

Tolerance ranges per ASA Std. B4a -1925

TABLE 4-1 Tolerance Ranges Per ASA Std. B4a-1925

Class of fit	Clearance	Interference	Hole tolerance	Shaft tolerance
1. Loose fit	$0.0025 \sqrt[3]{D^2}$		$+0.0025 \sqrt[3]{D}$	$-0.0025 \sqrt[3]{D}$
2. Free fit	$0.0014 \sqrt[3]{D^2}$		$+0.0013 \sqrt[3]{D}$	$-0.0013 \sqrt[3]{D}$
3. Medium fit	$0.0009 \sqrt[3]{D^2}$		$+0.0008 \sqrt[3]{D}$	$-0.0008 \sqrt[3]{D}$
4. Snug fit	0.0000		$+0.0006 \sqrt[3]{D}$	$-0.0004 \sqrt[3]{D}$
5. Wringing		0.0000	$+0.0006 \sqrt[3]{D}$	$+0.0004 \sqrt[3]{D}$
6. Tight		$0.00025D$	$+0.0006 \sqrt[3]{D}$	$+0.0006 \sqrt[3]{D}$
7. Medium force		$0.0005D$	$+0.0006 \sqrt[3]{D}$	$+0.0006 \sqrt[3]{D}$
8. Heavy force		$0.001D$	$+0.0006 \sqrt[3]{D}$	$+0.0006 \sqrt[3]{D}$

(D)