



SCALING INDIA'S COMMERCIAL MOBILITY WITH STAINLESS LOGISTICS SOLUTIONS



Lightweight



Corrosion
Resistance



Lower
Life Cycle Cost



Lower Carbon
Footprint

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A large industrial ladle, tilted to the right, pours a thick, glowing stream of molten metal. The metal is a bright, intense yellow-orange color, contrasting sharply with the dark, industrial background. The ladle itself is made of heavy, dark metal and shows signs of wear and scale. In the background, various industrial structures, pipes, and a staircase are visible, all dimly lit. The overall atmosphere is one of intense heat and industrial power.

A STAINLESS LEGACY

India's leading stainless steel manufacturer, Jindal Stainless, achieved a consolidated annual turnover of INR 38,562 crore (USD 4.7 billion) in FY24. The company is expanding its facilities to reach 4.2 million tonnes of annual melt capacity by 2026. Jindal Stainless operates 16 manufacturing and processing facilities across India, Spain, and Indonesia, with a global network of 12 locations as of March 2024.

Jindal Stainless remains focused on a greener, sustainable future fuelled by environmental responsibility. The company manufactures stainless steel using scrap in an electric arc furnace, which lowers greenhouse gas emissions and enables recyclability with no reduction in quality. The company aims to reduce carbon emission intensity by 50% well before FY35 and achieve Net Zero by 2050.

BUILT TO LAST

STAINLESS STEEL FOR LOAD BODIES



INTRODUCTION

The usage of stainless steel JT grade (N7 as per BIS 6911 specification) in the Trucks, Containers, and Trailer industry is a big breakthrough to increase payload along with durability. Its sterling features provide safety, aesthetics, weight reduction, fuel efficiency, and sustainability. Today stainless steel is increasingly being used in the construction of complete body, and structural parts as well as in the flooring of Heavy-duty Trucks, Containers, Tippers, and Trailers.

It is an established fact that the usage of stainless steel in load bodies guarantees better corrosion resistance and reduction in overall weight, offering substantial savings on fuel consumption or an increased revenue due to additional payload carrying capacity. From the environmental aspect, stainless steel being fully recyclable offers a 'green solution' and hence is the most preferred material for sustainable development for the future.

Owing to these amazing properties, JT has become the most preferred material of construction for the Truck & Trailer Industry.

BEYOND COMPARISON

STAINLESS STEEL FOR SAFETY & TRUST

WHY STAINLESS STEEL IS THE BEST CHOICE FOR LOAD BODIES



BEYOND EFFICIENCY

DRIVE AHEAD WITH 20% - 30% LIGHTER & 3X STRONGER
STAINLESS STEEL LOAD BODIES



Lightweight



Corrosion
Resistant



Maintenance
Free Life



Lower
Life Cycle Cost



Lower Carbon
Footprint

PARAMETERS	JT STAINLESS STEEL
WEIGHT	Reduces weight by 20-30%
PAYLOAD	Increases by 800 to 1200 Kg
COST SAVINGS	Savings of INR 20-30 Lakhs
ADDITIONAL REVENUE (10 years)	20-24 Lakhs

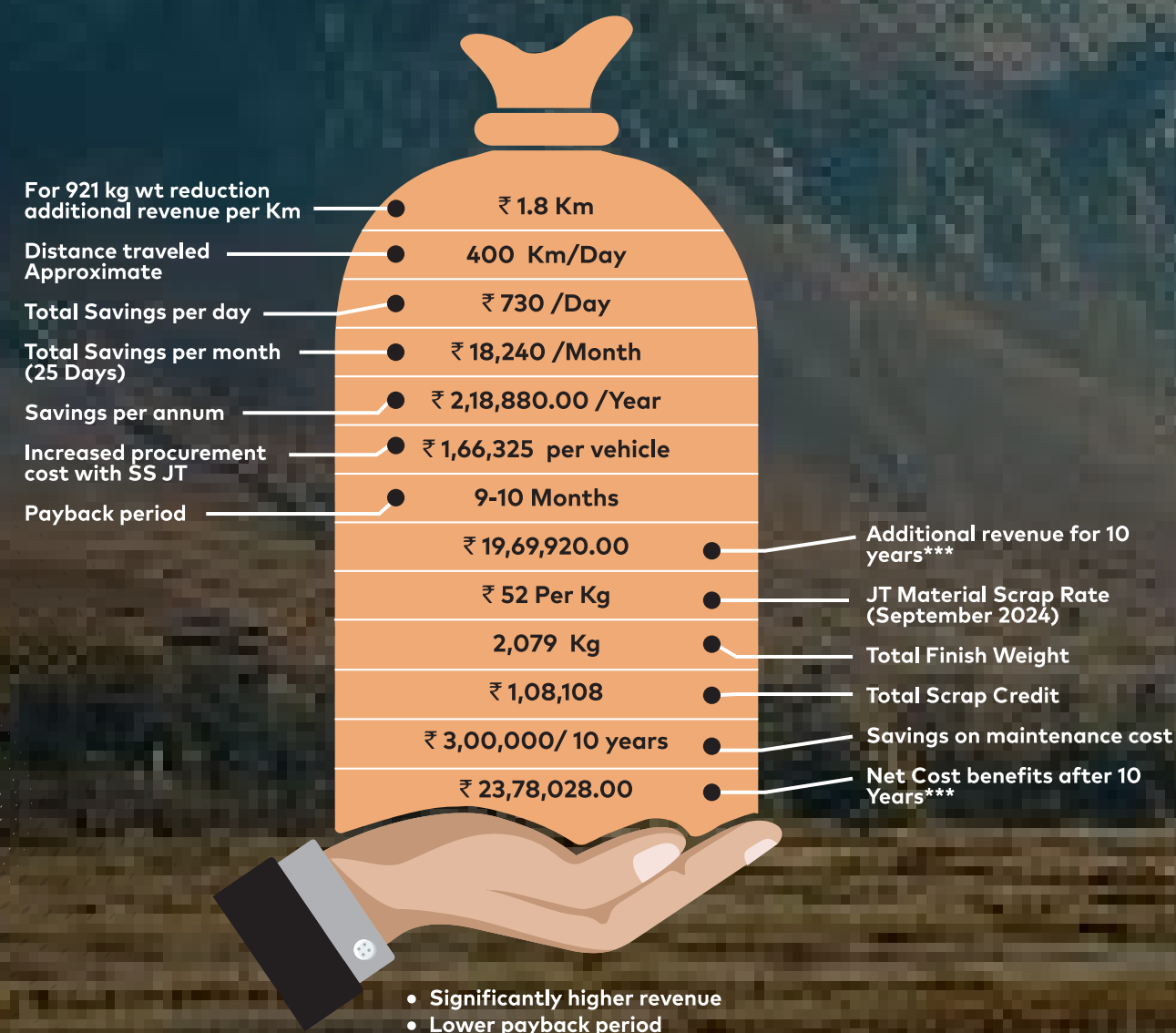
In India, stainless steel is gaining traction with all the major commercial vehicle manufacturers.

COMPONENTS	SS GRADE
UNDERFRAME	JT Tubes and Bend Sections
SIDEWALLS & ROOF	JT Corrugated Sheets and Tubes
DOORS	JT Corrugated Sheets and Tubes
FLOOR	JT Chequered Sheets



TYPICAL LIFE CYCLE COST SAVINGS FOR 32 FEET SS (JT) CONTAINERS

AS PER FEEDBACK FROM LOGISTICS PROVIDERS, TYPICAL FREIGHT
COST IS ₹ 2/MT/KM



THE JSL ADVANTAGE

While Stainless Steel gives you a material advantage, Stainless Steel from JSL, the largest manufacturer of Stainless Steel in India and a global player, gives you a distinct edge.



Indigenous



Full Quality Control - Completely Made in-House



Complete Stainless Steel Solutions - Sheet, Plates, Chequered Sheets, Pipes & Tubes



Support in Fabrication & Technical Training



Easy Availability and Faster Deliveries





BEYOND SUSTAINABILITY

LOWER CARBON FOOTPRINT FOR GREENER ROADWAYS

MATERIAL CHARACTERISTICS

CHEMICAL COMPOSITION

Grade	% C (max)	% Mn (max)	% P (max)	% S (max)	% Si (max)	% Cr	% Ni	% Mo	N (ppm)	%Others Cu:
JT	0.14	9.0 – 11.5	0.10	0.03	1.00	13.50-16.00	0.20-0.95	-	1000 - 2500	0.4 – 0.8

MECHANICAL PROPERTIES OF SHEETS

Property (Sheets)	JT	Mild Steel CRCA	Aluminium Annealed	Aluminium ½ hard
Yield Strength (MPa, min)	400	205	49	137
Ultimate Tensile Strength (MPa, min)	700	260	108	157
% Elongation (min)	40	16	43	12
Density (gm/cc)	7.8	7.8	2.7	2.7
Hardness (HRB, max)	100	70	Soft	Moderate

Note:

- When formed into tubes, stainless steel, due to its superior hardening property, exhibits a very high strength, coupled with excellent elongation.
- Typical mechanical properties of stainless steel tubes vis-à-vis MS tubes are tabulated as below:

MECHANICAL PROPERTIES OF TUBES

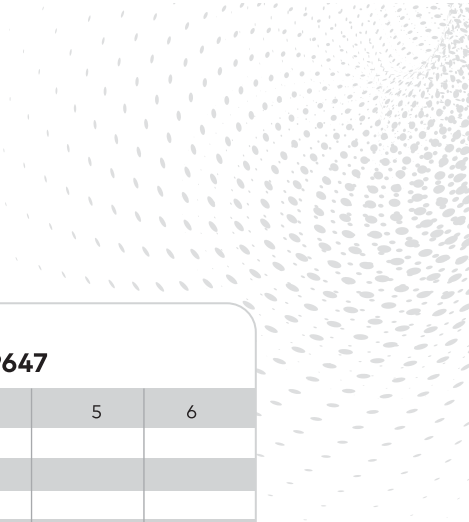
Property (Tubes)	JT	Mild Steel
Yield Strength (Mpa, min)	700	210 / 240 / 310
Ultimate Tensile Strength (Mpa, min)	900	
%Elongation (min)	30	12 / 10 / 8

SIZE RANGE COILS

Products	Max width (mm)	Thickness (mm)	
		Min	Max
CRAP Coil	1000	0.50	3.15
	1250	0.50	3.15

Note:

- We can also supply in sheet form in the standard size of 1250 X 2500 mm. However, we can also supply customized widths and lengths, if required.
- We can also supply in width of 1500 mm, for specific thicknesses and grades.



SHEETS, TUBES AND OTHER RANGE OF PRODUCTS

WEIGHT CHART - SQUARE PIPES

Dimension		Wall thickness (mm) Welded tubes according to ASTM A 554-DIN 2395-NFA 49647								
A mm	B mm	1	1.2	1.5	2	2.5	3	4	5	6
12	12	0.358								
15	15	0.453	0.538	0.661						
16	16	0.485	0.576	0.709						
19	19	0.567	0.675	0.832	1.090					
20	20	0.613	0.729	0.901	1.176					
22	22	0.677	0.806	0.996	1.303					
25	25	0.772	0.921	1.140	1.495	1.837	2.167			
30	30	0.932	1.112	1.379	1.814	2.236	2.645			
32	32	0.960	1.150	1.420	1.870	2.310	2.740			
35	35	1.091	1.304	1.618	2.133	2.635	3.124			
40	40	1.251	1.495	1.858	2.452	3.033	3.602	4.703		
45	45	1.410	1.686	2.097	2.771	3.432	4.081			
50	50		1.878	2.336	3.090	3.831	4.559	5.979	7.349	
60	60		2.254	2.814	3.728	4.628	5.516	7.255	8.943	
70	70			3.293	4.366	5.426	6.473	8.531	10.538	
80	80			3.771	5.004	6.223	7.430	9.807	12.133	14.410
100	100			4.728	6.279	7.818	9.344	12.359	15.323	18.237
120	120				7.555	9.413	11.258	14.910	18.513	22.065
140	140				8.831	11.008	13.172	17.462	21.703	25.893
150	150				9.469	11.805	14.129	18.738	23.298	27.807
200	200				12.659	15.793	18.913	25.118	31.272	37.376

UNIT WT. = KG/METRE

WEIGHT CHART - RECTANGULAR PIPES

Dimension		Wall thickness (mm) Welded tubes according to ASTM A 554-DIN 2395-NFA 49647								
A mm	B mm	1	1.2	1.5	2	2.5	3	4	5	6
15	10	0.370	0.440	0.540						
20	10	0.453	0.538	0.661						
20	15	0.533	0.634	0.781	1.016					
25	10	0.533	0.634	0.781						
25	10	0.613	0.729	0.901	1.176					
25	20	0.693	0.825	1.020	1.335					
26	13	0.613	0.729	0.901	1.176					
30	10	0.613	0.729	0.901	1.176					
30	15	0.693	0.825	1.020	1.335					
30	20	0.772	0.921	1.140	1.495	1.837	2.167			
30	25	0.840	1.000	1.240	1.630					
35	15	0.760	0.910	1.130	1.480					
35	20	0.852	1.017	1.259	1.654	2.036	2.406			
40	10	0.760	0.910	1.130	1.480					
40	15	0.852	1.017	1.259	1.654	2.036	2.406			
40	20	0.932	1.112	1.379	1.814	2.236	2.645			
40	27	1.044	1.246	1.547	2.037	2.515	2.980			
40	30	1.091	1.304	1.618	2.133	2.635	3.124			
45	15	0.910	1.090	1.350	1.780					
45	20	0.990	1.180	1.460	1.920					
50	10	0.910	1.090	1.350	1.780					
50	20	1.091	1.304	1.618	2.133	2.635	3.124			
50	25	1.171	1.399	1.738	2.292	2.834	3.363			
50	30	1.251	1.495	1.858	2.452	3.033	3.602			
50	40	1.410	1.686	2.097	2.771	3.432	4.081			
60	20	1.251	1.495	1.858	2.452	3.033	3.602			
60	30	1.410	1.686	2.097	2.771	3.432	4.081			
60	40		1.878	2.336	3.090	3.831	4.559			
70	20		1.650	2.050	2.710	3.360	4.000			
70	30			2.290	3.030	3.760	4.480			
70	40			2.575	3.409	4.229	5.038			
75	25		1.878	2.336	3.090	3.831	4.559			
80	20			2.290	3.030	3.760	4.480			
80	30			2.530	3.350	4.160	4.960			
80	40		2.254	2.814	3.728	4.628	5.516	7.255	8.943	10.582
80	50			3.010	4.000	4.960	5.920	7.790	9.620	11.390
80	60			3.293	4.366	5.426	6.473	8.531	10.538	12.496
100	20			2.760	3.650	4.540	5.410			
100	30			3.010	4.000	4.960	5.920			
100	40			3.293	4.366	5.426	6.473	8.531	10.538	12.496
100	50			3.532	4.685	5.824	6.952	9.169	11.336	13.453
100	60			3.771	5.004	6.223	7.430	9.807	12.133	14.410
100	80			4.250	5.641	7.021	8.387	11.083	13.728	16.324
120	40			3.771	5.004	6.223	7.430	9.807	12.133	14.410
120	60			4.250	5.641	7.021	8.387	11.083	13.728	16.324
120	80			4.728	6.279	7.818	9.344	12.359	15.323	18.237
140	80						10.301	13.635	16.918	20.151
150	50						9.344	12.359	15.323	18.237
150	100						11.736	15.548	19.310	23.022
160	80						11.258	14.910	18.513	22.065
200	100						14.129	18.738	23.298	27.807

WEIGHT CHART - ROUND PIPES

Outside Diameter (mm)										Weight (kg/metre)					Wall Thickness (mm)				
	0.40	0.45	0.50	0.60	0.70	0.75	0.80	0.90	1	1.2	1.5	1.6	2	2.5	2.6	3	3.2	3.6	4
6.00	0.056	0.063	0.069	0.081					0.125										
7.20	0.068	0.076	0.084	0.100															
7.50	0.072	0.080	0.088	0.104															
8.00	0.077	0.085	0.094	0.112	0.128	0.137	0.145	0.161	0.175										
9.50	0.091	0.102	0.113	0.134	0.155	0.165	0.175												
10.00	0.097	0.108	0.119	0.142	0.164	0.175	0.185	0.206	0.225										
12.00	0.117		0.145	0.172	0.199	0.212	0.225	0.251	0.275	0.325	0.394								
12.70	0.124		0.153	0.182	0.211	0.225													
13.30	0.130		0.161	0.192	0.222	0.237	0.251	0.280											
13.50	0.132		0.163	0.195	0.225	0.240	0.255	0.285											
14.00	0.137		0.170	0.202	0.234	0.250	0.265	0.296	0.326	0.385	0.470								
14.80	0.145		0.180	0.214	0.248	0.265													
15.00	0.147		0.182	0.217	0.252	0.269	0.286	0.319	0.351	0.415	0.507								
15.70	0.154		0.191	0.228	0.264	0.282	0.300	0.335											
15.88	0.155		0.193	0.230	0.266	0.284	0.302	0.338											
16.00	0.157		0.195	0.232	0.269	0.287	0.306	0.342	0.376	0.445	0.545	0.577	0.701						
17.00	0.167		0.207	0.247	0.287	0.306	0.326	0.364											
17.20	0.168		0.209	0.249	0.289	0.309	0.367	0.406	0.481	0.590	0.625	0.761							
18.00	0.177		0.220	0.262	0.304	0.325	0.346	0.387	0.426	0.505	0.620	0.657	0.801	0.970					
19.00	0.187		0.232	0.277	0.322	0.344	0.366	0.409											
19.05	0.187		0.232	0.277	0.322	0.344	0.366	0.409	0.452	0.536	0.659	0.699	0.854	1.036					
20.00	0.197		0.245	0.293	0.340	0.363	0.386	0.432	0.476	0.565	0.695	0.737	0.901	1.096	1.133	1.277			
21.00	0.207		0.258	0.308	0.357	0.382	0.406	0.455											
21.30	0.210		0.261	0.312	0.362	0.387	0.412	0.461	0.508	0.604	0.714	0.789	0.967	1.177	1.217	1.375			
22.00			0.270	0.323	0.375	0.401	0.426	0.477	0.526	0.625	0.770	0.817	1.002						
22.23			0.272	0.325	0.377	0.403	0.429	0.481	0.532	0.632	0.779	0.827	1.013						
23.00			0.283	0.338	0.392	0.419	0.446	0.500											
24.00			0.295	0.353	0.410	0.438	0.466	0.523											
25.00			0.308	0.368	0.428	0.457	0.487	0.545	0.601	0.715	0.883	0.937	1.125	1.409	1.458	1.653			
25.40			0.317	0.378	0.440	0.470	0.501	0.561	0.611	0.727	0.898	0.954	1.172	1.434	1.484	1.683			
26.00			0.320	0.383	0.445	0.476	0.507	0.568											
26.90			0.333	0.398	0.463	0.495	0.527	0.590	0.649	0.772	0.954	1.014	1.247	1527	1.582	1.795			
27.00			0.333	0.398	0.463	0.495	0.527	0.590											
28.00			0.346	0.413	0.480	0.514	0.547	0.613	0.676	0.805	0.995	1.058	1.302						
28.58			0.352	0.420	0.489	0.523	0.556	0.624	0.691	0.823	1.017	1.081	1.331						
30.00			0.371	0.443	0.515	0.551	0.587	0.658											
31.75									0.770	0.918	1.136	1.208	1.490	1.831	1.898	2.160			
31.80			0.396	0.474	0.551	0.589	0.627	0.703											
32.00			0.396	0.474	0.551	0.589	0.627	0.703	0.776	0.925	1.146	1.218	1.502	1.847	1.914	2.178			
33.00									0.956	1.183	1.258	1.552							
33.40									0.811	0.968	1.198	1.274	1.573	1.934	2.005	2.284			
33.70									0.819	0.977	1.209	1.286	1.588	1.953	2.025	2.306	2.444		
34.00									0.826	0.966	1.221	1.298	1.603	1.972					
34.93									0.850	1.014	1.256	1.335	1.649	2.030					
35.00									0.851	1.016	1.258	1.338	1.653	2.035					
38.10									0.929	1.109	1.375	1.462	1.808	2.229	2.311	2.637			
40.00									0.977	1.166	1.446	1.538	1.903	2.348	2.435	2.779			
41.30									0.999	1.193	1.481	1.578	1.949	2.406		2.850			
42.00										1.226	1.521	1.619	2.003						
42.40									1.037	1.238	1.536	1.635	2.023	2.498	2.591	2.960	3.141	3.498	3.444

WEIGHT CHART - ROUND PIPES

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TESTING

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Mr. Pradeep Bansal
Owner, CJ Darcl

Mr. Puneet Gupta
COO, KAMAL COACH

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