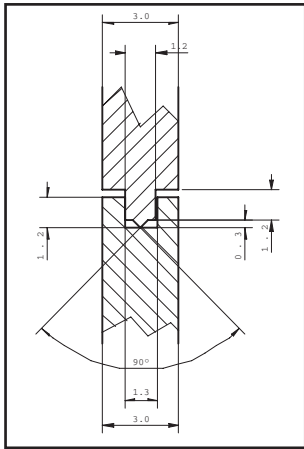
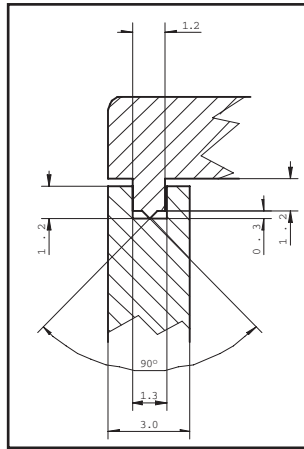


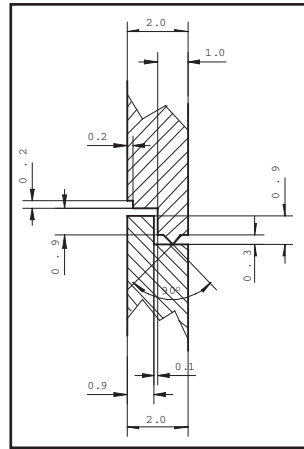
# Joint design for ultrasonic welding



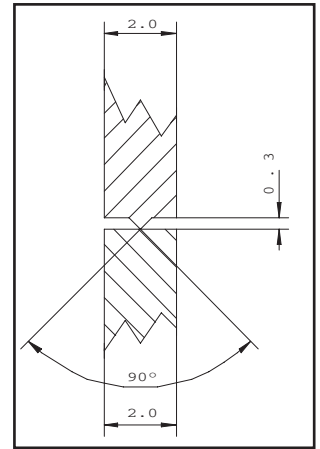
Energy Director 1



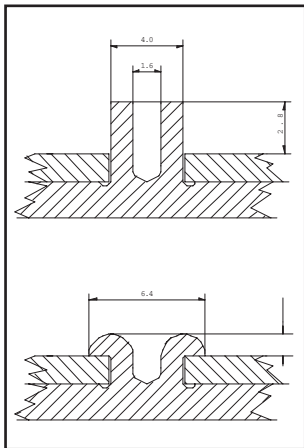
Energy Director 1.1



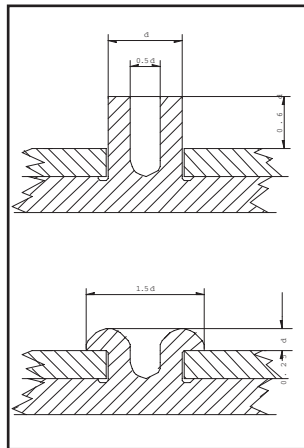
Energy Director 2



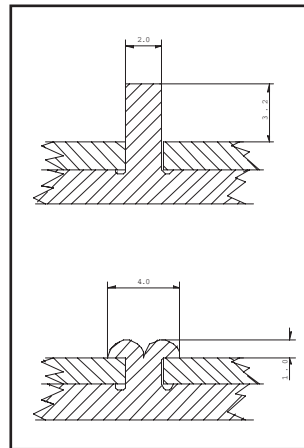
Energy Director 3



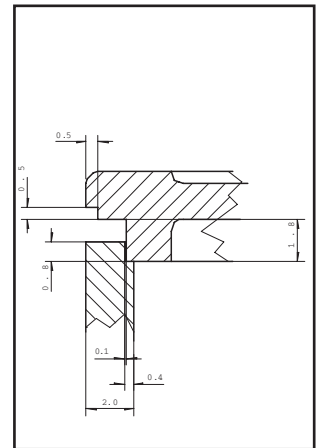
Tubular rivet 1



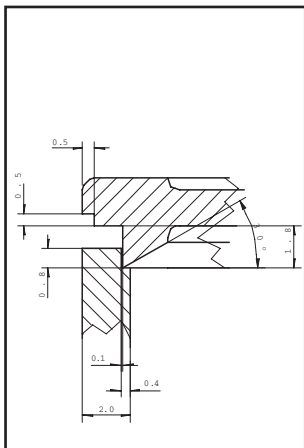
Proportions tubular rivet



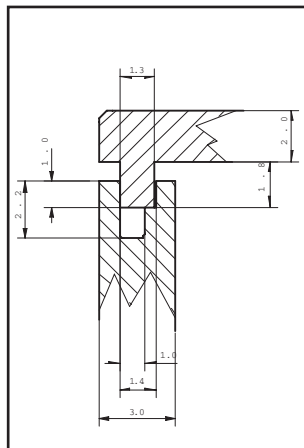
Rivet head



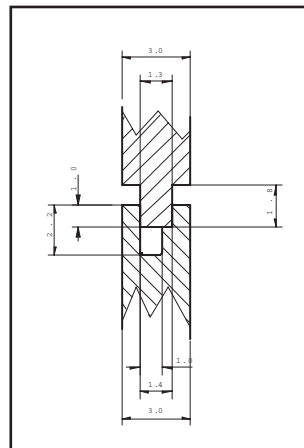
Shear joint 1



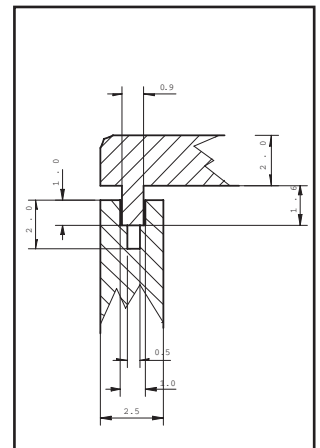
Shear joint 2



Shear joint 3



Shear joint 3.1



Shear joint 4