

COLLAR DE REFUERZO TUBERÍAS DE ACERO

COLLAR DE REFUERZO EN TUBERÍAS DE ACERO (AWWA M11): esta librería permite calcular el collar o cubierta de refuerzo para conexiones en tuberías de acero.

Plataforma: HP50g, versión ROM HP50-C / Revisión # 2.15

El comando RCT inicia la aplicación, se introducen los datos en las unidades especificadas:

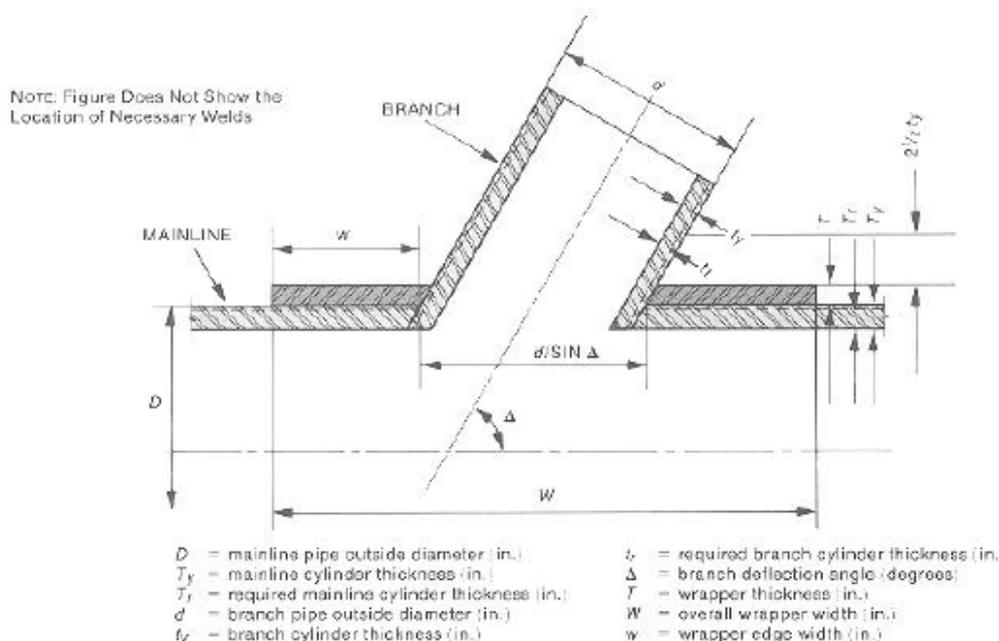


Figure 13-3 Reinforcement of Openings in Welded Steel Pipe

Table 13-2 Recommended Reinforcement Type*

PDV	d/D	M Factor	Reinforcement Type
>6000	all	—	Crotch Plate
4000-6000	>0.7	0.00025 PDV	Wrapper
<4000	>0.7	1.0	Wrapper
4000-6000	≤0.7	0.00025 PDV	Collar
<4000	≤0.7	1.0	Collar

*These reinforcements are for resistance to internal pressure. They should be checked for ability to resist external loads.

Criteria-data example—24-in. × 8-in. tee

Main-pipe size (nominal diameter)	24 in.
Main-pipe cylinder OD	D 25 ¾ in.
Main-pipe cylinder thickness	T_y 0.135 in. (10 gauge)
Branch-outlet size (nominal diameter)	8 in.
Branch-outlet cylinder OD	d 8 ⅝ in.
Branch-outlet thickness	t_y ¼ in.
Deflection angle	Δ 90°
Design pressure	P 150 psi
Reinforcement steel allowable stress (The allowable stress, based on a design stress resulting from working pressure, shall not exceed ½ the minimum yield of the steel used for the pipe cylinder or in the reinforcement, whichever is less.)	f_s 16 500 psi

Ilustración 2: Datos de ejemplo

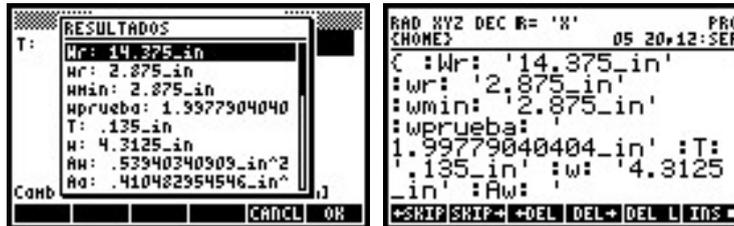
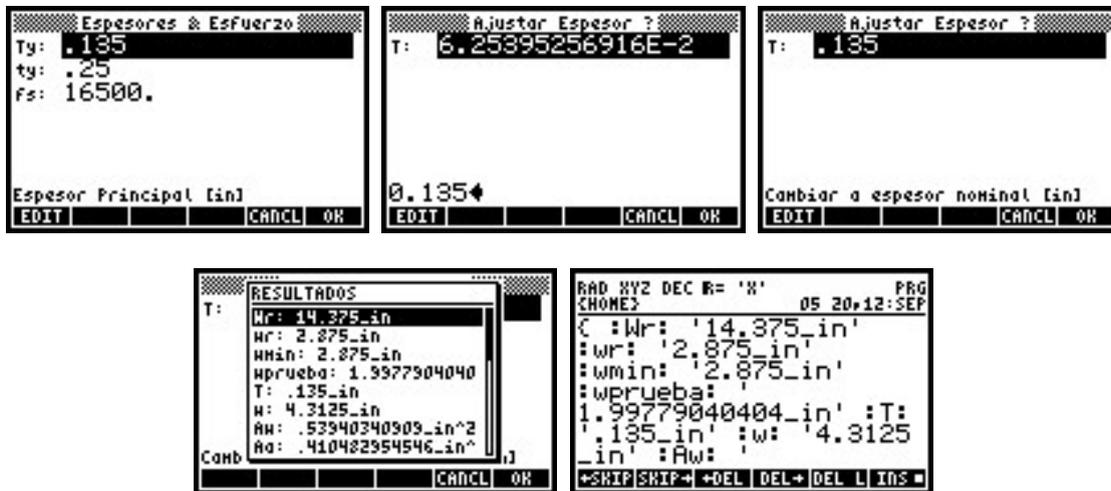


Ilustración 3: ajuste de espesor y resultados



Ilustración 4: para aletas consultar AWWA M11