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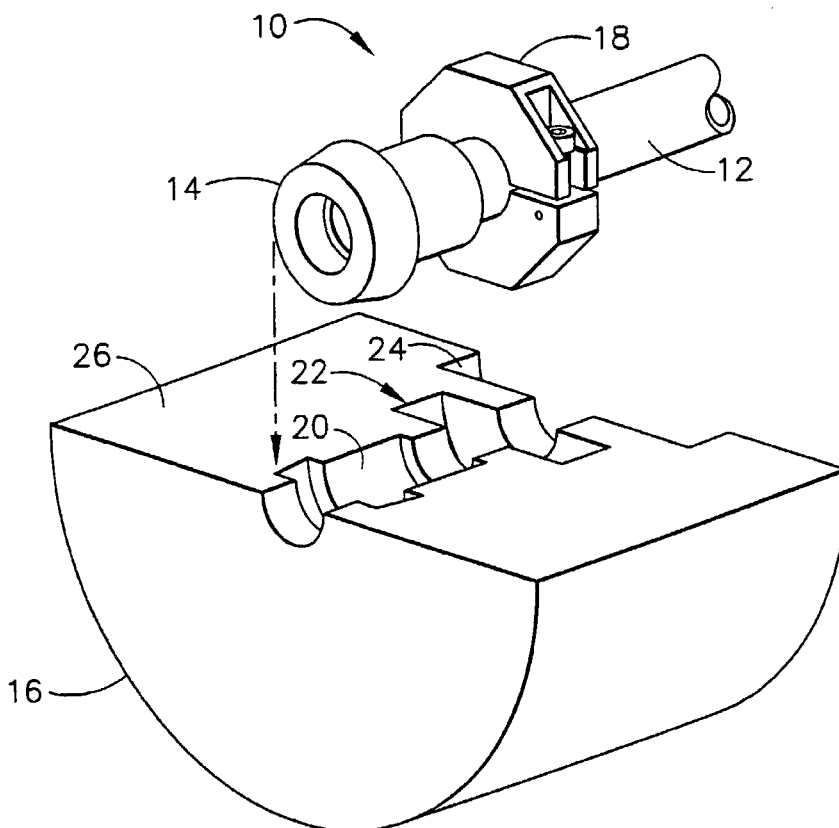
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(54) Title: SWAGED TUBE FITTING COLLAR AND DIE



(57) Abstract: An assembly (10, 50) for retaining a work piece and fitting together for placement in a swage machine. The assembly (10, 50), includes a die (16, 54) and a collar (18, 56) to keep the work piece from moving during the swaging process. The collar (18, 56) includes two clamping sections (28, 30 and 70, 72) that are connected together, such as by a hinge (32, 74). The collar (18, 56) is placed about the work piece and then clamped in place by a retaining bolt (34, 76) at the opposing end of the clamping section (28, 30 and 70, 72). The die (16, 54) includes a recess (22, 60) for holding the collar and a recess (24, 62) for the tube. The assembly (10, 50) includes an anti-rotation feature to minimize rotation of the collar (18, 56) within the recess (22, 60). One example of an anti-rotation feature is the formation of the recess (22, 60) and the collar (18, 56) in corresponding hexagonal shapes. The die (16, 54) may also include a recess (20, 58) for retaining a fitting to be swaged to the work piece. The

die and collar assembly (10, 50) eliminates the need for nylon inserts and eliminates work piece rotation and axial movement during the automated swaging process.



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