

Shaft Alignment Tolerances

The coupling manufacturer is generally concerned with their product effectively transmitting energy from one shaft to another. While it is safe to say the coupling will not fail if aligned to their tolerances, it is not safe to say that bearing, seal, shaft, and other equipment component life will not suffer a reduced lifespan or catastrophic failure.

Rather than being concerned with how much misalignment the coupling can handle, we should be concerned with how much misalignment the bearings and other components can handle in regards to reducing lifespan. If your objective is to increase equipment life and thereby reduce or eliminate process interruptions, minimize equipment life-cycle costs, and save energy, choose your alignment specifications wisely.

SHAFT-ALIGNMENT TOLERANCES (SHORT COUPLINGS)				
RPM	EXCELLENT		ACCEPTABLE	
	Offset, mils	Angularity mils/in	Offset, mils	Angularity mils/in
600	5.0	1.0	9.0	1.5
900	3.0	0.7	6.0	1.0
1,200	2.5	.05	4.0	0.8
1,800	2.0	0.3	3.0	0.5
3,600	1.0	.02	1.5	0.3
7,200	0.5	0.1	1.0	0.2