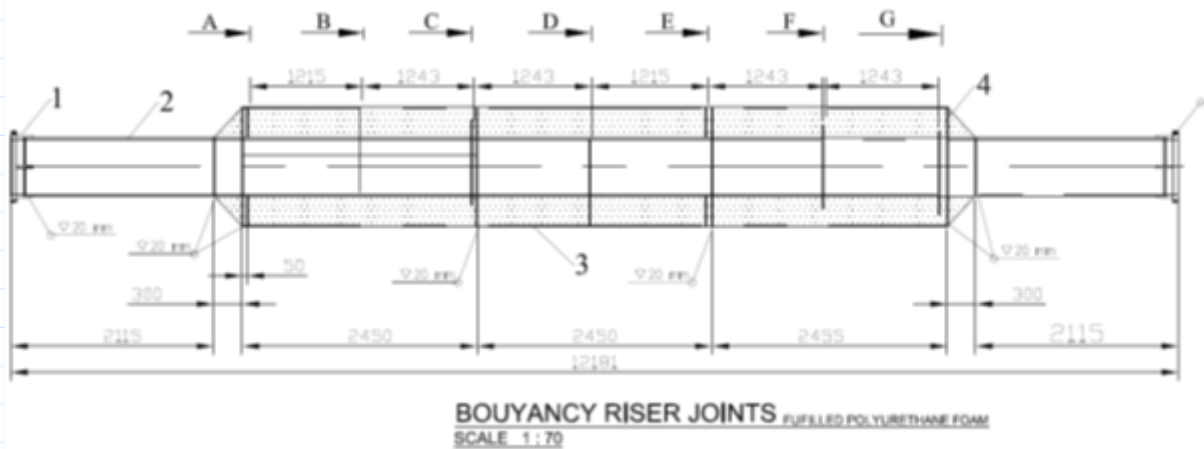


# RISER BOUYANCY JOINT



VOLUME SECTION A to G

$$3.14 \cdot 0.594^2 \text{ m}^2 \cdot 7.355 \text{ m} = 8.149 \text{ m}^3$$

VOLUME CURVATION:

ESTIMATED THAT 2 SIDE CURVATION EQUALS 1 RING

$$3.14 \cdot 0.594^2 \text{ m}^2 \cdot 0.3 \text{ m} = 0.332 \text{ m}^3$$

VOLUME INSIDE

$$3.14 \cdot 0.27^2 \cdot \text{m}^2 \cdot (7.355 + 0.3 + 0.3) \text{ m} = 1.821 \text{ m}^3$$

VOLUME BOUYANCY ELEMENT

$$8.149 \text{ m}^3 + 0.332 \text{ m}^3 - 1.821 \text{ m}^3 = 6.66 \text{ m}^3$$

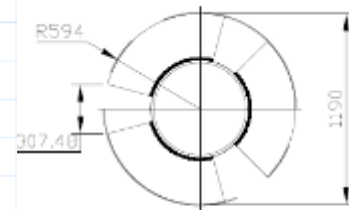
DISPLACED WEIGHT WATER

$$6.66 \text{ m}^3 \cdot 1029 \frac{\text{kg}}{\text{m}^3} = (6.853 \cdot 10^3) \text{ kg}$$

POSITIVE BOUYANCY (WEIGHT OF BOUYANCY JOINT 3400KG)

$$6853 \text{ kg} - 3400 \text{ kg} = (3.453 \cdot 10^3) \text{ kg}$$

BOUYANCY JOINT POSITIVE BOUYANCY OF 3.453MT



SECTION F-F  
GUSSETS