

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
L450MB	1.8975	2.1	EN 10208-2
L450QB	1.8952	3.1	EN 10208-2
L485MB	1.8977	2.2	EN 10208-2
L485QB	1.8955	3.1	EN 10208-2
L550QB	1.8957	3.1	EN 10208-2
L555MB	1.8978	2.2	EN 10208-2
P195GH	1.0348	1.1	EN 10216-2, EN 10217-2
P195TR1	1.0107	1.1	EN 10216-1, EN 10217-1
P195TR2	1.0108	1.1	EN 10216-1, EN 10217-1
P215NL	1.0451	1.1	EN 10216-4, EN 10217-4, EN 10217-6
P235GH	1.0345	1.1	EN 10216-2, EN 10217-2, EN 10217-5, EN 10273, EN 10028-2
P235S	1.0112	1.1	EN 10207
P235TR1	1.0254	1.1	EN 10216-1, EN 10217-1
P235TR2	1.0255	1.1	EN 10216-1, EN 10217-1
P245GH	1.0352	1.1	EN 10222-2
P245NB	1.0111	1.1	EN 10120
P250GH	1.0460	1.1	EN 10273
P255QL	1.0452	1.1	EN 10216-4
P265GH	1.0425	1.1	EN 10216-2, EN 10217-2, EN 10217-5, EN 10273, EN 10028-2
P265NB	1.0423	1.1	EN 10120, EN 10149-3
P265NL	1.0453	1.1	EN 10216-4, EN 10217-4, EN 10217-6
P265S	1.0130	1.1	EN 10207
P265TR1	1.0258	1.1	EN 10216-1, EN 10217-1
P265TR2	1.0259	1.1	EN 10216-1, EN 10217-1
P275N	1.0486	1.1	EN 10028-3
P275NH	1.0487	1.1	EN 10273, EN 10028-3
P275NL1	1.0488	1.1	EN 10216-3, EN 10217-3, EN 10028-3
P275NL2	1.1104	1.1	EN 10216-3, EN 10217-3, EN 10028-3
P275S	1.1100	1.1	EN 10207
P280GH	1.0426	1.2	EN 10222-2
P285NH	1.0477	1.2	EN 10222-4
P285QH	1.0478	1.2	EN 10222-4
P295GH	1.0481	1.2	EN 10273, EN 10028-2

6.2 Delivery condition

6.2.1 For each order item, the delivery condition for PSL 1 pipes shall be at the option of the manufacturer unless a specific delivery condition is specified in the purchase order. Delivery conditions for PSL 1 and PSL 2 pipes are given in Table 1 with additional information for PSL 2 pipes in Table 3.

6.2.2 For PSL 2 pipes, the delivery condition shall be in accordance with the purchase order as specified in the steel name.

Table 1 — Pipe grades, steel grades and acceptable delivery conditions

PSL	Delivery condition	Pipe grade/steel grade ^{a,b}
PSL 1	As-rolled, normalizing rolled, normalized or normalizing formed	L175 or A25
		L175P or A25P
		L210 or A
	As-rolled, normalizing rolled, thermomechanical rolled, thermomechanical formed, normalizing formed, normalized, normalized and tempered; or, if agreed, quenched and tempered for SMLS pipe only	L245 or B
	As-rolled, normalizing rolled, thermomechanical rolled, thermomechanical formed, normalizing formed, normalized, normalized and tempered or quenched and tempered	L290 or X42
		L320 or X46
		L360 or X52
		L390 or X56
		L415 or X60
		L450 or X65
L485 or X70		
PSL 2	As-rolled	L245R or BR
		L290R or X42R
	Normalizing rolled, normalizing formed, normalized or normalized and tempered	L245N or BN
		L290N or X42N
		L320N or X46N
		L360N or X52N
		L390N or X56N
		L415N or X60N
	Quenched and tempered	L245Q or BQ
		L290Q or X42Q
		L320Q or X46Q
		L360Q or X52Q
		L390Q or X56Q
		L415Q or X60Q
		L450Q or X65Q
L485Q or X70Q		
L555Q or X80Q		
L625Q or X90Q ^c		
L690Q or X100Q ^c		

Table 4 — Chemical composition for PSL 1 pipe with $t \leq 25,0$ mm (0.984 in)

Steel grade (Steel name)	Mass fraction, based upon heat and product analyses ^{a, g}							
	C max. ^b	Mn max. ^b	P %		S max.	V max.	Nb max.	Ti max.
	min.	max.						
Seamless pipe								
L175 or A25	0,21	0,60	—	0,030	0,030	—	—	—
L175P or A25P	0,21	0,60	0,045	0,080	0,030	—	—	—
L210 or A	0,22	0,90	—	0,030	0,030	—	—	—
L245 or B	0,28	1,20	—	0,030	0,030	c,d	c,d	d
L290 or X42	0,28	1,30	—	0,030	0,030	d	d	d
L320 or X46	0,28	1,40	—	0,030	0,030	d	d	d
L360 or X52	0,28	1,40	—	0,030	0,030	d	d	d
L390 or X56	0,28	1,40	—	0,030	0,030	d	d	d
L415 or X60	0,28 ^e	1,40 ^e	—	0,030	0,030	f	f	f
L450 or X65	0,28 ^e	1,40 ^e	—	0,030	0,030	f	f	f
L485 or X70	0,28 ^e	1,40 ^e	—	0,030	0,030	f	f	f
Welded pipe								
L175 or A25	0,21	0,60	—	0,030	0,030	—	—	—
L175P or A25P	0,21	0,60	0,045	0,080	0,030	—	—	—
L210 or A	0,22	0,90	—	0,030	0,030	—	—	—
L245 or B	0,26	1,20	—	0,030	0,030	c,d	c,d	d
L290 or X42	0,26	1,30	—	0,030	0,030	d	d	d
L320 or X46	0,26	1,40	—	0,030	0,030	d	d	d
L360 or X52	0,26	1,40	—	0,030	0,030	d	d	d
L390 or X56	0,26	1,40	—	0,030	0,030	d	d	d
L415 or X60	0,26 ^e	1,40 ^e	—	0,030	0,030	f	f	f
L450 or X65	0,26 ^e	1,45 ^e	—	0,030	0,030	f	f	f
L485 or X70	0,26 ^e	1,65 ^e	—	0,030	0,030	f	f	f
^a Cu \leq 0,50 %; Ni \leq 0,50 %; Cr \leq 0,50 % and Mo \leq 0,15 % ^b For each reduction of 0,01 % below the specified maximum concentration for carbon, an increase of 0,05 % above the specified maximum concentration for Mn is permissible, up to a maximum of 1,65 % for grades \geq L245 or B but \leq L360 or X52; up to a maximum of 1,75 % for grades $>$ L360 or X52 but $<$ L485 or X70; and up to a maximum of 2,00 % for Grade L485 or X70. ^c Unless otherwise agreed, Nb + V \leq 0,06 %. ^d Nb + V + Ti \leq 0,15 %. ^e Unless otherwise agreed. ^f Unless otherwise agreed, Nb + V + Ti \leq 0,15 %. ^g No deliberate addition of B is permitted and the residual B \leq 0,001 %.								