

DIE CLOSURE TOLERANCES

SCOPE

- Die Closure Tolerances relate to variations in thickness of forgings as affected by the closing of the dies and die wear, and pertain to variations in dimensions crossing the fundamental parting line.

TOLERANCE

- Die Closure Tolerances on forgings are based on the projected area of the forging at the trim line – not including flash, but including all areas to be subsequently punched out, and are applied as plus tolerances only. See Table II, below.

TABLE II: DIE CLOSURE TOLERANCES
TABULATED FIGURES ARE PLUS VALUES ONLY

	Materials	Area at the Trim Line Flash not included, expressed in square inches						
		10 and under	Over 10 to 30 incl.	Over 30 to 50 incl.	Over 50 to 100 incl.	Over 100 to 500 incl.	Over 500 to 1000 incl.	Over 1000
INCH	Carbon, Low Alloys	.04	.06	.09	.13	.16	.19	.25
	Stainless	.06	.09	.13	.16	.19	.25	.31
	Super Alloys, Titanium	.06	.09	.13	.19	.25	.31	.38
	Aluminum	.04	.05	.07	.09	.13	.19	.25
	Brass & Copper	.04	.05	.07	.09	.13	.19	.25

	Materials	Area at the Trim Line Flash not included, expressed in square millimeters						
		0 to 6.5 x 1000	Over 6.5 to 20 x 1000	Over 20 to 32 x 1000	Over 32 to 65 x 1000	Over 65 to 300 x 1000	Over 300 to 650 x 1000	Over 650 x 1000
METRIC	Carbon, Low Alloys	1.1	1.6	2.3	3.3	4.1	4.9	6.4
	Stainless	1.6	2.3	3.4	4.1	4.9	6.4	7.9
	Super Alloys, Titanium	1.6	2.3	3.4	4.9	6.4	7.9	9.7
	Aluminum	1.1	1.3	1.8	2.3	3.4	4.9	6.4
	Brass & Copper	1.1	1.3	1.8	2.3	3.4	4.9	6.4