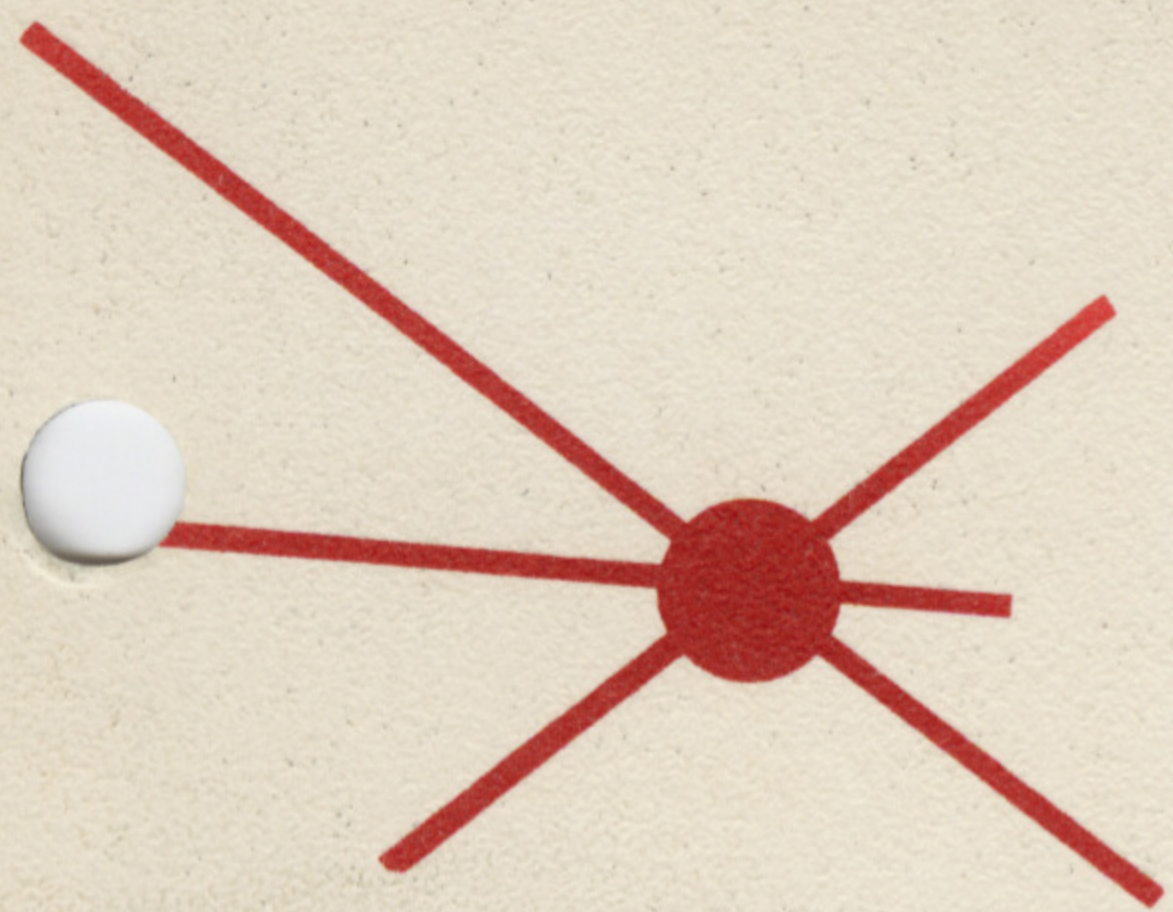
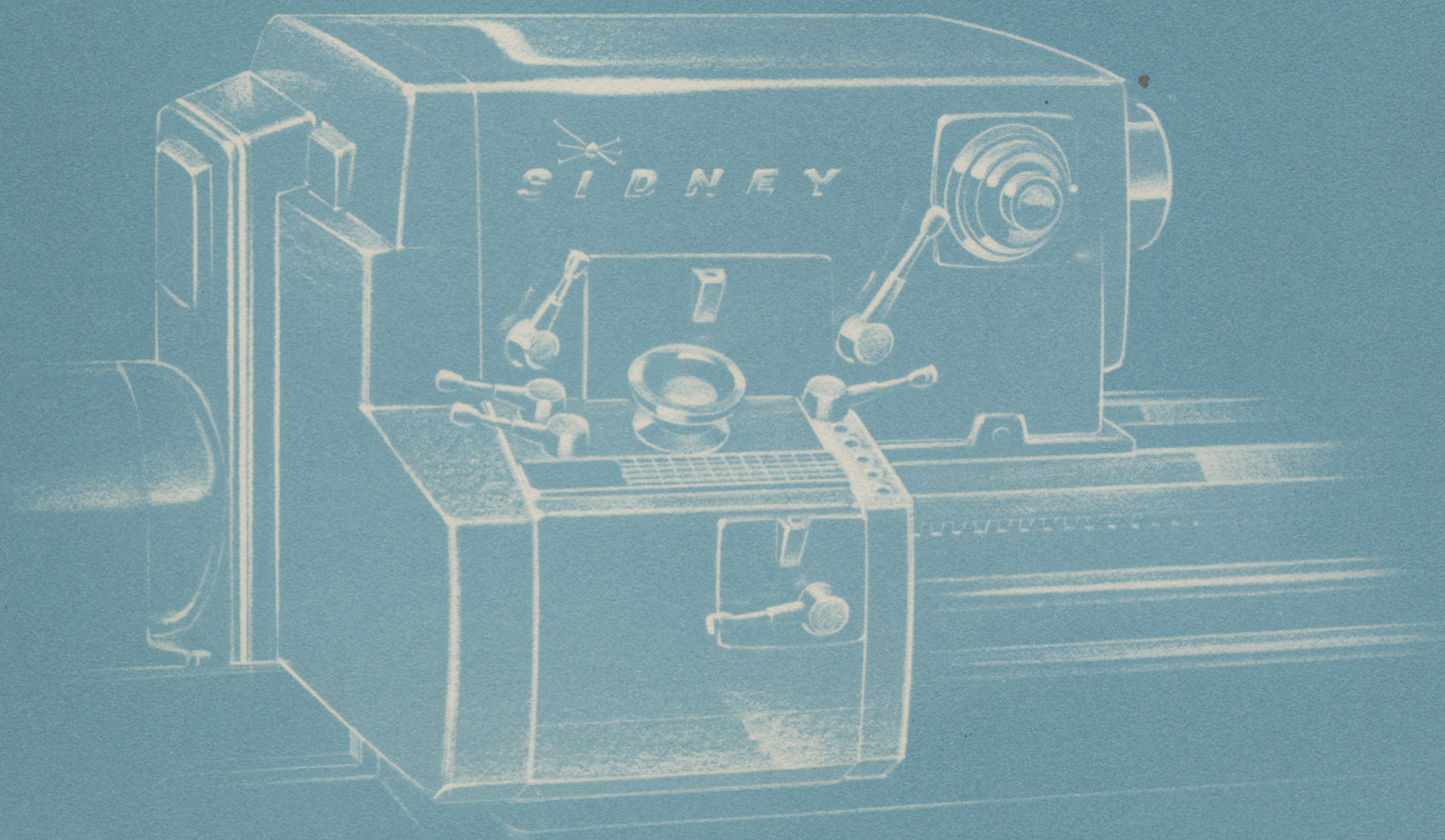


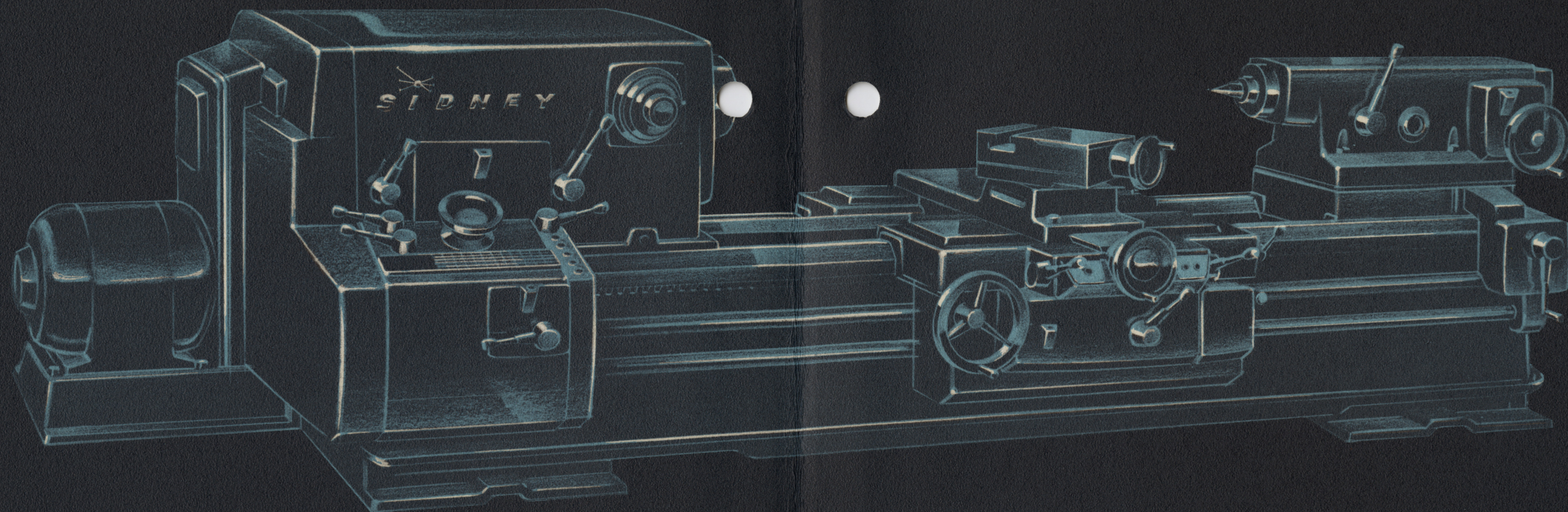


SIDNEY 3220

BUHR PRESENTS ANOTHER NEW LATHE



ADVANCE INFORMATION



ALL NEW DESIGN

ALL NEW FEATURES

ALL NEW PERFORMANCE

SIDNEY 3220

HEADSTOCK

Thirty-six spindle speeds in true geometric progression
60 horsepower in all speed ranges
160 to 1 overall ratio
Cutting speed automatically calculated
No speed-up gearing
Anti-friction bearings throughout
Automatic metered lubrication plus spray
Opposed helical final drive gears
All gears hardened and ground or shaved
Up to 145 cubic inch metal removal per minute
All SAE involute splines

END GEARING

Totally enclosed
Automatically lubricated
Anti-friction throughout
Metric and special leads available
Plate in cover for special lead settings (optional extra)
All gears hardened and shaved

GEARBOX

Dual cam tumbler lock (patent applied for)
Completely anti-friction bearing construction
60 threads and feeds
Automatic filtered lubrication

All SAE involute splines
Direct reading feed and thread plate
Anti-friction lead screw thrust bearings
Safety clutch protection

CARRIAGE-COMPOUND

Four way rapid traverse
Heavy duty construction
Automatic metered lubrication
Adjustable replaceable nuts
Hardened and ground cross-slide ways (optional extra)
Double locked tapered gibs
Steel tool slide: full bridge width
Square type swivel: full bridge width
Anti-glare dials
Memory clips on all dials
Positive thread chasing lock

APRON

Combination feed and traverse control
Independent cross and longitudinal controls
Automatic lubrication for all movements
Worm drive for feeds
Convenient operator controls
Totally enclosed one piece housing
No-stick jaw feed clutches

Separate or synchronized feeds
All SAE involute splines
Hardened and ground feed pinion
All gears hardened and shaved
Built in rapid traverse motor
Length dial with memory clips

BED

3 dimensional truss design (patent applied for)
Chip-shed chutes
Alloyed cast-iron
Replaceable hardened and ground tool steel ways
Rod supports automatically positioned
Integrally cast tail stock bed rack
Hardened sectional feed rack
Centralized leveling screw hold-down bolts
One-piece beds up to 49 feet long
Full depth walls—full length
Bed machined all over for future accessories
All legs provide full width support

TAILSTOCK

Hardened spindle
Key way enclosed
Automatic lubrication throughout
Depth reading dial

Anti-friction center with drilling lock (optional extra)
Belleville type expansion protection
Positive lock to spindle
2 speed operation
All SAE involute splines
Operator selected live or dead spindle (optional extra)

COOLANT SYSTEM

Double pumps—no hose
Aerated coolant trough
Operator pump control at carriage
Trough covers removable
Monel screen filter
Angular chip removal

ACCESSORIES

Tracer controls
European style tool rest
Electrical apron controls
Steady rests
Follow rests
Taper attachment
Length measuring device
Dual cross feed dials
Dual compound dials
Automatic length feed stops

SIDNEY 3220 / SPECIFICATIONS

GENERAL	MODEL 3220	MODEL 3220-24	MODEL 3220-28
Swing over Bed	32½" Dia.	35½" Dia.	38¾" Dia.
Swing over Compound	20½" Dia.	24½" Dia.	28½" Dia.
Spindle Center to Floor	44"	46"	48"
Center Distance	48"	48"	48"
Center Distance Increase	24" Increments	24" Increments	24" Increments
Floor Space	5'-6" x 15'-0"	5'-6" x 15'-0"	5'-6" x 15'-0"
Floor Space Increase	24" Increments	24" Increments	24" Increments
HEADSTOCK			
Number of Speeds	36	36	36
Range of Speeds	7 to 1120	7 to 1120	7 to 1120
Spindle Nose	D1-11" or L-3	D1-11" or L-3	D1-11" or L-3
Spindle Bore—D1-11"	4¼" Dia.	4¼" Dia.	4¼" Dia.
Spindle Bore—L-3	3¾" Dia.	3¾" Dia.	3¾" Dia.
Center—Morse Taper	No. 7	No. 7	No. 7
Bearing Length	45¾"	45¾"	45¾"
GEARBOX			
Number of Changes	60	60	60
Range of Threads per Inch	½ to 30	½ to 30	½ to 30
Range of Feeds per Rev.	.004-.240	.004-.240	.004-.240
Lead Screw Diameter	2¼"-2 Acme (2½"-2 Special)	2¼"-2 Acme (2½"-2 Special)	2¼"-2 Acme (2½"-2 Special)
CARRIAGE & COMPOUND			
Carriage Length	44"	44"	44"
Bridge Width	13"	13"	13"
Bottom Slide Travel	16"	16"	16"
Top Slide Travel	6½"	6½"	6½"
Rapid Traverse—Long.	240 I.P.M.	240 I.P.M.	240 I.P.M.
Rapid Traverse—Cross	120 I.P.M.	120 I.P.M.	120 I.P.M.
TAILSTOCK			
Spindle Diameter	6¾" Dia.	6¾" Dia.	6¾" Dia.
Tailstock Travel	12"	12"	12"
Tailstock Set Over	½"	½"	½"
Tailstock Bearing Length	23⅝"	23⅝"	23⅝"
BED			
Width	27"	27"	27"
Depth—Full Length	20"	20"	20"
MAIN DRIVE MOTOR			
Horsepower	60	60	60
R.P.M.	1800	1800	1800
SHIPPING WEIGHT			
With Average Accessory Equip.	25,600 lbs.	26,800 lbs.	28,000 lbs.