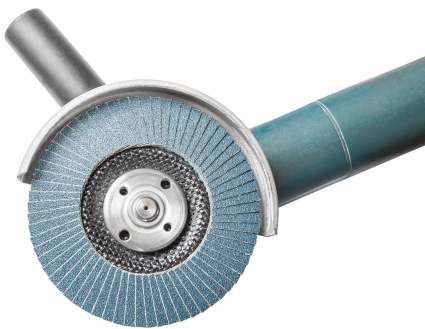


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End Forming of A Round Tube into A Polygon Section With Small Corner Radii



▶ MORE INFORMATION

MEGA-TREND

- **Chemicals and Materials**

TECHNOLOGY READINESS LEVEL (TRL)

- **TRL 2**

PATENT/ GRANTED NUMBER

- **MY-186227-A**

▶ TECHNOLOGY OVERVIEW

The present invention relates to an end forming / expansion of a round tube into a polygon section having small corner radii and a method thereof. Accordingly, the end forming / expansion of the round tube into the polygon section includes: a) a conical die with a predetermined taper angle, wherein a tube having predetermined cross sectional end or diameter (D), thickness (t) and length (L) is provided and is to be placed on top of the said conical die, and a conically-expanded tube is formed by an axially and/or uniformly compression force of a compression punch over the tube through the taper angle of the conical die at 1st stage of end forming / expansion process; and b) a taper square or polygonal die with an entry angle (α) and an escape angle (β) is used in association with a conical bottom square or polygonal punch to form a square or polygonal section from the conically-expanded tube at 2nd stage of end forming / expansion process; and wherein end formation of tube into other polygon sections can be obtained by changing the shape of the punch and die in the 2nd stage.

CONTACT US!

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