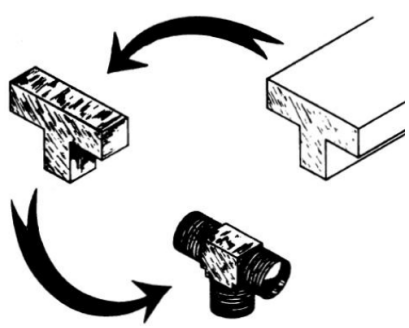
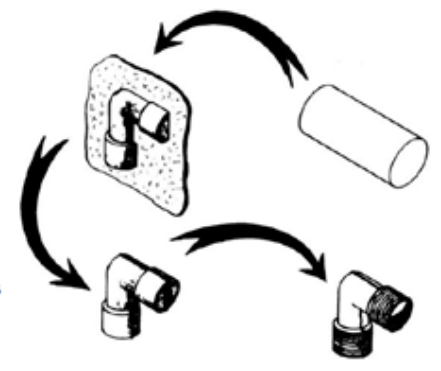




MANUFACTURING TECHNIQUES

FORGED FITTINGS

Brass for forged fittings is extruded into round bars, cut to length and then straightened. After straightening, the bars are cut into short lengths (slugs), reheated to the pliable state and pressed between upper and lower die cavities at a pressure in excess of 25,000 pounds per square inch. After cooling, the excess material is trimmed away and the forged blank is ready for machining. This process produces a uniform piece of brass with exceptional strength. Because the grain flow flows the contour of the blank, the finished fitting has high impact strength and is resistant to mechanical shock and vibration.



EXTRUDED FITTINGS

Special shaped bars, as well as hexagon and round bars, are extruded to the required shape, then drawn to size, cut to length and straightened. To do this, the solid, round billet, varying from 8 to 12 inches in diameter, is heated and then forced by a pressure of approximately 80,000 pounds per square inch through a die of the desired shape. The resulting bar is cooled and then drawn again thru additional dies to the desired shaped. After straightening, the bar is ready for machining. The process is a dense, non-porous material.

Raw Material Used in the Manufacturing of Brass Fittings:

- CA 345 ASTM B-453
- CA 377 ASTM B-124
- CA 360 ASTM B-16

