

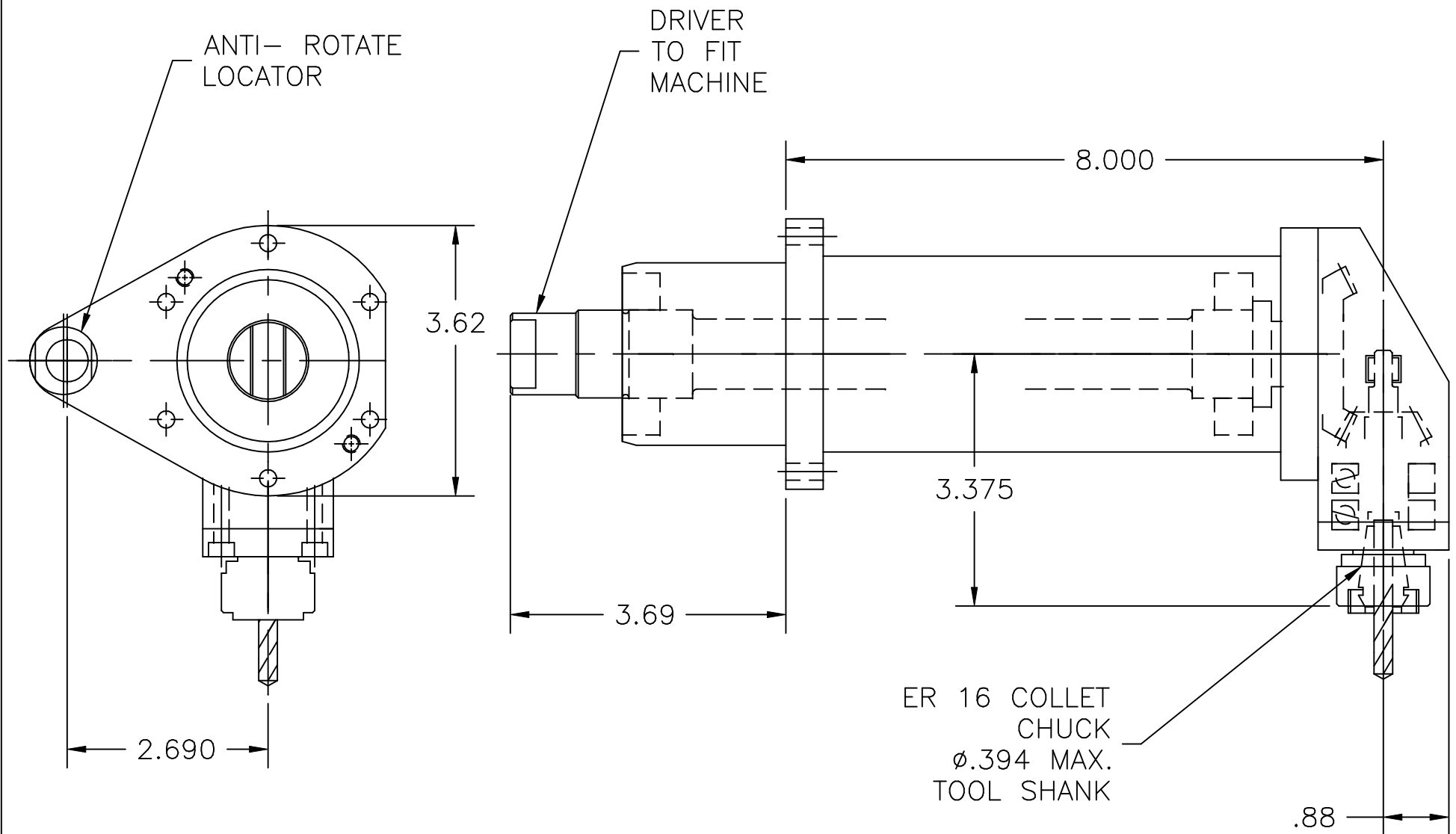
## SPECIAL PURPOSE COMPONENTS IDEA BOOK



Key Products, Inc.  
10600 W. Glenbrook Ct.  
Milwaukee, WI 53224  
414-355-5399

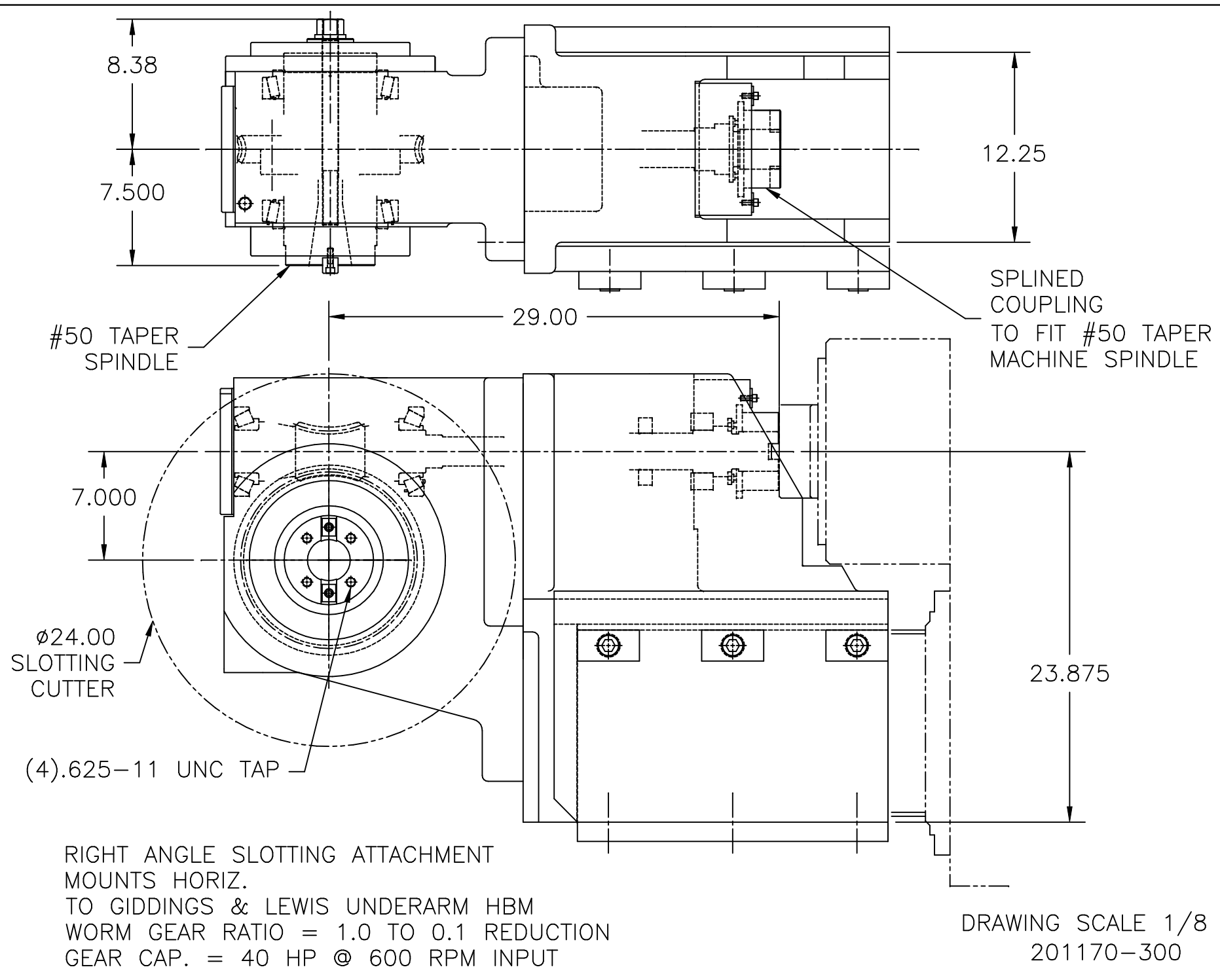
<http://www.keyproducts.net>

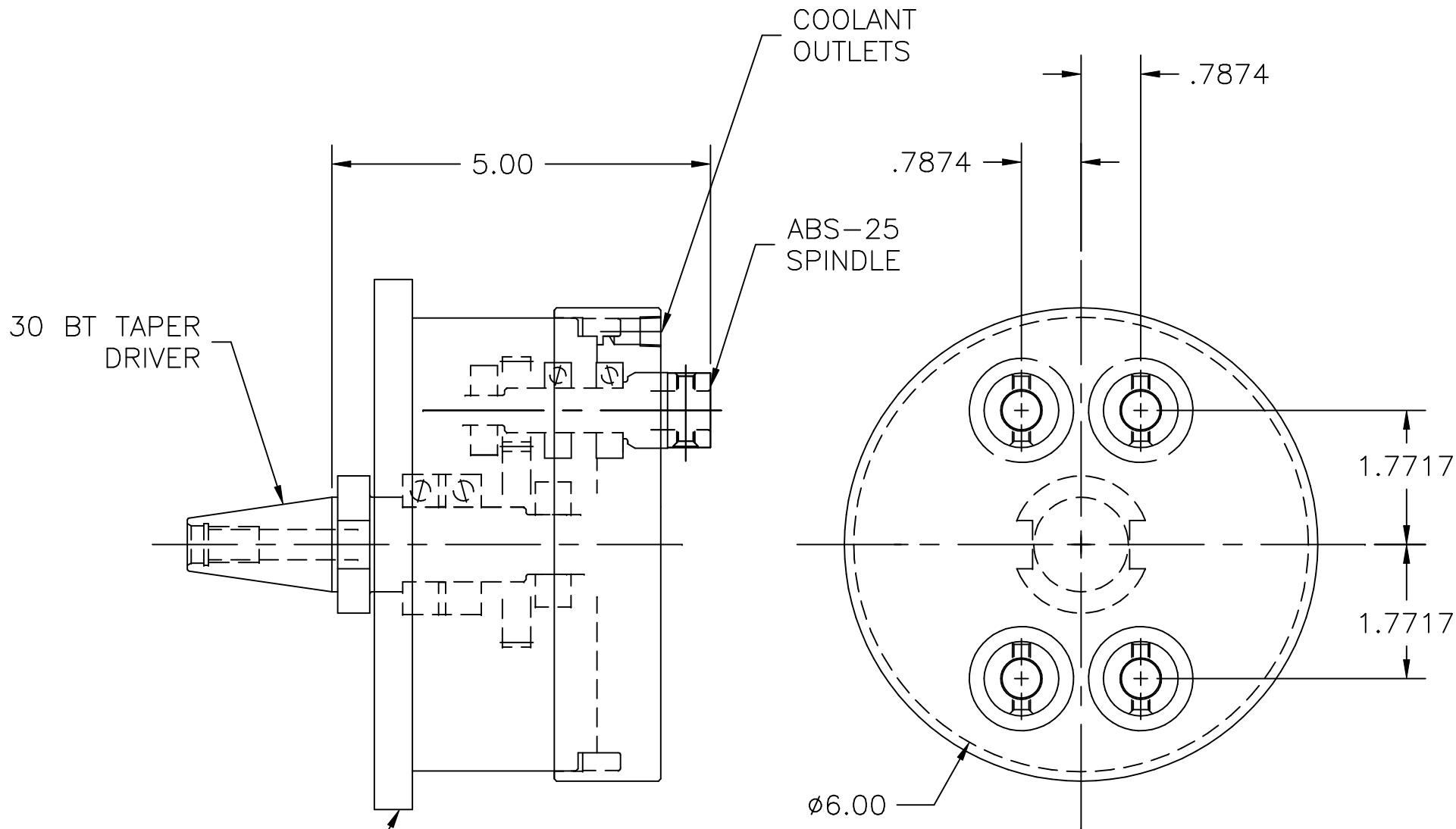
Key Products designs and manufactures machining attachments. This book includes some examples of previous projects. However, we can produce an attachment for your specific application.



RIGHT ANGLE DRILL ATTACHMENT  
 MOUNTS VERTICALLY  
 TO SUGINO HMC TURRET  
 GEAR RATIO = 1.0 TO 2.0 INCREASE  
 GEAR CAP. = 0.25 HP. PER 100 RPM OUTPUT

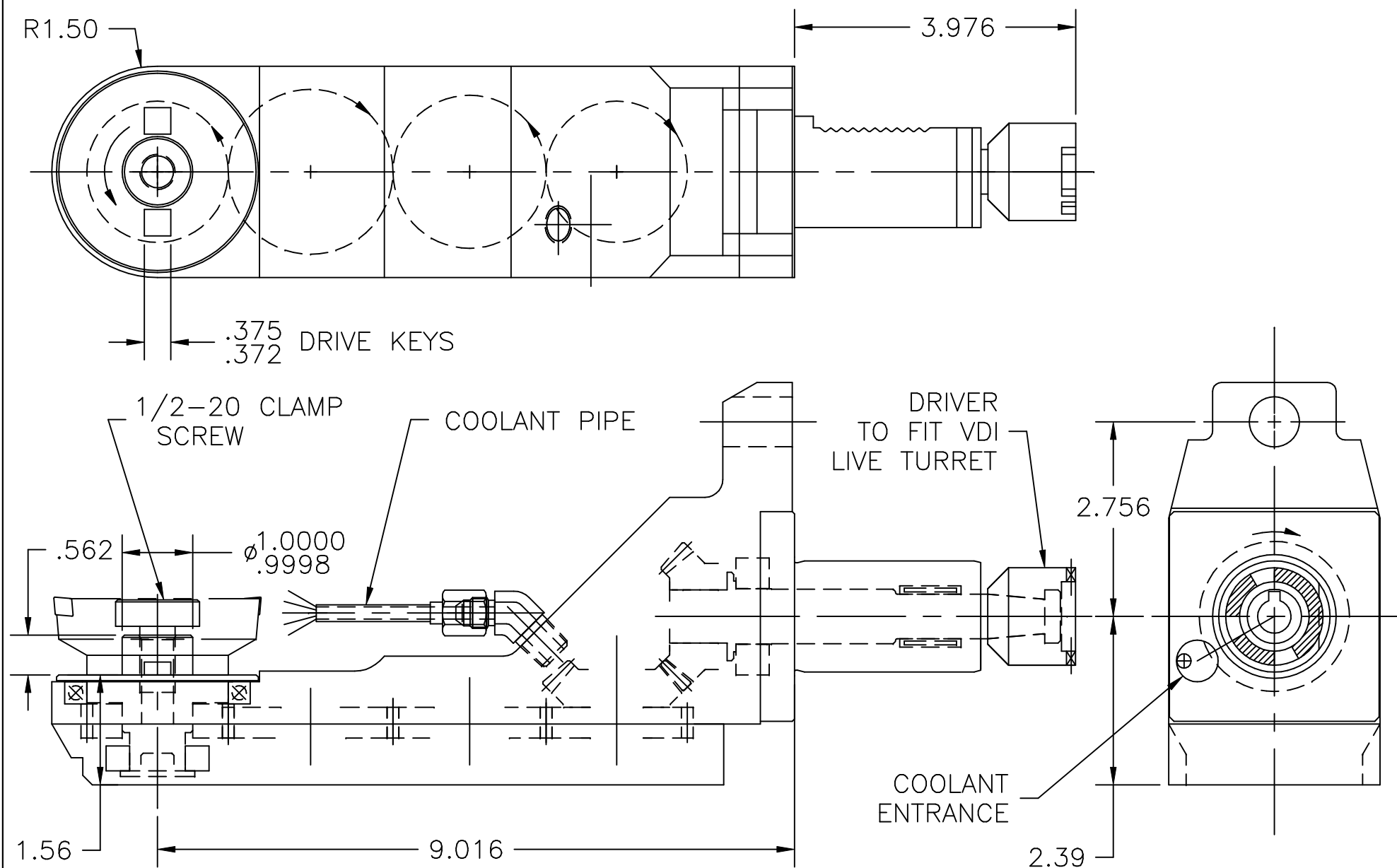
DRAWING SCALE 1/2  
 96113-300





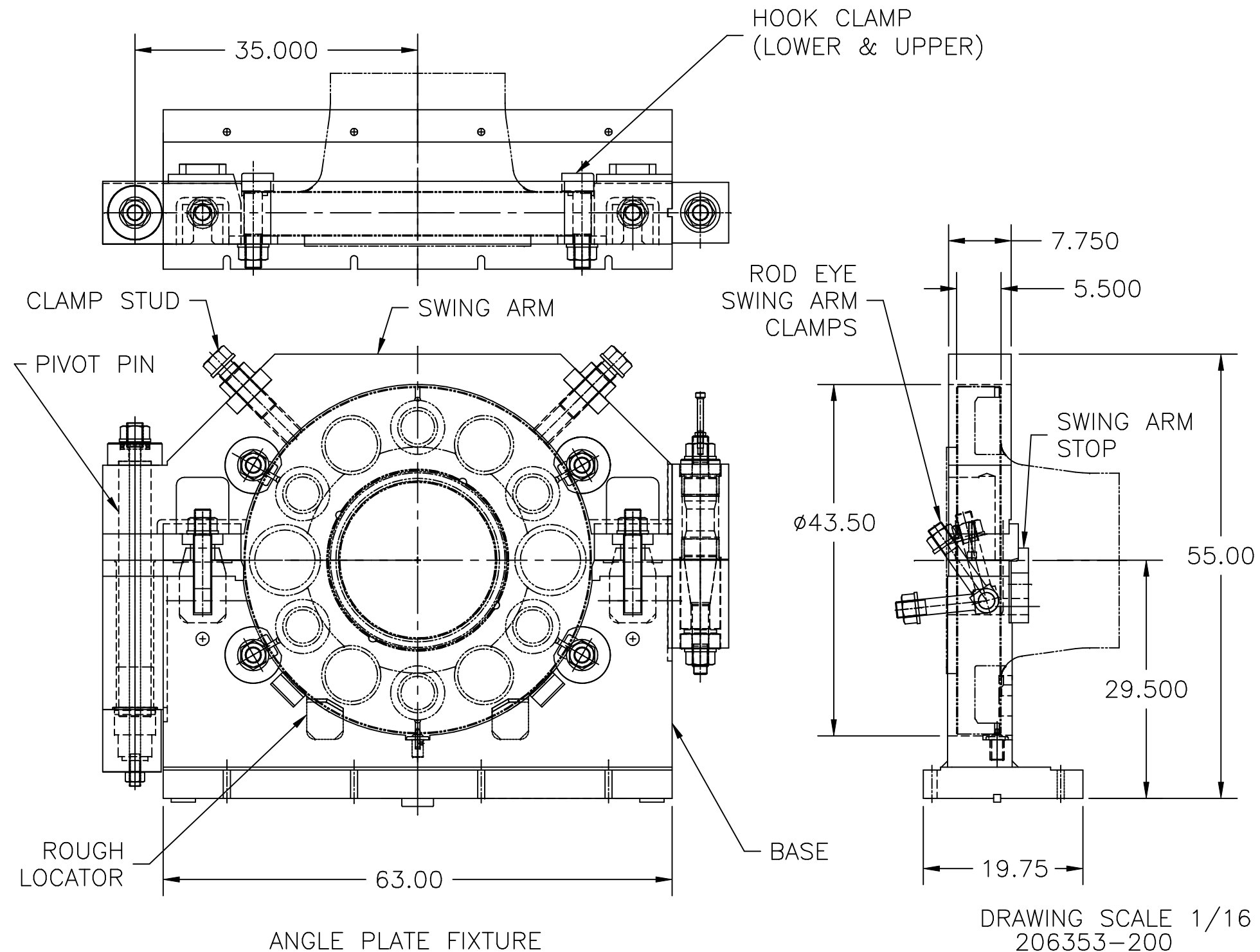
4 SPINDLE DRILL ATTACHMENT  
 MOUNTS VERTICALLY  
 TO KIRA MACHINING CENTER  
 GEAR RATIO = 1.0 TO 2.0 INCREASE  
 GEAR CAP. = 0.3 HP. PER 100 RPM OUTPUT

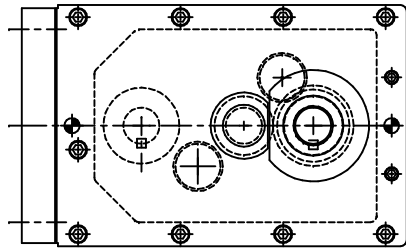
DRAWING SCALE 1/2  
 203319-300



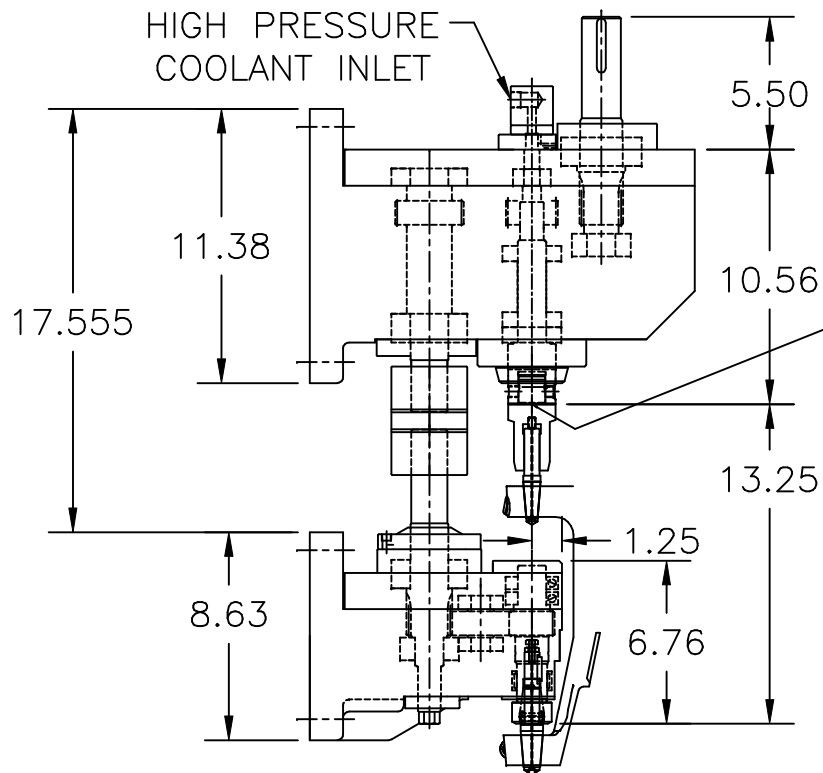
RIGHT ANGLE ATTACHMENT  
MOUNTS HORIZONTALLY TO OKUMA L470M  
WITH LIVE VDI TURRET  
GEAR RATIO = 1.0 TO 1.0  
GEAR CAP. = 0.6 HP. PER 100 RPM OUTPUT

DRAWING SCALE 1/2  
206164-300





UPPER SPINDLE ASSEMBLY



ABS-50 SPINDLE SOCKET

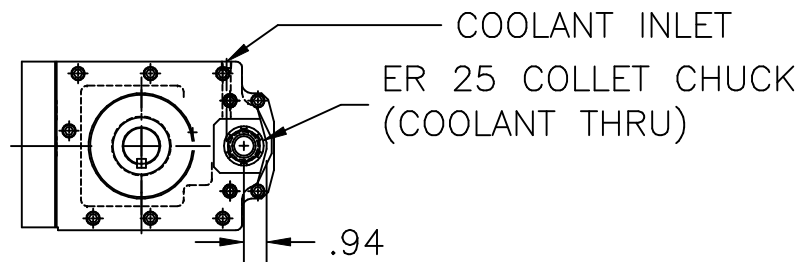
UPPER SINGLE SPINDLE DRILL HEAD  
MOUNTS TO CUSTOMER PLATEN

INPUT SPEED = 1160 RPM

SPINDLE SPEED = 958 RPM

AUXILIARY DRIVE FOR LOWER SPINDLE = 711 RPM

LOWER SPINDLE ASSEMBLY



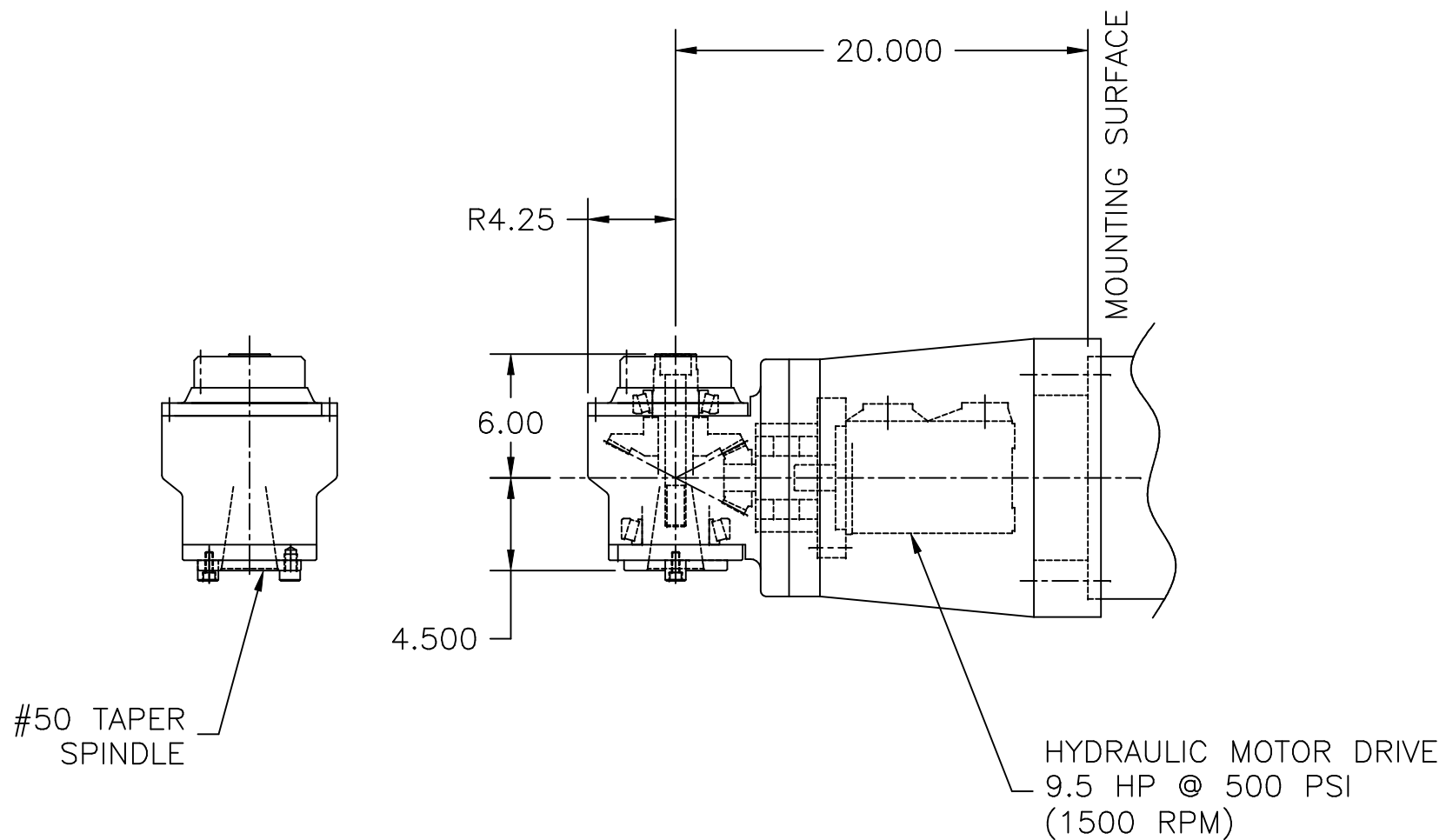
COOLANT INLET

ER 25 COLLET CHUCK  
(COOLANT THRU)

.94

DRAWING SCALE 1/8

206364-300-01



RIGHT ANGLE MILL ATTACHMENT  
MOUNTS HORIZ.  
GEAR RATIO = 1.0 TO 0.5 REDUCTION

DRAWING SCALE 1/8  
P-020494