

Table 4.1
WPS Qualification—Production Welding Positions Qualified by Plate, Pipe, and Box Tube Tests (see 4.4)

Qualification Test		Production Plate Welding Qualified			Production Pipe Welding Qualified					Production Box Tube Welding Qualified				
Weld Type	Test Positions	Groove CJP	Groove PJP	Fillet ^c	Butt Joint ^b		T-, Y-, K- Connections		Fillet ^c	Butt Joint		T-, Y-, K- Connections		Fillet ^c
					CJP	PJP	CJP	PJP		CJP	PJP	CJP	PJP	
P L A T E	CJP Groove ^a	1G 2G 3G 4G	F F, H V OH	F F, H V OH	F F, H V OH	F F, H V OH			F F, H V OH	F F, H V OH	F F, H V OH			F F, H V OH
	Fillet ^{a, b}	1F 2F 3F 4F		F F, H V OH					F F, H V OH					F F, H V OH
	Plug/ Slot	Qualifies Plug/Slot Welding for Only the Positions Tested												

CJP—Complete Joint Penetration

PJP—Partial Joint Penetration

^a Qualifies for a welding axis with an essentially straight line, including welding along a line parallel to the axis of circular pipe.

^b Qualifies for circumferential welds in pipes equal to or greater than 24 in [600 mm] nominal outer diameter.

^c Fillet welds in production T-, Y-, or K-connections shall conform to Figure 9.12. WPS qualification shall conform to 4.12.