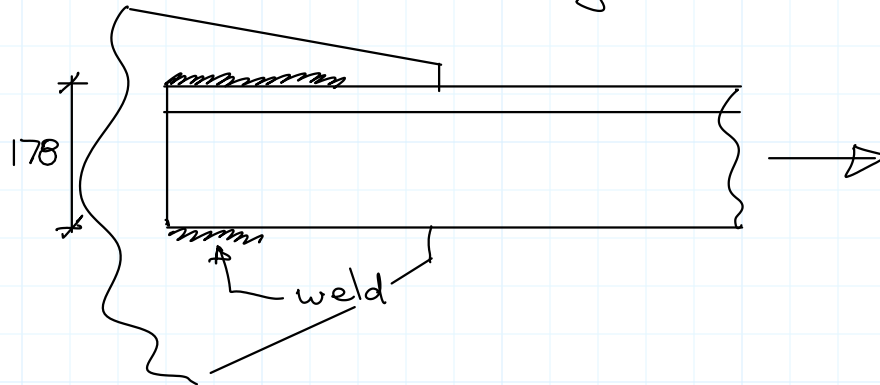


Example T-10: Weld Balancing

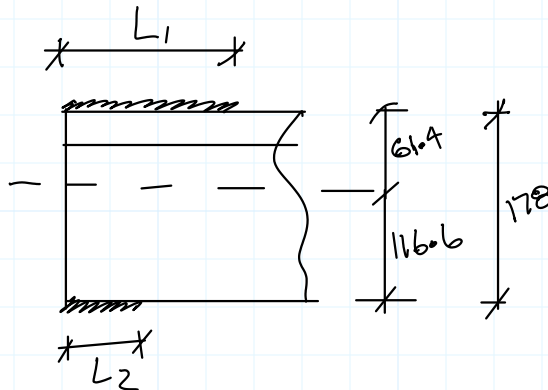
Problem

An L178x102x13 angle is welded to a gusset plate as shown. It has been determined that a total of 900 mm of weld is necessary to provide adequate resistance. Proportion the weld to each side of the angle.



Solution

61.4 - 'y' distance
on p 6-72 - distance
from shorter leg
to centroid.



Balance weld

$$61.4 L_1 = 116.6 L_2$$

$$L_1 = 1.90 L_2$$

$$L_1 + L_2 = 900$$

$$1.90 L_2 + L_2 = 900$$

$$L_2 = \frac{900}{2.90}$$

$$= 310 \text{ mm}$$

$$L_1 = 900 - 310 = 590 \text{ mm}$$

