

soldaduras PROBLEMA EXAMEN ENERO 2015

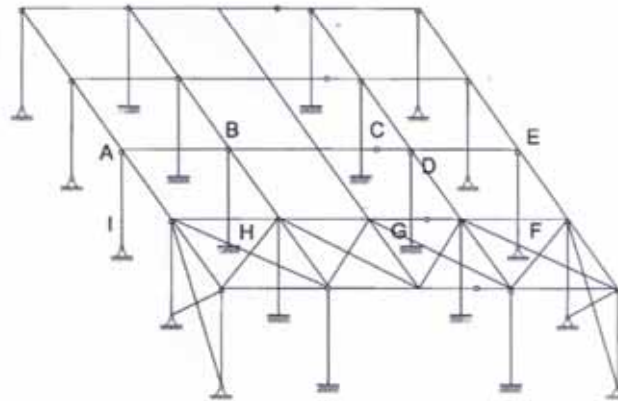
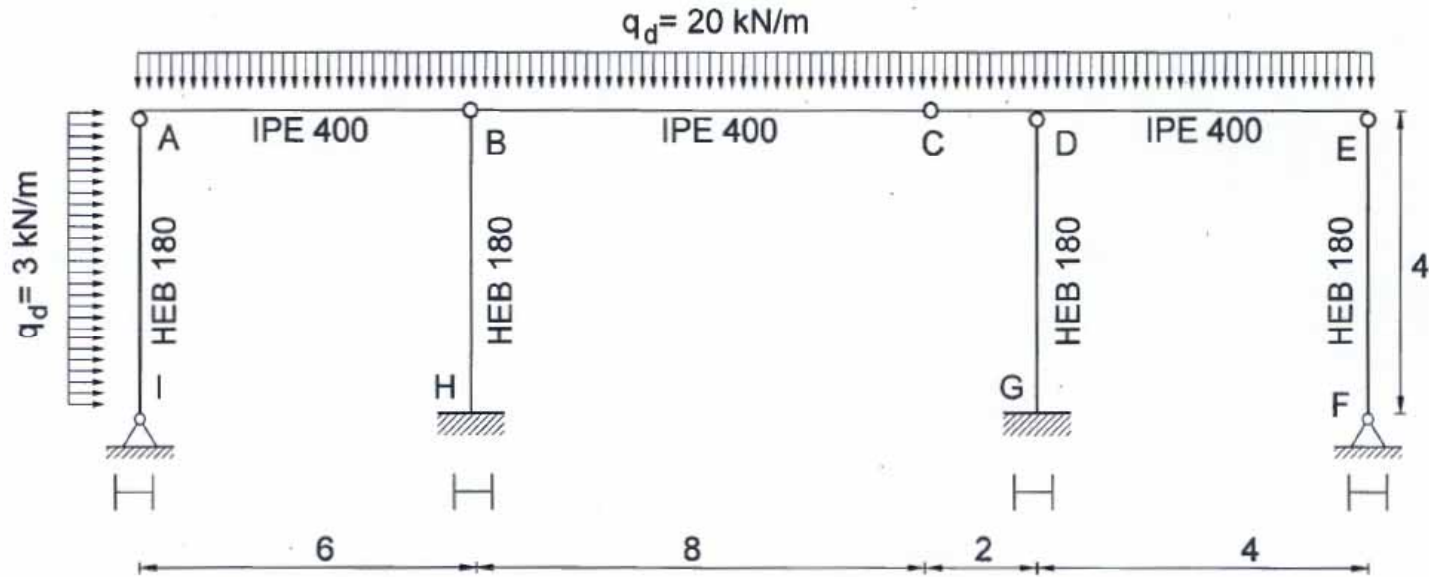
CTE_DB_SE_A
ETSAV ST3

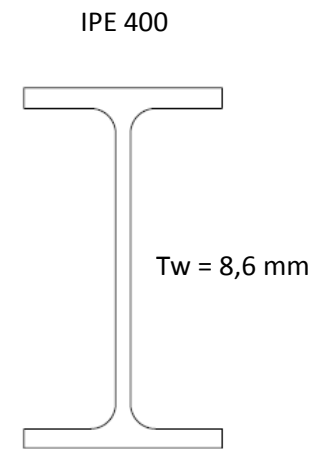
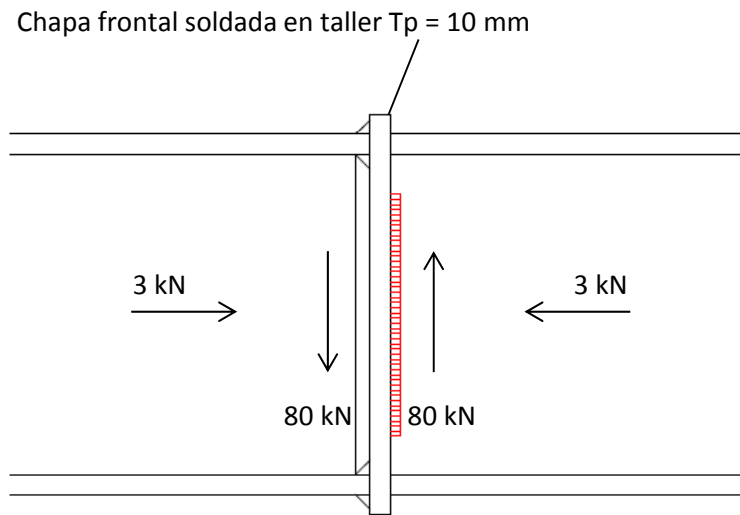
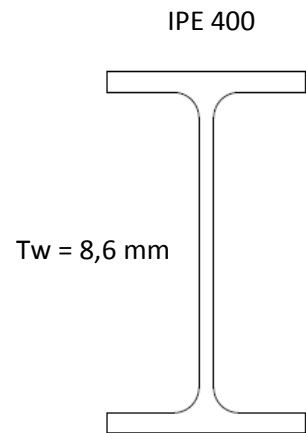
esquema

UPV María Castaño Cerezo ETSAV_ST3_2017-18

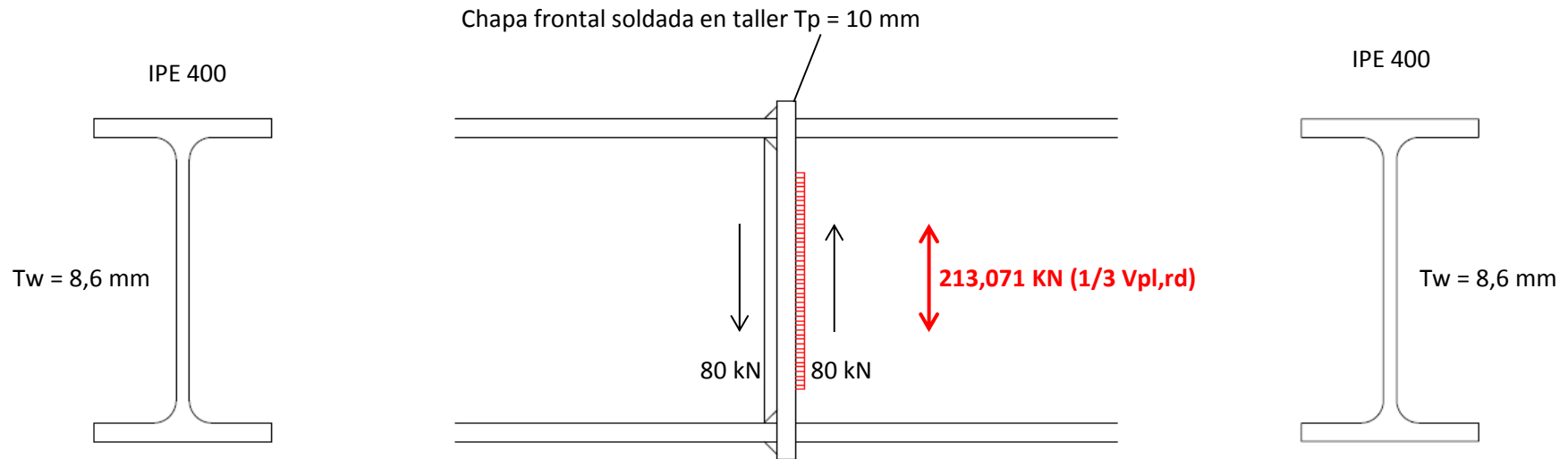
Nudo articulado_SOLDADURA (examen enero 2015)

Diseño y cálculo de la unión C con soldadura





ESPESOR DE GARGANTA (a) = Min (0,7*8,6;0,7*10) = 6,02 ~ 6 mm



LONGITUD CORDÓN (L)

$$L_{\max} = 2/3 * 400 = 267 \text{ mm} \sim \underline{270 \text{ mm}}$$

$$L_{\min} = \max (40\text{mm}; 6 * a) = \underline{40 \text{ mm}}$$

$$L_{\min} \text{ (recomendable)} = 1/2 * 400 = \underline{200 \text{ mm}}$$

$$L_{\text{calculo}} = \underline{80 \text{ mm}}$$

Longitud necesaria por cálculo $L = 80 \text{ mm}$

$$F_{w,rd} = F_{t,rd}$$

$$\frac{F}{2L} = \alpha \frac{f_u}{\gamma_{M2} \beta_w \sqrt{3}}$$

$$\frac{213071}{2L} = 6 \frac{430}{1,25 + 0,65 * \sqrt{3}}$$

$$L = 75,99 \cong 80 \text{ mm}$$