

Calculation of different rivet lengths

Indications without obligation, correct lengths to be determined by tests.

1.

$$h = 1,1 \cdot \frac{D^3 + 2d^3 + 3d^2D}{6d^2}$$

known : $\varnothing d, \varnothing D, (\alpha = 45^\circ)$
wanted : h

$$h = 1,1 \cdot \frac{2c^2 \lg \alpha (3d + 2c \lg \alpha)}{3d^2}$$

known : $\varnothing d, c, \alpha$
wanted : h

$$h = 1,1 \cdot \frac{cD^2 + cD - 2cd^2}{3d^2}$$

known : $\varnothing d, D, c$
wanted : h

2.

$$h = 1,1 \cdot \frac{D^3 + 2d^3 + 3d^2D}{6d^2}$$

known : $\varnothing d, \varnothing D, (\alpha = 45^\circ)$
wanted : h

$$h = 1,1 \cdot \frac{2c(D^2 + dD - 2d^2) + 0,1 \cdot D^3}{6d^2}$$

known : $\varnothing d, \varnothing D, c$
($D = d + 2c \cdot \lg \alpha$)
wanted : h

3.

$$h = 125 \cdot \frac{M (3D^2 + 4H^2)}{6d^2}$$

known : $\varnothing d, \varnothing D, H$
wanted : h

h, see page 10

4.

$$h = 125 \cdot \frac{D^3 + 3HD^2 + 4H^3 + 2d^2 + 3dD}{6d^2}$$

known : $\varnothing d, \varnothing D, (\alpha = 45^\circ) H$
wanted : h

$$h = 125 \cdot \frac{2cD^3 + cD^2H^2 - 2cd^3 + 3HD^2}{6d^2}$$

known : $\varnothing d, \varnothing D, c, H$
($D = d + 2c \cdot \lg \alpha$)
wanted : h

h, see page 10