

Longitudinal Turning Attachments

For 00, 2 and 3 Ultramatic Screw Machines and No. 2 Ultramatic Chucking Machines

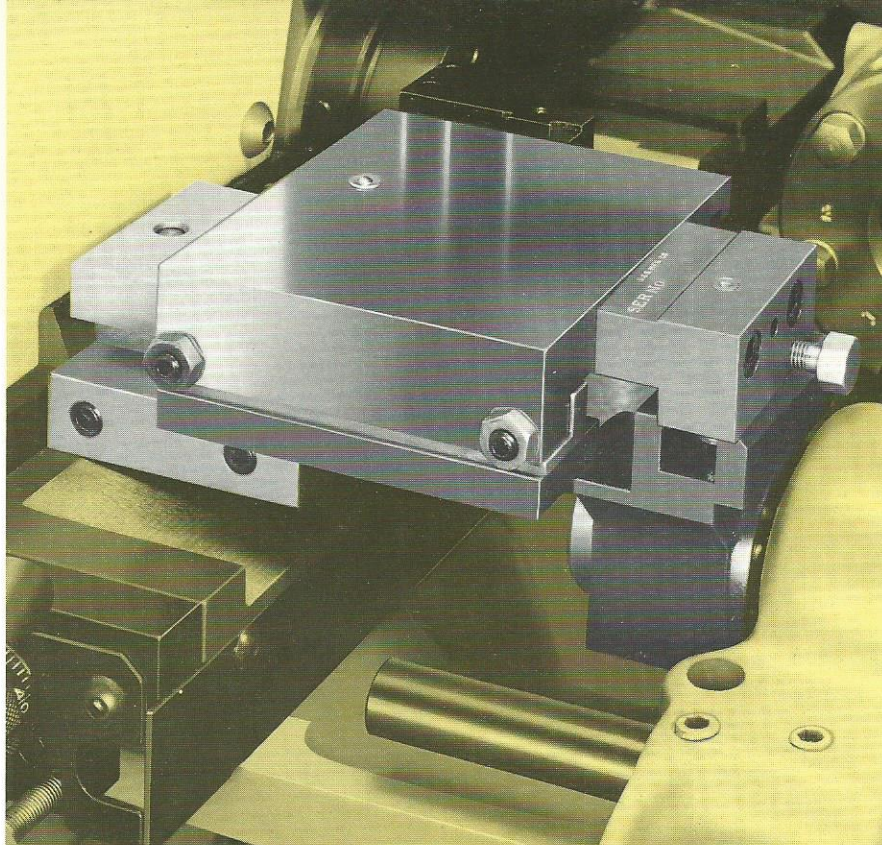
This attachment is mounted on the front cross slide of the machine and has both longitudinal and "in-feed" movement controlled by two simple cams. The Longitudinal Turning Attachment is commonly used to turn tapers as the slide is easily swiveled in either direction. The turning operation can often be overlapped with turret tools. The depth of chip and feed rate is comparable to a roller back box tool.

Completion of some parts in one operation (not previously practical) is now possible by turning diameters, behind a shoulder, that are beyond forming ratios. The single point turning tool produces a finish superior to that left by a forming tool. The positive stop on the cross slide permits turning to an accuracy of .0005" (0.013mm) total tolerance, dependent on material, depth of chip, and length of cut.

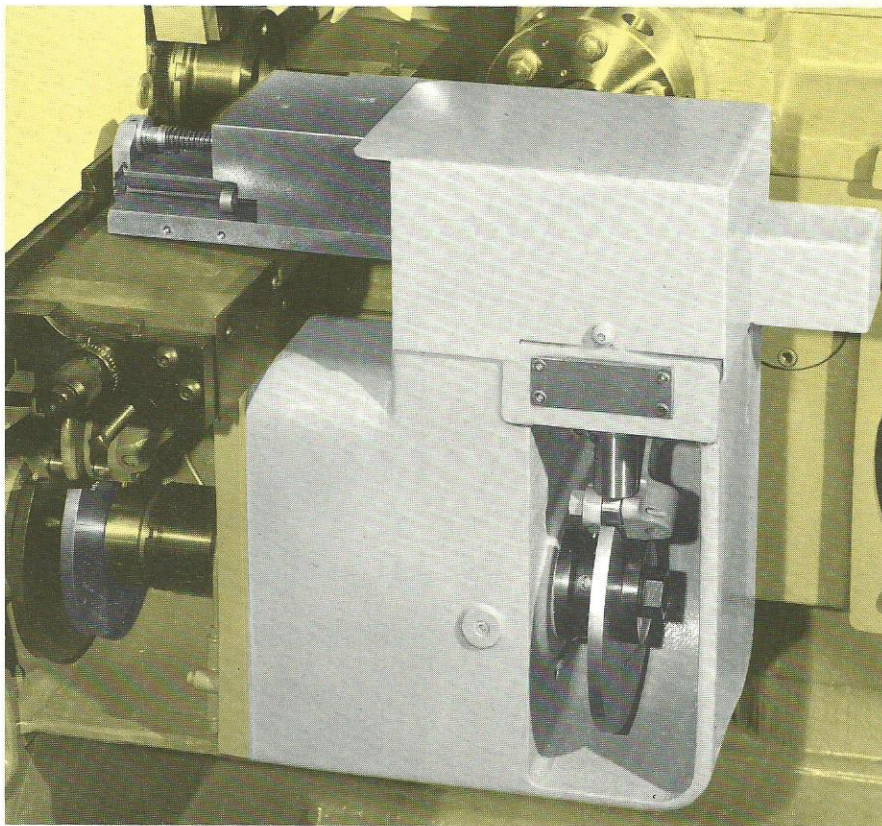
The tool holder takes a square blade, $\frac{5}{16}$ " (8mm) on 00 size and $\frac{1}{2}$ " (13mm) on 2 and 3 size, which can be used for forming operations without removing the attachment.

If it is desired to use the front cross slide for cross slide operations, the longitudinal slide of the attachment can be removed as easily as a circular forming tool post.

The 00 size attachment requires the use of the transfer mechanism, and will turn toward the machine spindle only. The #2 and 3 size attachment can be arranged to turn in either direction.



Attachment on 00 size machine.



Attachment on 2 size machine.

Specifications

Maximum turning length	00 size, $1\frac{3}{8}$ " (34.9mm) toward spindle only. 2 and 3 size, $3\frac{1}{2}$ " (88.9mm) in either direction
Maximum diameter turned	up to bar capacity of machine, 5" (127mm) on chucking machine
Maximum taper	7° on a side (14° included) in either direction
Minimum distance of blade to collet	$\frac{1}{16}$ " (1.6mm) on 00, $\frac{1}{4}$ " (6.4mm) on 2 and 3
Maximum distance of blade to collet and still obtain full travel	$2\frac{3}{32}$ " (53mm) on 00, $2\frac{1}{2}$ " (64mm) on 2 and 3

This attachment is also available for No. 2 Ultramatic Chucking Machines, specifications on application.