

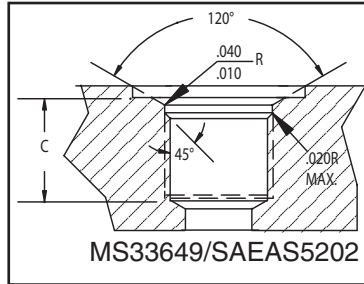
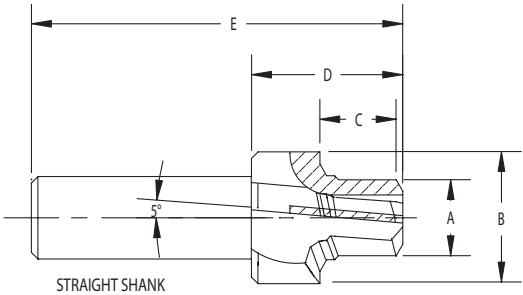
# PORT CONTOUR CUTTERS INTERNAL STRAIGHT THREAD O-RING BOSS

CARBIDE TIPPED  
STRAIGHT SHANK

## MS33649/SAEAS5202



Reamer pilot series porting tools profile the MS33649 contour. The reamer pilot also sizes the minor diameter per class 3B thread specification. Cutters are heat treated for toughness and durability. All tolerances are held within applicable Mil Specs. All grinding is done between centers to insure concentricity.



### COATINGS AVAILABLE

TITANIUM NITRIDE-TIN  
TITANIUM CARBONITRIDE-TICN  
TITANIUM ALUMINUM NITRIDE-TIALN  
AL TITANIUM NITRIDE-ALTN

### COOLANT THRU AVAILABLE

TOOL NUMBER	TUBE NO.	TUBE SIZE	THREAD SIZE	A REAMER DIA.	B SPOTFACE DIA.	C REAMER LENGTH	D HEAD LENGTH	E OAL LENGTH	SHANK DIMENSIONS	
									SHANK DIA.	SHANK LENGTH
MS49R-01T	1	1/16	1/4-28	.215	.650	.407	1-0	3-0	.500	2-0
MS49R-02T	2	1/8	5/16-24	.275	.742	.582	1-1/8	3-1/8	.500	2-0
MS49R-03T	3	3/16	3/8-24	.339	.805	.588	1-1/4	3-1/4	.500	2-0
MS49R-04T	4	1/4	7/16-20	.393	.888	.661	1-1/4	3-1/4	.500	2-0
MS49R-05T	5	5/16	1/2-20	.455	.950	.661	1-1/4	3-1/4	.500	2-0
MS49R-06T	6	3/8	9/16-18	.512	1.012	.714	1-1/2	3-1/2	.500	2-0
MS49R-07T	7	7/16	5/8-18	.575	1.105	.730	1-1/2	3-1/2	.500	2-0
MS49R-08T	8	1/2	3/4-16	.693	1.240	.839	1-5/8	3-5/8	.750	2-0
MS49R-09T	9	9/16	13/16-16	.756	1.302	.855	1-5/8	3-5/8	.750	2-0
MS49R-10T	10	5/8	7/8-14	.810	1.415	.935	1-7/8	4-1/8	.750	2-1/4
MS49R-11T	11	11/16	1-12	.925	1.602	1.069	2-1/8	4-3/8	.750	2-1/4
MS49R-12T	12	3/4	1-1/16-12	.987	1.665	1.069	2-1/8	4-3/8	.750	2-1/4
MS49R-14T	14	7/8	1-3/16-12	1.112	1.790	1.069	2-1/8	4-3/8	.750	2-1/4
MS49R-16T	16	1-0	1-5/16-12	1.237	1.965	1.069	2-1/8	4-3/8	.750	2-1/4
MS49R-18T	18	1-1/8	1-1/2-12	1.425	2.090	1.121	2-1/4	4-1/2	.750	2-1/4
MS49R-20T	20	1-1/4	1-5/8-12	1.550	2.310	1.121	2-1/4	4-1/2	1.000	2-1/4
MS49R-24T	24	1-1/2	1-7/8-12	1.800	2.600	1.132	2-1/4	4-1/2	1.000	2-1/4
MS49R-28T	28	1-3/4	2-1/4-12	2.175	3.050	1.248	2-1/4	4-1/2	1.000	2-1/4
MS49R-32T	32	2-0	2-1/2-12	2.425	3.520	1.373	2-1/2	5-0	1.000	2-1/2

