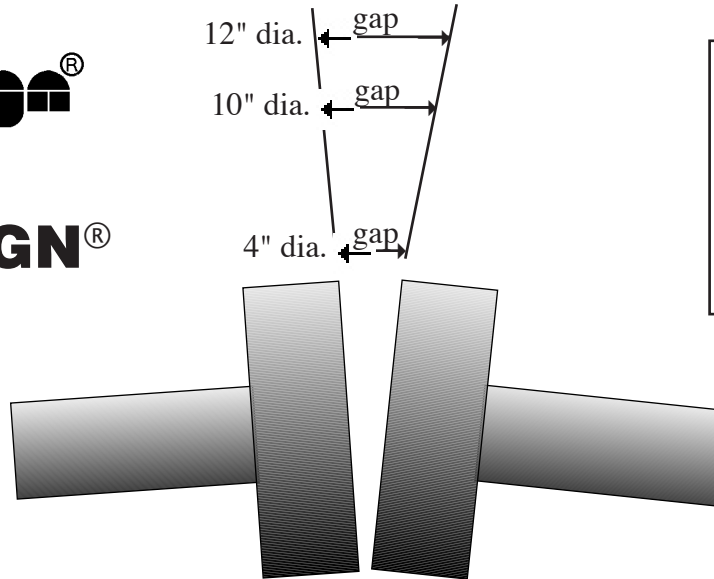



Why Not Use A 10" Diameter in the Coupling Mode?



Important Note:
 These suggested tolerances should be used only if machinery manufacturer or in-house tolerances are not available.

When checking the angularity [gap] against tolerance in the Coupling Mode , we will get the same answer no matter what coupling diameter we use when we look at our result per inch of diameter.

To get angularity [gap] results per inch of diameter, we divide the gap by the diameter at which it was measured. Which of these would you rather explain without a calculator?

- a gap of 5.4 Mils at the 12" diameter?
- a gap of 4.5 Mils at the 10" diameter?
- a gap of 1.8 Mils at the 4" diameter?

Since the Optalign® and Rotalign® show the gap at the diameter of your choosing, it is *much* easier to work with the default 10" diameter! In the above examples the results are exactly the same — because the angle is the same — *.45 Mils per inch of diameter!* If the Gap is correct at 10" it is correct for any diameter!

This gap of 4.5 Mils (.45 Mils/inch) would not be considered "Excellent" at 1,800 RPM since the angularity [gap] tolerance is 3.0 Mils/10" (.3 Mils/inch). It would meet the "Acceptable" tolerance though of 5.0 Mils/10" (.5 Mils/inch).

You can also multiply the angularity [gap] tolerance by the actual diameter and compare your result with the *actual* gap as checked with feeler gages or dial indicators. But, the default 10" diameter works - so why not use it!

Note: 1 Mil = 1/1000"

RPM	GAP (mils/10")		OFFSET (mils)		SPACER SHAFT (mils/in.)	
	Excellent	Acceptable	Excellent	Acceptable	Excellent	Acceptable
600	10.0	15.0	5.0	9.0	1.8	3.0
900	7.0	10.0	3.0	6.0	1.2	2.0
1200	5.0	8.0	2.5	4.0	0.9	1.5
1800	3.0	5.0	2.0	3.0	0.6	1.0
3600	2.0	3.0	1.0	1.5	0.3	0.5
7200	1.0	2.0	0.5	1.0	0.15	0.25

All RPM: Maximum Soft Foot Reading 2.0 mils. (1 mil = .001")
 Note: Use OEM or in-house tolerances if available.

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8ths
 1/8 = .125
 1/4 = .250
 3/8 = .375
 1/2 = .500
 5/8 = .625
 3/4 = .750
 7/8 = .875

Related Products:
 • SS Shims:
 • Kits & Packs
 • Portable Jack Bolts
 • Heavy Lifting Devices
 • and more...

Note: The wallet sized Tolerance table is shown. A full size Tolerance table is also available. Go to: <http://www.laseralignment.net/>