



METRIC CONVERSION					
INCH	mm				
.03	.8				
.07	1.8				
.09	2.3				
2.00	50.8				
9.00	228.6				

## COMPUTATION INTERNAL DIMENSIONS

MATERIAL: CARBON STEEL

## EXAMPLE 7 (SEE FIGURE 4)

INCH	Tolerance on Internal Dimension			Plus	Minus
	Diameter x Length/Width Tolerance factor	=	9 x 0.003 =	0.027	0.027
	Largest Diameter x Die Wear Tolerance factor (Table I, page 9)	=	11 x 0.005 =	+0.027	$-\frac{0.055}{0.082}$
	Raised to the next highest .01 in.	I		+0.03	-0.09
METRIC	Diameter x Length/Width Tolerance factor	=	228.6 × 0.003 =	0.686	0.686
	Largest Diameter x Die Wear Tolerance factor (Table I, page 9)	=	279.4 × 0.005 =	+0.686	$-\frac{1.397}{2.083}$
	Raised to the next highest .1 mm			+0.7	-2.1
	Minimum Tolerance (paragraph 2, page 8)			+0.8	

## EXAMPLE 8 (SEE FIGURE 4)

	Tolerance on Internal Dimension		146		Plus	Minus
INCH	Diameter x Length/Width Tolerance factor Largest Diameter x Die Wear Tolerance factor (Table I, page 9)	=======================================	2 × 0.000	=	0.006  +0.006	0.006 0.055 - 0.061
	Raised to the next highest .01 in.  Minimum Tolerance (paragraph 2, page 8)				+0.01 +0.03	-0.07
METRIC	Diameter x Length/Width Tolerance factor Largest Diameter x Die Wear Tolerance factor (Table I, page 9)	= =	50.8 × 0.003 279.4 × 0.005		0.152  +0.152	0.152 1.397 - 1.549
	Raised to the next highest .1 mm  Minimum Tolerance (paragraph 2, page 8)				+0.2	-1.6