



SPACERS AND TUBULAR PRODUCTS

CUSTOMIZED TO MEET YOUR SPECIFIC REQUIREMENTS

SPECIAL LENGTHS

Any length from 3/32" to 6" or 2.5 mm to 150 mm, subject to some limitations relative to diameter and wall thickness.

SPECIAL INSIDE DIAMETERS

Any diameter between 5/64" to 1" or 2 mm to 25.5 mm. Reduced tolerances are also available.

SPECIFIED OUTSIDE DIAMETERS

The outside diameter can be specified with minimum and maximum tolerances but it is then suggested to specify the inside diameter only with a reference dimension or only with a minimum dimension rather than a minimum/maximum tolerance to reduce cost.

BOTH DIAMETERS SPECIFIED

In situations which require both the inside and outside diameters to be specified with toleranced dimensions, a decision needs to be made as to which dimension should have the tighter tolerance so that the strip thickness tolerance can be properly allocated.

GAP

Spacers are usually butted with minimal or no gap. The gap can be specified from "no gap" to a toleranced or maximum specified gap.

SPECIAL WALL THICKNESS

The ideal thickness is 15% of the mean inside diameter up to a maximum of .140" and 3.5 mm. A range of 10% to 25% of the mean inside diameter is possible depending on material type and tolerancing requirements.

CONCENTRICITY

When necessary, with OD/ID reduced tolerance spacers, concentricity can also be a specification.

SPECIAL LENGTH TOLERANCES

Standard spacers have a generous length tolerance to keep the cost down. Reduced tolerances can be provided to .004" and 0.05 mm and in some instances even these tolerances can be further reduced. Tight tolerances increase costs. Tolerances should be tailored to the needs of the application to eliminate unnecessary expense.



SPECIAL MATERIALS

Virtually any material available in cold rolled strip form can be used. Some of the more frequently specified materials are brass and higher carbon steels for hardening purposes.

INCREASED COLUMNAR STRENGTH

Can be achieved through increased wall thickness, higher strength material, or by using materials that can be heat treated.

PERPENDICULARITY

The ends of standard spacers are square to the axis of the spacer but, to minimize cost, are not a controlled dimension. When required, perpendicularity can be specified.

SPECIAL FINISHES

Finishes are only limited by market availability. Finishes are specified for corrosion protection, color coding, and appearance. Stainless steel or brass should be considered in place of finishes, since these can result in a better product at a lower cost.

HEADED SPACERS/RIVETS

These are readily available in both spacer and rivet dimensions and are used in place of expensive long semi-tubular rivets.

SHOULDER RIVETS

These have found a use in unique applications as a standoff, riveted in place.

OTHER SPECIALS

- ⊙ Stamped with identification numbers or letters, indentations and protrusions.
- ⊙ Holes and perforations
- ⊙ Chevron or dovetail seams
- ⊙ Outside diameter diamond knurls
- ⊙ Serrated ends
- ⊙ Inside diameter lead-ins or outside diameter chamfers
- ⊙ Oval spacers and tubular products



SPIROL®

Innovative fastening solutions.
Lower assembly costs.



Challenge Us!

SPIROL Application Engineers will review your application needs and work with your design team to recommend the best solution. One way to start the process is to visit our **Optimal Application Engineering** portal at www.SPIROL.com.

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