

Magnaloy Coupling Company

Technical Product Information

Couplings

Magnaloy Coupling Shaft End Spacing

During the design of mounting systems and coupling installation on these systems, the spacing between shaft ends is an important parameter. Shaft engagement in the coupling bore is important to ensure adequate load bearing surfaces for the keystock or spline teeth. A good 'rule-of-thumb' is one times the shaft diameter for shaft engagement. However, 'additional engagement when available' is the first corollary to this rule.

In our Dimensional Specifications for the Magnaloy Flexible Drive Couplings, the dimensions 'W' and 'X' are given to assist in the proper design of these mounting systems. The dimension 'W' is the **minimum** shaft end separation recommended to prevent contact between shaft ends. Dimension 'X' is the **maximum** shaft end separation to ensure full shaft engagement in the coupling with 100% shaft engagement through the bore length. While this situation is ideal, because of shaft length consideration, it is sometimes not possible to achieve. In these cases, we recommend following the above corollary to the 'one time shaft diameter' rule. The full engagement condition resulting from dimension 'X' is **NOT** necessary for satisfactory performance of the Magnaloy Coupling and is shown for illustrative purposes only.