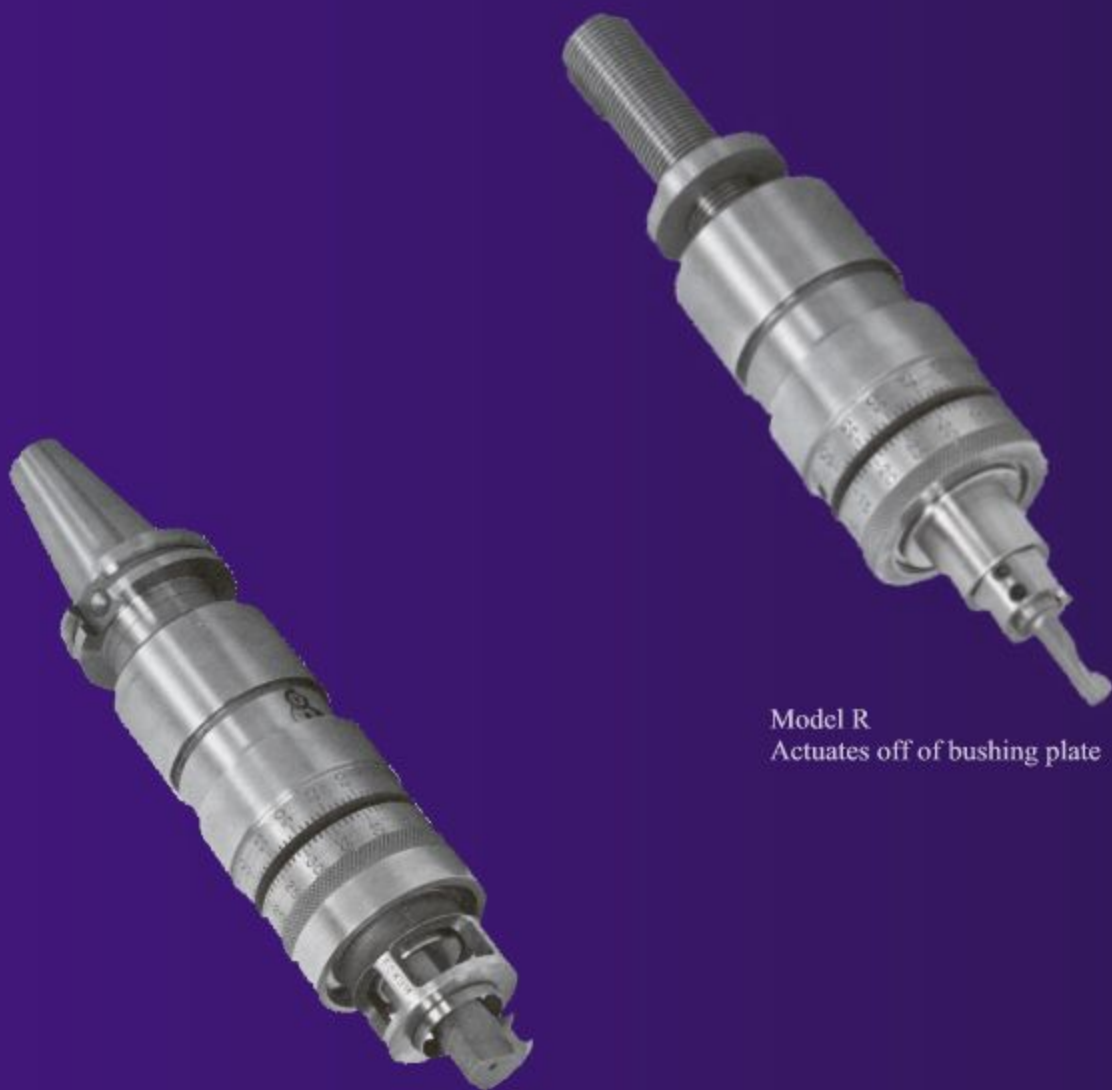


# Bokumatic Automatic Recessing head Model R

I.D. grooves, O.D. grooves, back chamfers, back counter bores or any multiple combination.



Model R  
Actuates off of bushing plate

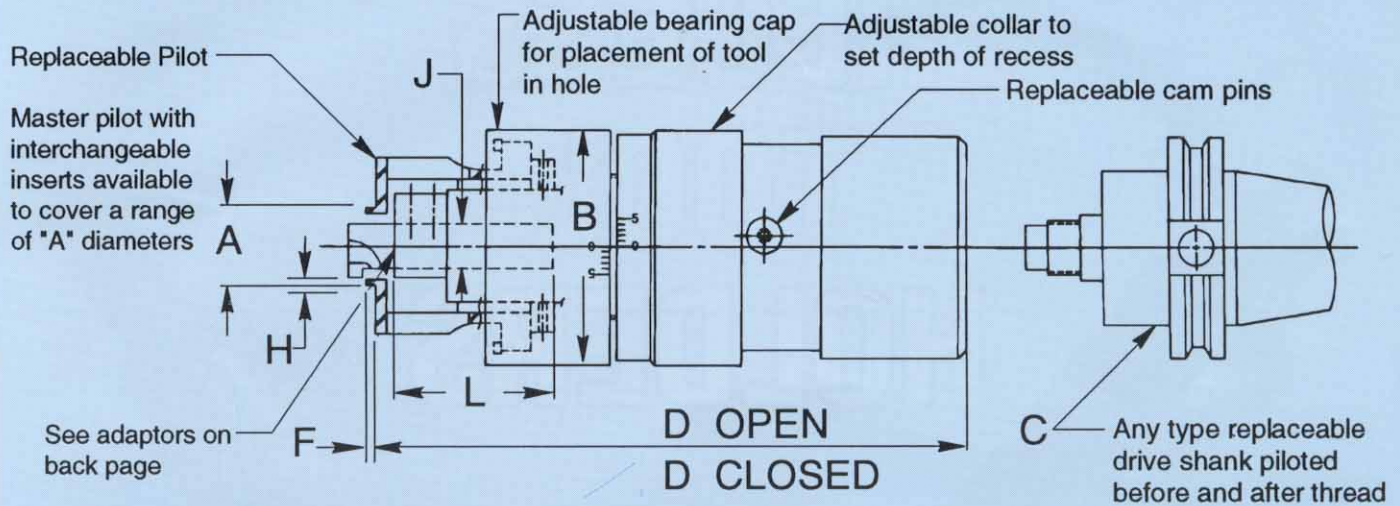
Model R-1  
Actuates off of part

High production holder for CNC machine centers, special transfer or dial machines, Goss & Deleeuw and virtually all standard machines

**BOKUM**  
**TOOL**  
**COMPANY INC.**



# BASIC DIMENSIONS FOR THE MODEL 'R-1' HOLDER



## Model 'R-1' Holder - Actuation off part

MODEL	A	B	C	D-OPEN	D-CLOSED	F	H	J	L	PRESSURE REQUIRED TO COMPRESS HOLDER COMPLETELY NO LOAD	NORMAL RANGE OF HOLDER	RATIO OF HOLDER
	PILOT DIA.	BODY DIA.	DRIVE SHANK	OVERALL LENGTH BEFORE COMPRESSION	OVERALL LENGTH WHEN FULLY COMPRESSED	PILOT LENGTH	MAX. CUTTING DEPTH PER SIDE	HOLE DIA. FOR CUTTING TOOL	LENGTH OF TOOL HOLE			
R-1	TO SUIT PART	2 5/8	ANY TYPE	6 1/2	5 5/8	TO SUIT PART	.170	3/8, 1/2	1 3/4	140 lbs	1/8 to 3 1/2	5:1
OVERSIZE R-1	TO SUIT PART	2 15/16	ANY TYPE	6 1/2	5 5/8	TO SUIT PART	.170	3/8, 1/2	1 3/4	140 lbs	1/8 to 3 1/2	5:1

The **Model "R-1" Recess Tool Holder** is actuated by contact with the workpiece. A replaceable rotating pilot is mounted against a thrust bearing, and is ground to fit the I.D. or O.D. of the part. An optional master pilot allows one holder to work in a variety of bore diameters. The master pilot holds an interchangeable insert ground to fit a specific hole size.

The "R-1" Holder brings our special cam design to a package small enough to be carried by most automatic tool changers. Bokum accuracy, durability and versatility are unequalled. Standard adaptors are offered to accept our stock standard recess tools (radial relief), or special circular form tools built to customer specifications (see back page).

Interchangeable shanks are available, some with an over-ride feature, which permits the holder to maintain consistent groove depth despite variation in the location of the face of the part. The holder is capable of O.D. grooving, in a range from 1/8" to 2", and is easily converted from part actuation to bushing actuation.

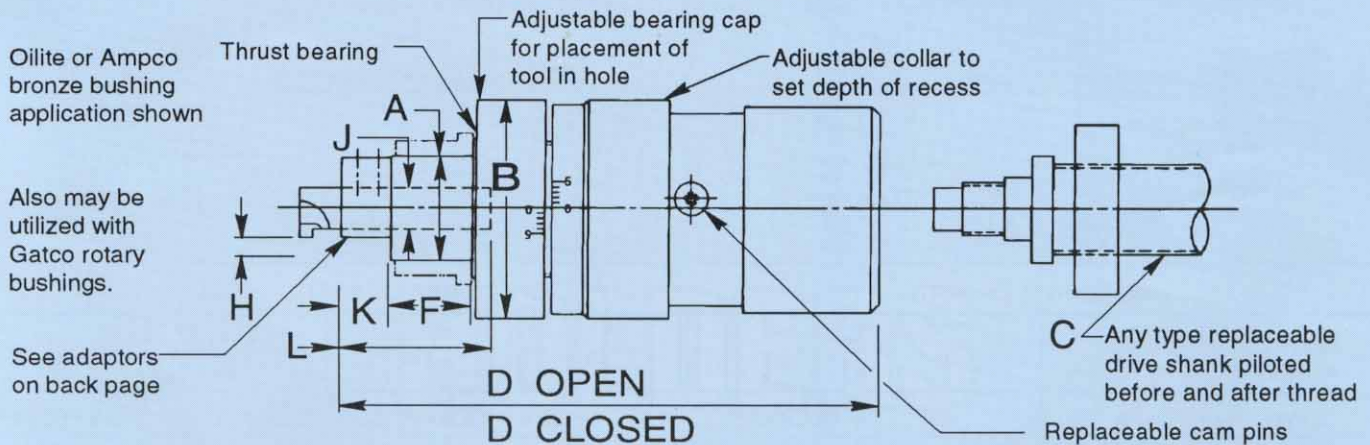
Of course, specific applications may be discussed with your Bokum representative or with our engineers.



**BOKUM TOOL COMPANY** inc.

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# BASIC DIMENSIONS FOR THE MODEL 'R' HOLDER



## Model 'R' Holder - Bushing plate actuation

MODEL	A PILOT DIA.	B BODY DIA.	C DRIVE SHANK	D-OPEN OVERALL LENGTH BEFORE COMPRESSION	D-CLOSED OVERALL LENGTH WHEN FULLY COMPRESSED	F PILOT LENGTH +/- 1/16" ADJUSTMENT	K LENGTH OF QUICK CHANGE ADAPTOR NOSE	H MAX. CUTTING DEPTH PER SIDE	J HOLE DIA. FOR CUTTING TOOL	L LENGTH OF TOOL HOLE	PRESSURE TO COMPRESS HOLDER COMPLETELY NO LOAD	NORMAL RANGE OF HOLDER	RATIO OF HOLDER
R	1.2495 1.2490	2 5/8	ANY TYPE	6 5/16	5 7/16	15/16	9/16	.170	3/8, 1/2	1 3/4	140 lbs	1/8 to 1 1/4	5:1
OVERSIZE R	1.4995 1.4990	2 5/8	ANY TYPE	6 5/16	5 7/16	15/16	9/16	.170	3/8, 1/2	1 3/4	140 lbs	1/8 to 1 1/2	5:1

The **Model "R" Recess Tool Holder** actuates by contact with either a bronze bushing or a "Gatco" style rotary bearing. A bushing plate located above the fixtured part provides for proper location of the cutting tool. This machine configuration is preferred for high production runs or where chips would likely interfere with a pilot contacting the part.

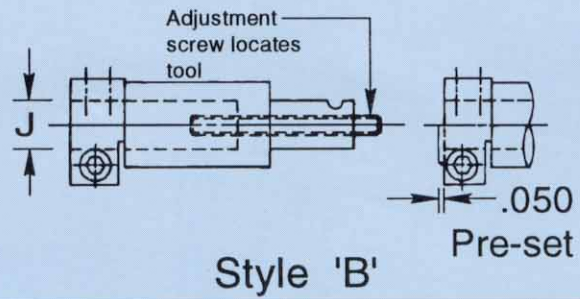
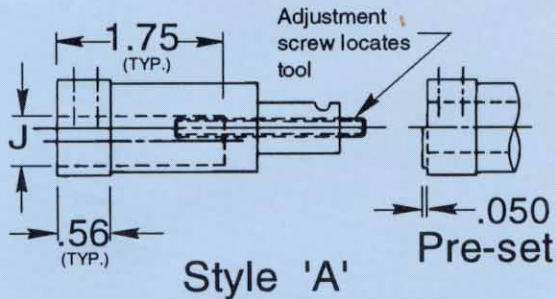
The available pre-set adaptors (see back page) eliminate the need for external gaging of cutting tool location. Our simple, sturdy design makes repair easy, thus reducing machine downtime. The Model "R" holder is available with a variety of shanks which can be used on the simplest drill press or the most sophisticated machine.



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# INTERCHANGEABLE ADAPTORS

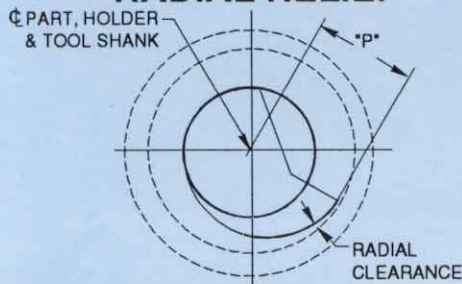


	ON CENTER (OF PART)		OFF CENTER (OF PART)				
ADAPTOR NUMBER	15	16	17	18	170	180	190
STYLE	A	A	A&A PRE-SET	A & A PRE-SET	B & B PRE-SET	B & B PRE-SET	B & B PRE-SET
J	3/8"	1/2"	3/8"	1/2"	3/8"	1/2"	1/2"

**Model R and R-1 Tool Holders** may be obtained with either an on-center or off-center adaptor. The on-center adaptors require radial relief style tools. When an off-center adaptor is used, circular form tools can be utilized. This type of tool is particularly important when using a **CNC machine** or a special machine with positive spindle stops. When circular form tools are resharpened, the dimension from the centerline of the tool to the cutting edge remains constant. Therefore, the machine stop or tapes need not be changed.

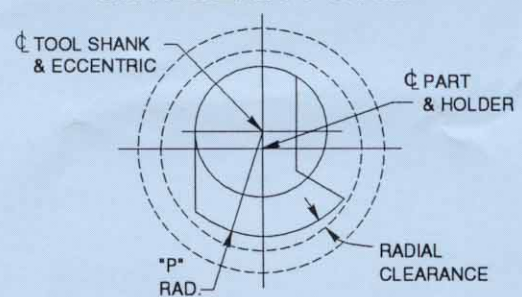
The pre-set adaptors are used on high production set-ups or where tool changes are frequent. The cutting tool is designed with a flange and a ground set-up face which is in the same plane as the cutting edge. The tool is loaded in the adaptor against the front face and rotated counterclockwise until the ground face on the flange contacts the pre-set face on the adaptor. This puts the cutting tool point at the same radial location, whether it is a new tool or a resharpened tool. In addition, critical lengths and diameters are maintained from tool to tool. When resharpening this tool, grind both the top face (cutting edge) and the set-up flange on the same plane.

## RADIAL RELIEF



Tool mounted on center must have radial clearance, so tool does not rub on O.D. When resharpening tool, "P" Dim. gets smaller, meaning more feed is necessary to cut groove Dia.

## CIRCULAR FORM



Tool must be offset above  $\phi$  to use circular form tool. For high production tooling, use this design. When resharpening tool, "P" Rad. does not change. Feed stroke remains the same.



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