

PHYSICAL PROPERTIES AND CHEMICAL COMPOSITION OF SECTIONS AS PER IS 2062:1999

Grade	DESIGNATION	CHEMICAL COMPOSITION						Tensile Strength (Min) MPa		MECHANICAL PROPERTIES				
		Ladle Analysis, Percent, Max:								Yield stress (Min), Mpa	Percent Elongation (Min) at Gauge Length 5.65x $\sqrt{S_0}$	Internal Diameter of Bend (Min)	Charpy 7-notch impact Energy J (Min)	
		C	Mn	S	P	Si	C.E							<20
A	Fe 410WA	0.23	1.5	0.050	0.050	0.40	0.42	410	250	240	230	23.0	3t	-
B	Fe 410WB	0.22	1.5	0.045	0.045	0.40	0.41	410	250	240	230	23.0	2t for less than 25mm product & 3t for over 5mm thick Product	27
C	Fe 410WC	0.20	1.5	0.040	0.040	0.40	0.39	410	250	240	230	23.0	2t	27

The Catalogue has been prepared in compliance with
IS 2062 : 99; IS 808 : 89; IS 1730 : 1989 & IS 1732 : 1989

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.) MAX			CHEM. COMP.	PHY PROPERTY
	MM	MIN.	SPECIFIED	MAX.	WIDTH	THICK		
10 X 3	0.224	0.236	0.248	± 1.00	± 0.5	Width in case of parallelogram sections the out of squareness tolerance shall be as agreed to between the purchaser and the supplier	AS PER IS : 2062/99 Gr. A, B & C	AS PER IS : 2062/99
10 X 4	0.305	0.314	0.330	± 1.00	± 0.5			
10 X 5	0.381	0.393	0.412	± 1.00	± 0.5			
10 X 6	0.457	0.471	0.494	± 1.00	± 0.5			
16 X 3	0.358	0.377	0.396	± 1.0	± 0.5			
16 X 4	0.487	0.502	0.527	± 1.0	± 0.5			
16 X 5	0.609	0.628	0.659	± 1.0	± 0.5			
16 X 6	0.731	0.754	0.791	± 1.0	± 0.5			
16 X 8	0.970	1.000	1.050	± 1.0	± 0.5			
16 X 10	1.067	1.100	1.155	± 1.0	± 0.5			
16 X 12	1.465	1.510	1.585	± 1.0	± 0.5			
20 X 3	0.447	0.471	0.494	± 1.0	± 0.5			
20 X 4	0.609	0.628	0.659	± 1.0	± 0.5			
20 X 5	0.761	0.785	0.824	± 1.0	± 0.5			
20 X 6	0.914	0.942	0.989	± 1.0	± 0.5			
20 X 8	1.222	1.260	1.323	± 1.0	± 0.5			
20 X 10	1.523	1.570	1.648	± 1.0	± 0.5			
20 X 12	1.824	1.880	1.974	± 1.0	± 0.5			
20 X 15	2.231	2.300	2.415	± 1.0	± 0.6			
25 X 3	0.560	0.589	0.618	± 1.0	± 0.5			
25 X 4	0.761	0.785	0.824	± 1.0	± 0.5			
25 X 5	0.952	0.981	1.030	± 1.0	± 0.5			
25 X 6	1.145	1.180	1.239	± 1.0	± 0.5			
25 X 8	1.523	1.570	1.648	± 1.0	± 0.5			
25 X 10	1.901	1.960	2.058	± 1.0	± 0.5			
25 X 12	2.289	2.360	2.478	± 1.0	± 0.5			
25 X 15	2.852	2.940	3.087	± 1.0	± 0.6			
30 X 3	0.672	0.707	0.742	± 1.0	± 0.5			
30 X 4	0.914	0.942	0.989	± 1.0	± 0.5			

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.) MAX			CHEM. COMP.	PHY PROPERTY
	MM	MIN.	SPECIFIED	MAX.	WIDTH	THICK		
50 X 6	2.289	2.36	2.478	± 1.0	± 0.5			
X 8	3.046	3.14	3.297	± 1.0	± 0.5			
X 10	3.812	3.93	4.126	± 1.0	± 0.5			
X 12	4.569	4.71	4.945	± 1.0	± 0.5			
X 15	5.713	5.89	6.164	± 1.0	± 0.6			
X 20	7.615	7.85	8.242	± 1.0	± 0.8			
X 25	9.516	9.81	10.300	± 1.0	± 1.0			
X 30	11.446	11.80	12.390	± 1.0	± 1.2			
60 X 3	1.340	1.41	1.480	± 1.5	± 0.5			
X 4	1.824	1.88	1.974	± 1.5	± 0.5			
X 5	2.289	2.36	2.478	± 1.5	± 0.5			
X 6	2.745	2.83	2.971	± 1.5	± 0.5			
X 8	3.657	3.77	3.958	± 1.5	± 0.5			
X 10	4.569	4.71	4.945	± 1.5	± 0.5			
X 12	5.481	5.65	5.932	± 1.5	± 0.5			
X 15	6.858	7.07	7.423	± 1.5	± 0.6			
X 20	9.137	9.42	9.891	± 1.5	± 0.8			
X 25	11.446	11.80	12.390	± 1.5	± 1.0			
X 30	13.677	14.10	14.805	± 1.5	± 1.2			
X 40	18.236	18.80	19.740	± 1.5	± 1.5			
65 X 4	1.979	2.04	2.142	± 1.5	± 0.5			
X 5	2.474	2.55	2.677	± 1.5	± 0.5			
X 6	2.968	3.06	3.213	± 1.5	± 0.5			
X 8	3.958	4.08	4.284	± 1.5	± 0.5			
X 10	4.947	5.10	5.355	± 1.5	± 0.5			
X 12	5.936	6.12	6.426	± 1.5	± 0.5			
X 15	7.421	7.65	8.032	± 1.5	± 0.6			
X 20	9.894	10.20	10.710	± 1.5	± 0.8			
X 25	12.416	12.80	13.440	± 1.5	± 1.0			
X 30	14.841	15.30	16.065	± 1.5	± 1.2			
X 40	19.788	20.40	21.420	± 1.5	± 1.5			

Shall be as agreed to between the purchaser and the supplier

AS PER IS : 2062/99

AS PER IS : 2062/99

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.) MAX			CHEM. COMP.	PHY PROPERTY
	MM	MIN.	SPECIFIED	MAX.	WIDTH	THICK		
50 X 6	2.289	2.36	2.478	± 1.0	± 0.5			
X 8	3.046	3.14	3.297	± 1.0	± 0.5			
X 10	3.812	3.93	4.126	± 1.0	± 0.5			
X 12	4.569	4.71	4.945	± 1.0	± 0.5			
X 15	5.713	5.89	6.164	± 1.0	± 0.6			
X 20	7.615	7.85	8.242	± 1.0	± 0.8			
X 25	9.516	9.81	10.300	± 1.0	± 1.0			
X 30	11.446	11.80	12.390	± 1.0	± 1.2			
60 X 3	1.340	1.41	1.480	± 1.5	± 0.5			
X 4	1.824	1.88	1.974	± 1.5	± 0.5			
X 5	2.289	2.36	2.478	± 1.5	± 0.5			
X 6	2.745	2.83	2.971	± 1.5	± 0.5			
X 8	3.657	3.77	3.958	± 1.5	± 0.5			
X 10	4.569	4.71	4.945	± 1.5	± 0.5			
X 12	5.481	5.65	5.932	± 1.5	± 0.5			
X 15	6.858	7.07	7.423	± 1.5	± 0.6			
X 20	9.137	9.42	9.891	± 1.5	± 0.8			
X 25	11.446	11.80	12.390	± 1.5	± 1.0			
X 30	13.677	14.10	14.805	± 1.5	± 1.2			
X 40	18.236	18.80	19.740	± 1.5	± 1.5			
65 X 4	1.979	2.04	2.142	± 1.5	± 0.5			
X 5	2.474	2.55	2.677	± 1.5	± 0.5			
X 6	2.968	3.06	3.213	± 1.5	± 0.5			
X 8	3.958	4.08	4.284	± 1.5	± 0.5			
X 10	4.947	5.10	5.355	± 1.5	± 0.5			
X 12	5.936	6.12	6.426	± 1.5	± 0.5			
X 15	7.421	7.65	8.032	± 1.5	± 0.6			
X 20	9.894	10.20	10.710	± 1.5	± 0.8			
X 25	12.416	12.80	13.440	± 1.5	± 1.0			
X 30	14.841	15.30	16.065	± 1.5	± 1.2			
X 40	19.788	20.40	21.420	± 1.5	± 1.5			

Shall be as agreed to between the purchaser and the supplier

AS PER IS : 2062/99

AS PER IS : 2062/99

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.) MAX			CHEM. COMP.	PHY PROPERTY
	MIN.	SPECIFIED	MAX.	WIDTH	THICK	OUT OF SQUARE		
70 X 4	2.134	2.20	2.310	± 1.5	± 0.5	Shall be as agreed to between the purchaser and the supplier	AS PER IS : 2062/99	AS PER IS : 2062/99
70 X 5	2.668	2.75	2.887	± 1.5	± 0.5			
70 X 6	3.201	3.30	3.465	± 1.5	± 0.5			
70 X 8	4.268	4.40	4.620	± 1.5	± 0.5			
70 X 10	5.335	5.50	5.775	± 1.5	± 0.5			
70 X 12	6.392	6.59	6.919	± 1.5	± 0.5			
70 X 15	7.993	8.24	8.652	± 1.5	± 0.6			
70 X 20	10.67	11.00	11.550	± 1.5	± 0.8			
70 X 25	13.289	13.70	14.385	± 1.5	± 1.0			
70 X 30	16.005	16.50	17.325	± 1.5	± 1.2			
70 X 40	21.34	22.00	23.100	± 1.5	± 1.5			
75 X 4	2.289	2.36	2.478	± 1.5	± 0.5			
75 X 5	2.852	2.94	3.087	± 1.5	± 0.5			
75 X 6	3.424	3.53	3.706	± 1.5	± 0.5			
75 X 8	4.569	4.71	4.945	± 1.5	± 0.5			
75 X 10	5.713	5.89	6.184	± 1.5	± 0.5			
75 X 12	6.858	7.07	7.423	± 1.5	± 0.5			
75 X 15	8.565	8.83	9.271	± 1.5	± 0.6			
75 X 20	11.446	11.80	12.390	± 1.5	± 0.8			
75 X 25	14.259	14.70	15.435	± 1.5	± 1.0			
75 X 30	17.169	17.70	18.585	± 1.5	± 1.2			
75 X 40	22.892	23.60	24.780	± 1.5	± 1.5			
80 X 4	2.435	2.51	2.635	± 2.0	± 0.5			
80 X 5	3.046	3.14	3.297	± 2.0	± 0.5			
80 X 6	3.657	3.77	3.958	± 2.0	± 0.5			
80 X 8	4.869	5.02	5.271	± 2.0	± 0.5			
80 X 10	6.092	6.28	6.594	± 2.0	± 0.5			
80 X 12	7.314	7.54	7.917	± 2.0	± 0.5			
80 X 15	9.137	9.42	9.891	± 2.0	± 0.6			
80 X 20	12.222	12.60	13.230	± 2.0	± 0.8			
80 X 25	15.229	15.70	16.485	± 2.0	± 1.0			

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM) MAX.	
	MM	MIN.	SPEC.	MAX.	WIDTH
150X20	22.892	23.60	24.780	± 3.0	± 0.8
X25	28.518	29.40	30.870	± 3.0	± 1.0
X30	34.241	35.30	37.065	± 3.0	± 1.2
X40	45.687	47.10	49.455	± 3.0	± 1.5
X50	57.133	58.90	61.845	± 3.0	± 1.5
160X8	9.700	10.00	10.500	± 3.2	± 0.5
X10	12.222	12.60	13.230	± 3.2	± 0.5
X12	14.647	15.10	15.855	± 3.2	± 0.5
X15	18.236	18.80	19.740	± 3.2	± 0.6
X20	24.347	25.10	26.355	± 3.2	± 0.8
X25	30.458	31.40	32.970	± 3.2	± 1.0
X30	36.569	37.70	39.585	± 3.2	± 1.2
X40	48.694	50.20	52.710	± 3.2	± 1.5
180X8	10.961	11.30	11.865	± 3.6	± 0.5
X10	13.677	14.10	14.805	± 3.6	± 0.5
X12	16.490	17.00	17.850	± 3.6	± 0.5
X15	20.564	21.20	22.260	± 3.6	± 0.6
X20	27.451	28.30	29.715	± 3.6	± 0.8
X25	34.241	35.30	37.065	± 3.6	± 1.0
X30	41.128	42.40	44.520	± 3.6	± 1.2
X40	54.805	56.50	59.325	± 3.6	± 1.5
200X10	15.229	15.70	16.485	± 4.0	± 0.5
X12	18.236	18.80	19.740	± 4.0	± 0.5
X15	22.892	23.60	24.780	± 4.0	± 0.6
X20	30.458	31.40	32.970	± 4.0	± 0.8
X25	38.024	39.20	41.160	± 4.0	± 1.0
X30	45.687	47.10	49.455	± 4.0	± 1.2
X40	60.916	62.80	65.940	± 4.0	± 1.5

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.) MAX		OUT OF SQUARE
	MM	MIN.	SPECIFIED	MAX.	WIDTH	
120 X 20	18.236	18.80	19.740	± 2.4	± 0.8	Shall be as agreed to between the purchaser and the supplier
x 25	22.892	23.60	24.780	± 2.4	± 1.0	
x 30	27.451	28.30	29.715	± 2.4	± 1.2	
x 40	36.569	37.70	39.585	± 2.4	± 1.5	
x 50	45.687	47.10	49.455	± 2.4	± 1.5	
130 X 6	5.936	6.12	6.426	± 2.6	± 0.5	
X 8	7.915	8.16	8.568	± 2.6	± 0.5	
X 10	9.894	10.20	10.710	± 2.6	± 0.5	
X 12	11.834	12.20	12.810	± 2.6	± 0.5	
X 15	14.841	15.30	16.065	± 2.6	± 0.6	
X 20	19.788	20.40	21.420	± 2.6	± 0.8	
X 25	24.832	25.60	26.880	± 2.6	± 1.0	
X 30	29.682	30.60	32.130	± 2.6	± 1.2	
X 40	39.576	40.80	42.840	± 2.6	± 1.5	
X 50	49.664	51.20	53.760	± 2.6	± 1.5	
140 X 6	6.392	6.59	6.919	± 2.8	± 0.5	
X 8	8.526	8.79	9.229	± 2.8	± 0.5	
X 10	10.670	11.00	11.550	± 2.8	± 0.5	
X 12	12.804	13.20	13.860	± 2.8	± 0.5	
X 15	16.005	16.50	17.325	± 2.8	± 0.6	
X 20	21.340	22.00	23.100	± 2.8	± 0.8	
X 25	26.675	27.50	28.875	± 2.8	± 1.0	
X 30	32.010	33.00	34.650	± 2.8	± 1.2	
X 40	42.680	44.00	46.200	± 2.8	± 1.5	
X 50	53.350	55.00	57.750	± 2.8	± 1.5	
150 X 6	6.858	7.07	7.423	± 3.0	± 0.5	
X 8	9.137	9.42	9.891	± 3.0	± 0.5	
X 10	11.446	11.80	12.390	± 3.0	± 0.5	
X 12	13.677	14.10	14.805	± 3.0	± 0.5	
X 15	17.169	17.70	18.585	± 3.0	± 0.6	

DIMENSION	MASS PER MTR. (KG/M)			TOLERANCES (MM.)		MAX
MM	MIN.	SPECIFIED	MAX.	WIDTH	THICK	OUT OF SQUARE
80 X 30	18.236	18.80	19.740	± 2.0	± 1.2	Shall be as agreed to between the purchaser and the supplier
x 40	24.347	25.10	26.355	± 2.0	± 1.5	
x 50	30.458	31.40	32.970	± 2.0	± 1.5	
90 X 5	3.424	3.53	3.706	± 2.0	± 0.5	
X 6	4.113	4.24	4.452	± 2.0	± 0.5	
X 8	5.481	5.65	5.932	± 2.0	± 0.5	
X 10	6.858	7.07	7.423	± 2.0	± 0.5	
X 12	8.226	8.48	8.904	± 2.0	± 0.5	
X 15	10.282	10.60	11.130	± 2.0	± 0.6	
X 20	13.677	14.10	14.805	± 2.0	± 0.8	
X 25	17.169	17.70	18.585	± 2.0	± 1.0	
X 30	20.564	21.20	22.260	± 2.0	± 1.2	
X 40	27.451	28.30	29.715	± 2.0	± 1.5	
X 50	34.241	35.30	37.065	± 2.0	± 1.5	
100 X 5	3.812	3.93	4.147	± 2.0	± 0.5	
X 6	4.569	4.71	4.945	± 2.0	± 0.5	
X 8	6.092	6.28	6.594	± 2.0	± 0.5	
X 10	7.585	7.85	8.242	± 2.0	± 0.5	
X 12	9.137	9.42	9.891	± 2.0	± 0.5	
X 15	11.446	11.80	12.390	± 2.0	± 0.6	
X 20	15.229	15.70	16.485	± 2.0	± 0.8	
X 25	19.012	19.60	20.580	± 2.0	± 1.0	
X 30	22.892	23.60	24.780	± 2.0	± 1.2	
X 40	30.458	31.40	32.970	± 2.0	± 1.5	
X 50	38.024	39.20	41.160	± 2.0	± 1.5	
120 X 6	5.481	5.65	5.932	± 2.4	± 0.5	
X 8	7.314	7.54	7.917	± 2.4	± 0.5	
X 10	9.137	9.42	9.891	± 2.4	± 0.5	
X 12	10.961	11.30	11.865	± 2.4	± 0.5	
X 15	13.677	14.10	14.805	± 2.4	± 0.6	