countershaft assembly completely insulated
- With rubber to prevent vibration being transmitted to lathe
- Counterweights and all pulleys completely enclosed and guarded
- Automatic brake release when guard for cone pulley is raised

\[ \text{UNDERNEATH DRIVE} \]
(Pedestal Model)
- Two step motor pulley to countershaft drive
- \( 1 \) section \( V \)-belt, \( 4 \) belt size
- Four step countershaft to jackshaft drive
- \( 1 \) section \( V \)-belt, \( \frac{1}{4} \) belt size
- Double \( V \)-belt drive, jack shaft to spindle
- A section \( V \)-belts, \( 4 \) belt size
- Jack shaft and countershaft mounting

\[ \text{LATHE EQUIPMENT} \]
- No. 5 Face Plate
- 1 60° Centers
- 1 16" Chuck
- 1 16" Chuck Adapter
- 1 16" Live Center
- 1 16" Tool Post
- 1 16" Tool Post Holder
- 1 3" Tailstock
- 1 3" Tailstock Holder
- 1 3" Tailstock Chuck
- 1 3" Tailstock Chuck Wrench

\[ \text{OVERALL DIMENSIONS} \]
- Model 1925...15" base
- Model 1926...18" base
- Model 1927...20" base

\[ \text{MOTOR} \]
- Use 1 1/2 H.P. 1750 R.P.M. motor

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For small to medium work in industry and schools. Industrial shops and production lines reduce costs and improve efficiency by concentrating small and medium work on Logan 10" Lathes. School shops find these versatile, rugged tools ideal for training. Ball bearing spindle mountings; rugged two-way, two-flat-way beds precision ground to a tolerance of .0005"; self-lubricating bronze bearings at vital wear points...are typical of the features that make these 10" Logans outstanding performers.

**Screw Cutting Lathes**

<table>
<thead>
<tr>
<th>Lathe No.</th>
<th>Screw Cutting Lathes</th>
<th>Ship. Wt. (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1805</td>
<td>Plain Change, Bench Model, 24&quot; Centers, V-Belt Drive</td>
<td>410</td>
</tr>
<tr>
<td>1806</td>
<td>Plain Change, Bench Model, 31&quot; Centers, V-Belt Drive</td>
<td>440</td>
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<tr>
<td>1810</td>
<td>Plain Change, Pedestal Cabinet Model, 24&quot; Centers, V-Belt Drive</td>
<td>440</td>
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<td>1811</td>
<td>Plain Change, Pedestal Cabinet Model, 31&quot; Centers, V-Belt Drive</td>
<td>440</td>
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<tr>
<td>1815</td>
<td>Quick Change, Bench Model, 24&quot; Centers, V-Belt Drive</td>
<td>470</td>
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<tr>
<td>1816</td>
<td>Quick Change, Bench Model, 31&quot; Centers, V-Belt Drive</td>
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<tr>
<td>1820</td>
<td>Quick Change, Pedestal Cabinet Model, 24&quot; Centers, V-Belt Drive</td>
<td>470</td>
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<td>1821</td>
<td>Quick Change, Pedestal Cabinet Model, 31&quot; Centers, V-Belt Drive</td>
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<td>1875</td>
<td>Quick Change, Pedestal Cabinet Model, 24&quot; Centers, V-Belt Drive</td>
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**Turret Lathes**

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<th>Lathe No.</th>
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<th>Ship. Wt. (Lbs.)</th>
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<td>Hand Screw, Floor Model, 43&quot; Bed, Lever Turret, V-Belt Drive</td>
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<td>1830-2</td>
<td>Hand Screw, Floor Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>540</td>
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<td>1835</td>
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<td>790</td>
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<td>1835-2</td>
<td>Quick Change, Pedestal Cabinet Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>800</td>
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<td>1840</td>
<td>Quick Change, Floor Model, 43&quot; Bed, Lever Turret, V-Belt Drive</td>
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<td>1840-2</td>
<td>Quick Change, Floor Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>600</td>
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<td>1840</td>
<td>Quick Change, Floor Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>600</td>
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<tr>
<td>1850</td>
<td>Plain Change, Floor Model, 43&quot; Bed, Lever Turret, V-Belt Drive</td>
<td>580</td>
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<tr>
<td>1850-2</td>
<td>Plain Change, Floor Model, 43&quot; Bed, Pilot Wheel Turret, V-Belt Drive</td>
<td>590</td>
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</tbody>
</table>

**No. 1830-2**
- Hand Screw Machine, 43" bed, Pilot Wheel Turret, V-Belt drive, Lever operated double tool post cross slide clamps directly to bed in place of carriage.

**No. 1830**
- Same as No. 1830-2, but has lever operated turret. Order LA 32-34 Bar feed for use with these lathes.

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**No. 1805**
- Plain Change Bench Model Screw Cutting Lathe
For use on No. 1836 or No. 18302 Hand Screw Machines only. Maximum capacity ¾" round stock. Maximum feed per stroke is 2”. No. AC-50 Push Type Collars are used in sizes from 1/16” to ¾”. A patented cam action prevents feeding while bar is being locked in collet and eliminates locking while bar is being fed.
No. LA-32-34 Ship wt. 45 lbs.

**BITS**

No. 560 Has Blank Cutter Bits, size ¼” x ¼” x 2”—packaged set of 6, ship wt. 1 lb.
No. 561 Has Formed Cutter Bits, size ½” x ½”—packaged set of 6, ship wt. 1 lb.
No. 558 Carbide Tipped Formed Bits, size ¼” x ¼”—packaged set of 6, ship wt. 1 lb.

**BORING BARS**

Used with No. 556 Boring Tool Holder

<table>
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<tr>
<th>Article No.</th>
<th>Size</th>
<th>Ship Wt.</th>
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<tbody>
<tr>
<td>570-A</td>
<td>¾ x 4”</td>
<td>¼ lb.</td>
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<tr>
<td>570-B</td>
<td>3/16 x 4 1/8”</td>
<td>¼ lb.</td>
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<tr>
<td>570-C</td>
<td>½ x 5”</td>
<td>¼ lb.</td>
</tr>
<tr>
<td>570-D</td>
<td>5/16 x 6”</td>
<td>½ lb.</td>
</tr>
<tr>
<td>570-E</td>
<td>¾ x 7”</td>
<td>½ lb.</td>
</tr>
<tr>
<td>570-F</td>
<td>7/16 x 8”</td>
<td>½ lb.</td>
</tr>
</tbody>
</table>

**SPINDLE BRAKE**

Fits any Logan 11” Swing Lathe. Replaceable leather shoe applies friction to spindle for rapid brake. Spring return lever.
No. AC-321 Spindle brake with screws for attaching. Shipping weight, 10 lbs.

**JACOBS CENTER REST CHUCK**

1/4-34” capacity. Requires No. 448 Arbor.
No. 455 Shipping wt. 2 lbs.

**JACOBS DRILL CHUCKS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Capacity</th>
<th>Arbor Supply</th>
<th>Ship Wt.</th>
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</thead>
<tbody>
<tr>
<td>451</td>
<td>0-1/2”</td>
<td>Arbor, 3/16”</td>
<td>3/4 lb.</td>
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</tbody>
</table>

**JACOBS HEADSTOCK CHUCKS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Capacity</th>
<th>Arbor Supply</th>
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<tbody>
<tr>
<td>453</td>
<td>1/4-5/8”</td>
<td>Arbor, 3/16”</td>
<td>3/4 lb.</td>
</tr>
</tbody>
</table>

**JACOBS COMMUTATOR CHUCK KIT**

Contains a Jacobs Armature Driving Chuck, ½ to ¾" capacity, and a Center Rest Chuck also ¼ to ¾" capacity. Both chucks equipped with No. 2 Morse Taper Arbors to fit the headstock and tailstock.
No. 459 Shipping wt. 9 lbs.
LOGAN LATHE ACCESSORIES

BUCK ADJUST-TRU CHucks

6-Jaw and 3-Jaw Types
Chuck to .0005" precision in 1 minute, and re-chuck to .0005" on duplicate parts with scroll chuck speed, with no further adjustment. Hold I.D. and O.D. true... and end most needs for stub arbors, mandrels and special fixtures.

- 6-Jaw Type Replaces Collets
Infinite spindle hole capacity from 1/4" to 1 1/2". Replaces step collets, too. Step jaws provide such capacity from 1/4" to 5". All told, this single chuck handles the work of 93 collets!

No. 3662 6" diameter, 1 1/2" center clearance, 3/4" jaw width, 6 internal and 6 external jaws. Order AC-113 or AC-114 Chuck adapter. Shipping wt., 28 lbs.

- 3-Jaw Type Replaces 4-Jaw Chucks
Has the accuracy of 4-jaw chucks plus the speed and versatility 4-jaw chucks lack.

No. 3634 6" diameter, 1 1/2" center clearance, 3/4" jaw width, 3 internal and 3 external jaws. Order AC-113 or AC-114 Chuck adapter. Shipping wt., 27 lbs.


HAMPTON SPEED CHucks
Handles round or hexagon stock with the same set of jaws and identical adjustments. Simplifies precision production of concentric and eccentric parts. Jaws opened and closed 1/64" without stoppage spindle. Complete set of socket wrenches with each model.

No. 600 1" capacity, complete with 3 sets of jaws, 1/4" to 1", lathe bed clamp, stop plate, spanner wrench and with 1/4"-8 thread adapter. Shipping weight, 22 lbs.

No. 601 1-5/16" capacity, complete with 4 sets of jaws, 1/4" to 1-5/16", lathe bed clamp, stop plate, spanner wrench and with 2 1/4"-8 thread adapter. Shipping weight, 26 lbs.

3-JAW UNIVERSAL CHucks

No. 436 Medium Duty, 5". Body of chuck threaded for 1 1/2"-8 thread spindle. Shipping wt., 12 lbs.

No. 431 Heavy Duty, 5". Body of chuck threaded for 1 1/2"-8 thread spindle. Shipping wt., 15 lbs.

No. 1063 Heavy Duty, 6". Adapter furnished for 2 1/4"-8 thread spindle. Shipping wt., 20 lbs.

4-JAW INDEPENDENT CHucks

No. 444 6", 4-Jaw. Body of chuck threaded for 1 1/2"-8 thread spindle. Shipping weight, 13 lbs.

No. 1064 6", 4-Jaw. Adapter furnished for 2 1/4"-8 thread spindle. Shipping weight, 20 lbs.

No. 1284 8", 4-Jaw. Adapter furnished for 2 1/4"-8 thread spindle. Shipping weight, 27 lbs.

DRAW-IN COLLETS

No. AC-30 Used with # AC-152, # AC-155 and # AC-166 Collet Attachments. Sizes 1/16" to 1/4" by 32nds. Round. Ship. wt., 1/2 lb.

No. AC-35-5 Set of 15 # AC-30 Collets, 1/16" to 1/2" by 32nds. Ship. wt., 7 lbs.

No. 475 Used with # AC-360, # 360-1, # AC-2360, # LA-1050, # LA-1050-1, # AC-2150 Collet Attachments. Sizes 1/16" to 1" by 32nds. Round. Ship. wt., 3/4 lb.

No. 477-5 Set of 21 # 475 Collets, 1/16" to 1" by 32nds. Ship. wt., 18 lbs.

PUSH TYPE COLLETS


No. AC-45-5 Set of 19 # AC-50 Collets, 1/16" to 3/4" by 32nds. Ship. wt., 8 lbs.

DRAW-IN COLLET CHUCK ATTACHMENTS

All attachments consist of hollow draw bar, tapered closing sleeve, spindle nose cap and spindle cap wrench.

No. AC-132 Chucks work between 1-15/16" and 1 1/2" diam. Uses No. AC-30 Collets. For Logan 10" Lathes. Shipping wt., 5 lbs.

No. LA-1050 Chucks 1 1/8"-1" diameter work. Uses No. 475 Collets. For Logan 11" Lathes with Serial No. 52575 and under. Shipping wt., 7 lbs.

No. LA-1050-1 Same as No. 1050 for 11" Logan Lathes with Serial No. 52576 and over. Shipping wt., 7 lbs.

No. AC-2050 Uses No. 475 Collets and chucks work between 1/16" and 1". For Logan 12" Lathes. Shipping wt., 8 lbs.
PRODUCTION COLLET ATTACHMENTS

All models are lever operated. Open and close while lathe spindle is in motion.

No. AC-103 Uses # AC-30 Collets. For # 300 Series Lathes. 
Ship. wt. 12 lbs.
No. AC-116 Uses # AC-30 Collets. For
# 900 and # 1600 Series Lathes. Ship. wt. 12 lbs.
No. AC-360-1 Uses # 475 Collets. For Logan 11" Lathe, Serial Number 52976 and Over. Ship. wt. 18 lbs.
No. AC-2360 Uses # 475 Collets. For Logan 12" Lathes. Ship. wt. 20 lbs.

COLLET RACKS

Clamp to rear way of any Logan Lathe bed. Provide convenient storage and protection for collets.
No. AC-345 for No. 475 Collets. Ship. wt., 7 lbs.

COMPOUND REST ASSEMBLIES

No. LA-49-4 Standard equipment on Logan 11" screw cutting lathes and on all 10" Lathes with Serial Number 50843 and up. Also fits 11" Turret Lathes in place of the double tool post cross slide. Complete as shown with tool post and wrench. Shipping weight, 15 lbs.

No. LA-49-1 For 10" Lathes, Serial Number 29567 and Under. Ship. wt., 13 lbs.
No. LA-49-3 For 10" Lathes, Serial Number 29568 to 50842. Ship. wt., 13 lbs.
No. LA-1176 For 12" Lathes. Ship. wt. 17 lbs.

DOUBLE TOOL POST CROSS SLIDE (Lever Operated)

No. LA-1108 Same as LA-25-1, for 11" Lathes. Ship. wt., 32 lbs.

DOUBLE TOOL POST CROSS SLIDE

No. LA-29 For Lathes with Serial Number 29567 or under. Manual feed by hand wheel or power cross feed. Adjustable tool post wedges included. Shipping wt., 18 lbs.
No. LA-29-1 For Lathes with Serial Number 29568 or over. Fits all 11" Lathes. Shipping wt., 18 lbs.
No. LA-77 For 12" Lathes. Replaces Compound Rest Assembly. Ship. wt., 24 lbs.
No. AC-318 Same as #LA-29-1, but with Added Lever Operation. Ship. wt., 22 lbs.
No. AC-304 Same as #LA-77, but with Added Lever Operation. Ship. wt., 18 lbs.
No. AC-310 Lever Attachment for Cross Slide. Converts # LA-29-1 to # AC-318 and # LA-77 to # AC-304. Ship. wt., 5 lbs.

CENTER COUNTERSINK DRILLS

Drill and countersink bearings for Lathe Center. Three sizes.

<table>
<thead>
<tr>
<th>No.</th>
<th>Size</th>
<th>Ship. wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>575-A</td>
<td>1/16&quot;</td>
<td>1/4 lb.</td>
</tr>
<tr>
<td>575-B</td>
<td>3/32&quot;</td>
<td>1/4 lb.</td>
</tr>
<tr>
<td>575-C</td>
<td>1/8&quot;</td>
<td>1/4 lb.</td>
</tr>
</tbody>
</table>

LATHE DOGS

Bent Tail Type, with Square Head Set Screw.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>580-A</td>
<td>1/4&quot;</td>
<td>1/2 lb.</td>
</tr>
<tr>
<td>580-B</td>
<td>1/2&quot;</td>
<td>1/2 lb.</td>
</tr>
<tr>
<td>580-C</td>
<td>9/16&quot;</td>
<td>1/2 lb.</td>
</tr>
</tbody>
</table>

CLAMP TYPE LATHE DOGS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>585</td>
<td>1/4&quot;</td>
<td>1/2 lb.</td>
</tr>
<tr>
<td>586</td>
<td>2-1/4&quot;</td>
<td>3/4 lb.</td>
</tr>
</tbody>
</table>

AUXILIARY HEAD

Adapts Logan 11" Lathes for Oversize Work

Mounted on Logan 11" Lathe. Note raising blocks is position under the tool post and tailstock.

Gives Logan 11" Lathes 141/2" Swing over wings of carriage.
Ball Bearing Mounted Spindle . . . 2-1/4", 8-Thread Spindle Nose.
Attached in 10 minutes, easy to detach.
12" Face Plate.

Gear reduction feature permits cutting threads four times as coarse as in regular operation. Spindle center is set back as well as elevated. As a result, in turning large work, the pressure from the cut is over the lathe way, not overhanging. Provides the smooth operation on heavy cuts essential to accuracy. Raising blocks for the tool post and tailstock assembly furnished.
No. AC-400 Shipping weight, complete, 140 lbs.

LACQUER ENAMEL


METRIC TRANSPosing GEARS

Each complete set includes bracket, gear guards and transposing gear chart. Each equipa a standard Logan Lathe to cut right hand and left hand metric screw threads ranging from 6 mm. pitch to .026 mm. pitch. All gears semi-steel, 16 pitch, 7/16" wide and carefully machined.
No. AC-130 For 10" Plain Change Gear Lathes. Ship. wt., 29 lbs.
No. AC-143 For 10" Quick Change Gear Lathes with Serial No. 45681 and up. Ship. wt., 35 lbs.
LOGAN LATHE ACCESSORIES

Palmgren Milling Attachment

Mounted in 10 seconds on any 1¼" diameter tool post. Allows lathe to be used for slotting, milling, sawing, grooving, squaring, recentering, etc. Jaws are 2¼" wide, 1½/16" deep, and open to 2½".

No. 230 Shipping weight, 14 lbs.

Drill Pad

No. AC-300 No. 2 Morse Taper. Ship wt., 1 lb.

1750 RPM Electric Motors

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Ship Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1105</td>
<td>½ H.P., 1 Phase, 110/220V, 60-Cycle</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>1106</td>
<td>½ H.P., 1 Phase, 110/220V, 50-Cycle</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>1110</td>
<td>¾ H.P., 3 Phase, 220/440V, 60-Cycle</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>1111</td>
<td>¾ H.P., 3 Phase, 220/440V, 60-Cycle, For Bench and Floor Models.</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>1116L</td>
<td>¾ H.P., 1 Phase, 110/220V, 60-Cycle</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>1116C</td>
<td>¾ H.P., 1 Phase, 110/220V, 60-Cycle, For Cabinet Models</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>1118L</td>
<td>¾ H.P., 3 Phase, 220/440V, 60-Cycle, For Bench and Floor Models.</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>1118C</td>
<td>¾ H.P., 3 Phase, 220/440V, 60-Cycle, For Cabinet Models</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>1119</td>
<td>1 H.P., 1 Phase, 110/220V, 60-Cycle</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>1120</td>
<td>1 H.P., 3 Phase, 220/440V, 60-Cycle</td>
<td>70 lbs.</td>
</tr>
</tbody>
</table>

Drive and Face Plates

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Ship Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA-170</td>
<td>Drive Plate, 6&quot; Diam., Threaded for 1½-8 Spindle, ship wt., 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-1009</td>
<td>Drive Plate, 6&quot; Diam., Threaded for 2¼-4 Spindle, ship wt., 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-344</td>
<td>Face Plate, 8&quot; Diam., Threaded for 1½-3 Spindle, ship wt., 6 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-1008</td>
<td>Face Plate, 8&quot; Diam., Threaded for 2¼-4 Spindle, ship wt., 6 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Motor Pulleys

Two-step, V-grooves

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Ship Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA-349A</td>
<td>½&quot; Bore. For Bench and Floor Model, 10&quot; Lathes, ship wt., 3 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-349C</td>
<td>¾&quot; Bore. For Bench and Floor Model, 10&quot; Lathes, ship wt., 3 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-1037C</td>
<td>3/8&quot; Bore. For Bench and Floor Model, 11&quot; Lathes and #800 Series Pedestal Cabinet Lathes, ship wt., 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-2108C</td>
<td>3/8&quot; Bore. For Pedestal Cabinet Models #1800 and #2900 Series, ship wt., 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>LA-2109C</td>
<td>3/8&quot; Bore. For Pedestal Cabinet Models #1800 and #2900 Series, ship wt., 4 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Quick Change Gear Attachment

Provides 48 threads and feeds in either direction. Screw threads from 8 to 224 per inch. Two-lever adjustment. Changing 24-tooth stud gear for 48-tooth stud gear also furnished, provides additional feeds of from 4 to 7 per inch. Longitudinal power feed from .0044" to 1000" per spindle revolution. Power cross feeds .35 times longitudinal feeds. Complete with a replacement lead screw, parts and installation instructions.

No. LA-1200 For 1"" and 1½"" Lathes, 24"" Centers. Ship wt., 24 lbs.
No. LA-958 For 11"" Lathes, 36"" Centers. Ship wt., 26 lbs.

Heavy Duty Coolant Pump

High Pressure — Gear Type

Light weight, portable. Operates independently of the machine tool. Delivers from 60 gallons per hour to a few drops. 20 lbs. pressure capacity. 1/25 H.P., 115 V., AC 60 Cy. 1 phase Motor. 7½ gallon container has 5" bowl screw strainer. Complete unit includes 4 ft. of ¾" Neoprene hose with flow control pet cock and 12" of flexible feed spout. 3½ ft. of rubber-covered electric cord with plug and motor switch.

No. 525-1 Shipping weight, 38 lbs.

Center Rests

No. AC-189 3" Cap. 3-Jaws. For 10" Lathes. Ship wt., 8 lbs.
No. AC-250 3" Cap. 3-Jaws. For 11" Lathes. Ship wt., 9 lbs.
No. AC-2189 3" Cap. 3-Jaws. For 12" Lathes. Ship wt., 11 lbs.

Follower Rests

No. AC-196 3" Cap. 2-Jaws. For 10" and 11" Lathes. Ship wt., 5 lbs.
No. AC-2196 3" Cap. 2-Jaws. For 12" Lathes. Ship wt., 7 lbs.

Sets for Conversion of Bench Models to Floor Models

Each set includes Pan, Legs and Countershaft support

No. 413 1½ Deep Chip Pan, for 10" Lathes, 24" Centers. Ship wt., 118 lbs.
No. 418 1½ Deep Oil Pan, for 10" Lathes, 24" Centers. Ship wt., 122 lbs.
No. 417 1½ Deep Oil Pan, for 11" Lathes, 31" Centers. Ship wt., 125 lbs.
No. 1072 1½ Deep Oil Pan, for 11" Lathes, 24" Centers. Ship wt., 126 lbs.
No. 1078 1½ Deep Oil Pan, for 11" Lathes, 36" Centers. Ship wt., 130 lbs.

Carrige Stops

No. AC-234 Micrometer Carriage Stop. Collet graduated in .001". Setting may be locked for duplicate work. For all Logan Lathes. Ship wt., 3 lbs.
LOGAN LATHE ACCESSORIES

TAILSTOCK ASSEMBLIES

LEVER TAILSTOCKS

No. AC-241 For Logan 10" Lathe. Has 2 1/4" lever stroke. Provides lever and hand wheel operation. No. 2 Morse Taper. Ship wt. 30 lbs.

No. AC-373 For Logan 11" Lathe. 4" lever stroke. Provides lever and hand wheel operation. No. 2 Morse Taper. Ship wt. 34 lbs.

STANDARD TAILSTOCKS

No. LA-3-1 Same as Furnished on 10" Screw Cutting Lathe. Ship wt. 24 lbs.

No. LA-1065 Same as Furnished on 11" Screw Cutting Lathe. Ship wt. 29 lbs.

No. LA-2065 Same as Furnished on 12" Screw Cutting Lathe. Ship wt. 32 lbs.

TAPER ATTACHMENTS

Exclusive "Micro-Screw" feature gives quick, positive adjustments of slide bar to desired taper. Easily installed, with taper attachment cross slide becoming a permanent part of the lathe. Quickly detached.

No. AC-255 For 10" Lathe, Serial Number 50842 and Under. Ship wt. 18 lbs.

No. AC-298 For 10" Lathe, Serial Number 50843 and Over. Ship wt. 19 lbs.

No. AC-292 For 11" Lathe. Ship wt. 20 lbs.

No. AC-2295 For 12" Lathe. Ship wt. 22 lbs.

TOOL HOLDERS

No. 552 Straight Turning Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 551 R.H. Turning Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 550 L.H. Turning Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 556 Boring Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 557 Straight Cut-off Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 554 R.H. Cut-off Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 564 Extra Cut-off Blade, for #557 and #554 Cut-off Tool Holders. Ship wt. 1/4 lb.

No. 555 Knurling Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1 lb.

No. 565 Extra Diamond Knurls, for #555 Tool Holder. Spectly Fine, Medium or Coarse. Ship wt. 1/4 lb.

No. 553 Threading Tool Holder, 1/4" x 1/4" Tool Holder Shank. Ship wt. 1/4 lb.

No. 563 Extra Threading Cutter, for #553 Tool Holder. Ship wt. 1 lb.

No. 549 Tool Holder Set, One Each #550, #551, #552, #553, #554, #555, #556, and 57 Tool Holders in Steel Box. Ship wt. 7 lbs.

No. 521 TAILSTOCK TURRET

Finger tip control rotates 6 tools in direct line with spindle. 1/4" diameter. 9/16" turret holes. No. 2 Morse Taper. Shipping wt. 4 lbs.

HEXAGONAL TURRET ASSEMBLIES

Six-Position Self-Indexing Pilot Wheel or Lever Operated

Fit bedways of Logan Screw Cutting Lathes. Interchangeable with the tailstock, and used with a Double Tool Post. Cross Slide to replace the compound rest, they convert such a lathe into a turret lathe. Extra heavy construction assures maximum smooth¬ness and accuracy. Turret lock furnished on pilot wheel models provides increased rigidity for heavy cuts. 1 1/4" across turret head diameter - 4 1/4" maximum stroke of turret - 23" maximum distance, end of spindle to turret face - adjustable gibes on side — finish burnished.

No. LA-66 Pilot Wheel Type. Shipping wt. 100 lbs.

No. LA-65 Lever Type. Shipping wt. 97 lbs.

TURRET TOOL POSTS

Quickly set up on the tailstock of a compound rest. Mount four tools up to 1". 12 stations available, with three working positions for each tool. On jobs requiring less than four tools, duplicate tools may be set up for uninterrupted production, 1 1/4" square tool block indexes at 20° intervals, providing a quick set up for threading.

No. 512 Square. For 10" Screw Cutting Lathes, Serial Number 50843 and Over. For all 11" and 12" Lathes. Shipping wt. 3 lbs.

No. 513 Square. For 10" Screw Cutting Lathes, Serial Number 50842 and Under. Shipping wt. 3 lbs.

No. 514 Square. For All 10", 11" and 12" Turret Lathes. Shipping wt. 4 lbs.

MICA ARMATURE UNDERCUTTERS

Mounts on back of the cross slide, leaving the tool post free to hold the turning tool. Lifting the lever swings the entire upper part of the assembly out of the way to permit turning the armature without removing the undercutter. The high speed saw is rigidly held to assure clean, even, parallel cuts and is adjustable for depth of cut desired. Length of saw stroke is 2 inches. Furnished complete with two saws, one .015" thick, the other .020" thick.

No. 487 For 10" Lathe, Serial Number 50842 and Under. Shipping wt. 8 lbs.

No. 487-1 For 10" Lathe, Serial Number 50843 and Over. For All 11" Lathes. Shipping wt. 8 lbs.

No. 488 Packet of 6 Blades .015". For #487 and #497-1 Mica Undercutter. Shipping wt. 1/4 lb.

No. 489 Packet of 6 Blades .020". For #487 and #497-1 Mica Undercutter. Shipping wt. 1/4 lb.
LOGAN 8" SHAPER

Combines capacity, precision and versatility. Powerful 8½" maximum stroke permits full and accurate machining of work 8" long. Handles straight cuts, angular cuts, squaring, machining and slotting. Six automatic feeds in either direction, from .002" to .012" are set by a feed dial graduated to .001". A half turn of the feed handle in either direction reverses the feed. Any speed from 35 to 180 strokes per minute is quickly obtainable. Speed changes are effected instantly, without stopping the motor or shift belt, by turning the hand wheel control.

Table, 8" wide by 8" long, has a vertical travel of 5½" and a 10½" traverse. The adjustable table support mounted on the base of the machine, provides solid reinforcement.

Because the tool head may be swiveled 360°, squaring the ends of stock of almost any length is possible on the Logan Shaper. The stock is laid horizontally and the head turned to present the tool in proper position. Tool head vertical travel is 2½".

LOGAN 8-INCH SHAPERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Motor HP</th>
<th>Phase</th>
<th>Voltage</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>E58-5½</td>
<td>With ½ H.P., 1 Phase, 110/220V, 60-Cycle Motor</td>
<td>½ H.P.</td>
<td>1</td>
<td>110/220V</td>
<td>690 lbs.</td>
</tr>
<tr>
<td>E58</td>
<td>Shaper, Less Motor</td>
<td></td>
<td></td>
<td></td>
<td>640 lbs.</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

- Length of ram, 19" ... width of ram, 5-3/16" ... width of ram ways, 5-3/16"... Cross-rail ways, ¾" x ¾" x 5½"...
- length of stroke, 8½" ... length of ram bearings, 19" ... bearing surface of ram, 51 sq. in.
- vertical travel of tool head, 2½" ... size of tool holder, 7/16" x ¾" ...
- tool head swivel, 360° ... tool head diameter, 4" ... length of cross rail, 13½" ...
- horizontal travel of table, 10½" ... vertical travel of table, 5½" ... distance, top of table to ram (maximum), 8" ...
- working surface of table, 8" x 8" ... slots in table (3 on top and 3 on side), 7/16"...
- table depth, 7½" ... saddle bearing, 5½" ... feeds, .002, .004, .006, .008, .010, and .012 ... speeds, "Anyspeed," 35 to 180 strokes per minute ... size of motor, ½ h.p. or ¾ h.p. ...
- cutting speeds, up to 120 feet per minute ... vise, swivel 300°, 5½" opening, 5" width ... weight with motor, 700 lbs. ... overall dimensions, 15" wide, 35" deep, 51" high.

SHAPER ACCESSORIES

BLANK CUTTER BITS


"T" HEAD BOLTS

<table>
<thead>
<tr>
<th>Size</th>
<th>Ship. Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½&quot;</td>
<td>½ lb.</td>
</tr>
<tr>
<td>2½&quot;</td>
<td>¾ lb.</td>
</tr>
<tr>
<td>3½&quot;</td>
<td>1 lb.</td>
</tr>
</tbody>
</table>

INDEX CENTERS

No. 535 5 inches between centers. 3 inch swing. Index plate with divisions between 22-30. Shipping wt., 16 lbs.

NOGLE PLATE

No. 537 For clamping irregular work to table. Ship. wt., 7 lbs.

ROTARY TABLE

No. 536 4" with 7" diamete work surface. Shipping wt., 23 lbs.

LOGAN ENGINEERING CO.

Lawrence and Lamos Avenues

Chicago 30, Illinois

Printed in U.S.A.