

Pipe grade	Pipe body of seamless and welded pipe			Weld seam of EW, LSAW, SSAW and COW pipes
	Yield strength	Tensile strength	Elongation (on 50mm or 2 in)	Tensile strength
	Rt0.5	Rm	Af	Rm
	MPa (psi), min	MPa (psi), min	% minimum	MPa (psi), min
L175 or A25	175 (25 400)	310 (45 000)	c	310 (45 000)
L175P or A25P	175 (25 400)	310 (45 000)	c	310 (45 000)
L210 or A	210 (30 500)	335 (48 600)	c	335 (48 600)
L245 or B	245 (35 500)	415 (60 200)	c	415 (60 200)
L290 or X42	290 (42 100)	415 (60 200)	c	415 (60 200)
L320 or X46	320 (46 400)	435 (63 100)	c	435 (63 100)
L360 or X52	360 (52 200)	460 (66 700)	c	460 (66 700)
L390 or X56	390(56 600)	490 (71 100)	c	490 (71 100)
L415 or X60	415 (60 200)	520 (75 400)	c	520 (75 400)
L450 or X65	450 (65 300)	535 (77 600)	c	535 (77 600)
L485 or X70	485 (70 300)	570 (82 700)	c	570 (82 700)

c. For the specified minimum elongation, Af shall be using below equation:

$$A_f = C \frac{A_{xc}^{0,2}}{U^{0,9}}$$

Where

C is 1940 for calculations using IS units and 625000 for calculations using USC units;

Axc is the applicable tensile test piece cross-section area, expressed in square mm or square inch, as follows:

- for circular cross-section test pieces, 130mm<sup>2</sup> for 12.7 mm and 8.9 mm diameter test pieces; and 65 mm<sup>2</sup> (0.10 in<sup>2</sup>) for 6,4 mm (0.250 in) diameter test pieces;
- for full-section test pieces, the lesser of a) 485 mm<sup>2</sup> (0.75 in<sup>2</sup>) and b) the cross-sectional area of the test piece, derived using the specified outside diameter and the specified wall thickness of the pipe, rounded to the nearest 10 mm<sup>2</sup> (0.01 in<sup>2</sup>);
- for strip test pieces, the lesser of a) 485 mm<sup>2</sup> (0.75 in<sup>2</sup>) and b) the cross-sectional area of the test piece, derived using the specified width of the test piece and the specified wall thickness of the pipe, rounded to the nearest 10 mm<sup>2</sup> (0.01 in<sup>2</sup>);

U is the specified minimum tensile strength, expressed in megapascals (pounds per square inch).