

ASTM A420 WPL6 Elbow Tee, Reducer Caps according to ASME B16.9

ASTM A420 WPL6 Pipe fittings for Low temperature service				
<i>TYPE OF MATERIAL: Impact tested carbon steel</i>				
PRODUCT FORM	STANDARD	GRADE	ACCEPTANCE CLASS	SUPPLEMENTARY REQUIREMENT
Wrought fittings	ASTM A420	WPL6	-	ASTM A960 S51, S53, S57, S69
	ASTM A420	WPL6W	-	ASTM A960 S51, S53, S57, S69
Pipe fittings covers: Elbow, Tee, Reducer, Caps				
Sour service (additional metallurgical, manufacturing, testing and certification requirements) ^{a, b}	When sour service requirements are specified by the purchaser, the material shall conform to the requirements of ISO 15156/NACE MR0175 or ISO 17945/NACE MR0103, and the following additional requirements to the MDS.			
	<u>Chemical composition</u>			
	<ul style="list-style-type: none"> - S ≤ 0.010 % for WPL6 and WPL6W fittings made from seamless products other than flat-rolled or forged - S ≤ 0.003 % for WPL6W fitting made from flat-rolled products - S ≤ 0.020 % for WPL6 fitting made from forging or hot rolled/wrought bar - Ni < 1.0 % for the weld metal of WPL6W fittings 			
	<u>Hardness testing</u>			
Marking	For WPL6W fittings, in addition to the hardness testing requirement in the MDS, welding procedure qualification testing for manufacturing and any repair welding shall meet the requirements of NACE MR0175-2/ISO 15156-2, section 7.3.3, using Vickers method, with a maximum hardness of 250HV.			
	<u>The material shall be traceable</u> in accordance with ISO 15156-2/NACE MR0175-2, section 9 and this MDS.			
	The fittings shall be marked to ensure full traceability to melt and heat treatment lot.			
Certification	The material manufacturer shall have a quality system certified in accordance with ISO 9001 or another quality requirements standard accepted by the purchaser.			
	<p>The inspection documents shall be issued in accordance with ISO 10474 /EN 10204 Type 3.1 and shall confirm compliance with this specification.</p> <p>The inspection documents shall include the following information:</p> <ul style="list-style-type: none"> - Heat treatment condition. For tempered condition, tempering temperature shall be stated. 			
<p>^a The supplementary suffix "S" shall be used to designate a material delivered in accordance with the MDS plus the additional supplementary requirements for sour service, but excluding HIC testing and UT examination.</p> <p>^b The supplementary suffix "SH" shall be used to designate a material delivered in accordance with the MDS including the additional supplementary requirements for sour service plus HIC testing and UT examination.</p>				