Joint preparations

Table 7.1

No. and joint type		Sides	Method	Thickness
17. X-joint $\beta_1 = 45^\circ$ $\beta_2 = 15^\circ$ C = 1.5 - 2.5 mm D = 2.5 - 3.0 mm	β_1 C	Two sides	MMA MIG TIG ⁶⁾ FCW	14 – 30 mm ⁸⁾
18. X-joint $\beta_1 = 45^{\circ}$ $\beta_2 = 15^{\circ}$ $C = 3.0 - 8.0 \text{ mm}^{4)}$ No root gap	β_1 β_2 C	Two sides	SAW ⁹⁾	14 – 30 mm
19. U-joint β = 10° R = 8.0 mm C = 2.0 – 2.5 mm D = 2.0 – 2.5 mm	t R C	Two sides	MMA MIG TIG ⁶⁾ FCW SAW ¹⁰⁾	< 50 mm
20. Double U-joint $\beta = 15^{\circ}$ R = 8.0 mm C = 4.0 - 8.0 mm ⁴)	R C	Two sides	SAW ⁹⁾	> 20 mm

 $^{^{4)}}$ A root land of 5 mm and above may require the torch to be angled towards the direction of travel, see "Width and depth" in chapter 4.

⁶⁾ Normally only for the first 1 – 3 runs. Followed by MIG, FCW, MMA or SAW.

⁸⁾ A thickness above 20 mm can be prepared as an asymmetrical X-joint.

 $^{^{9)}}$ TIG or MMA can be used for root runs. Grinding from the back. C = 3.0 mm.

¹⁰⁾ SAW can be used for fill and cap passes.