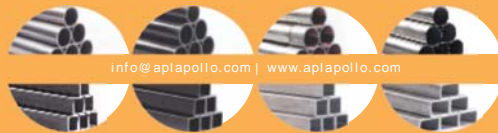




Wherever you go
there we are



info@aplapollo.com | www.aplapollo.com



APL APOLLO TUBES LIMITED
36, Kaushambi, Near Anand Vihar Terminal, Ghaziabad-201010, (U.P), INDIA
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Concept & Design: www.studiog.co.in



Product Profile



Company Overview

In third decade of our existence, wherein we started our journey under the visionary leadership of Lt. Sh. Sudesh Gupta-founder chairman with an impeccable mission to carve an unparalleled position for ourselves in the industry, through our integrated manufacturing lines, world class brand, upstream and downstream tie-ups along with a rapidly growing domestic market and consumption centres across the world; we have come to acquire the leadership status in the industry.

Today, we are the largest player in the segment having multi-locational installed capacities (5 manufacturing units – 2 in Delhi NCR, 1 near Bengaluru, a new Greenfield plant in Hosur, Tamil Nadu and 1 near Mumbai). These latest Japanese technology based world class manufacturing facilities offer a comprehensive range of steel tubes in over 300 varieties all ERW Tubes segments e.g. black, hollow section, galvanised and pre-galvanised tubes.

Moreover, to make our products available, just-in-time, across all the corners of India, we are extending our footprints via Company's own warehouse-cum-branches network. We are further contemplating to widen and deepen this network in Tier-II and III cities. The increased presence would enable the Company to address consumer needs quicker, access feedback better and capture marketplace realities more accurately.

With continuous investment in technologies, capacities and capabilities, we are aspiring to achieve US \$1 Billion revenue and installed capacity of 1 Million TPA by 2015

Our products comply with various Indian as well as International standards, manufactured in various steel grades. Our product range includes Black, Hot-dipped galvanised, Pre-galvanised steel tubes, square and rectangular hollow section from ½" to 14" with thickness of 0.7mm to 10mm. The Company has quality certifications like ISO 9001:2008, OHSAS 18001:2007 & ISO 14001:2004 and safety certifications like 'CE' & 'UL' for Europe and USA. Among the user industries are urban infrastructure namely airports, metro stations, automotive segments like bus body manufacturers, construction, scaffoldings, water wells, windmills, bridges, pre-fabricated structures, furniture n fixtures, fire fighting systems, oil and gas pipe lines, general engineering purpose etc.

Such multi-pronged approach has truly added new shines of glory to our brand APL Apollo, a name that radiates with our strong convictions to outperform on our path of growth... quarter after quarter... year after year...

What sets us apart

Multi-locational Facilities

Being the only manufacturer having 5 plants spread across the North, West and South India, we are capable of delivering materials to all parts of the country in a shorter period than others.

Branch Network

Having the largest branch network of more than 15 branches spread in different states, we are capable of providing finished products to our customers according to their needs.

'0' Ovality

Being one of the few manufacturers in the world having online Rotatory Sizing Mill, we are capable of providing tubes with minimum ovality for high precision end use.

Technological Advancement

APL APOLLO has always been a pioneer in adapting the latest technologies whether it is pre-galvanised lines, cold saws, high speed mills from Europe and Japan or the unique rotatory sizing mills which help in providing you with the best quality rolled tubes.

Raw Material

We acquire 100% tested, best quality hot rolled coils for rolling our tubes which makes our tubes high pressure resistant with high strength.

Wide Range

APL Apollo is the only manufacturer in the industry to have a product range of over 350 products that vary from round tubes to hollow section, 1/2" to 14" in outer diameter, 0.7 mm to 10.0 mm in wall thickness, 3mtrs to 12mtrs in length and surface protection such as self-coated, oil/varnished, hot dip galvanised and pre-galvanised.

Bur-free ends

We have cold saws installed on the mills, which provide bur free ends of hollow section that helps in easy welding and joining of the tubes and providing strength to them. Apart from this we do end-facing of the round tubes which provides 100% bur-free end tubes.

Brand Equity

We market our products under APL APOLLO brand which enjoys a good reputation not only in India but in overseas markets as well.

Bundling Facility

Installed with automatic bundling machines, we are capable of providing a proper bundled pack of tubes which provides an advantage of proper handling and also helps in reducing damages.

Certifications

The Company's products are certified by reputed international agencies like SGS (France), Underwrites' Laboratories (USA) and CE (Europe); It received the Recognised Export House status and is also ISO 9001:2008, ISO14001:2004 and OHSAS 18001:2007 certified. Additionally, all its products are BIS-marked.



An Aspect That Brings Respect

Quality has always been synonymous with customer satisfaction, and that's how we aim at it. Stringent quality checks, ISO compliance, and rigorous product testing we do is all for the sake of unparalleled quality.

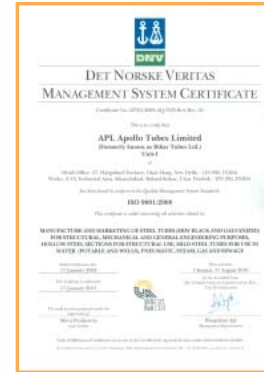
APL Apollo Tubes Limited is an integrated management system certified company having ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007. It has strong domestic customer base and exports to over 25 countries. We believe that the best way to ensure quality maintenance is by installing equipments and adapting processes that are capable of producing it.

We have been living up to the continuously changing market scenarios while maintaining one of the best infrastructures in the industry. The superior quality black and galvanized steel tubes are produced on modern high speed tube mills based on the latest technology of world leader M/s Kusakabo of Japan. Apart from complete in-house quality inspection facilities at various stages starting from procurement of raw material to final dispatch of finished goods, we have complete infrastructure of Coil Slitting, Tube Making, End Facing, Hydrotesting, Pickling & Galvanizing and Threading & Bundling.

Our mills are fully computerized and operate at a speed of 100 meters/minute ensuring steel tubes production with accurate roundness, straightness, length and strong weld joints. These mills possess quick size changing facility with spare cassettes which reduces the down time and enables faster delivery.

We have 'Online NDT' Eddy Current Testing which works in synchronization with automatic sorting system installed at our plant ensuring automatic segregation of Good Tubes and Bad Tubes. This system not only marks out the rejects but also ensures efficient monitoring of equipment performance and rejection levels. While our customers get Eddy Current tested quality tubes, the constantly monitored quality index yields productivity advantage. Better yield because of low rejections gives direct price competitiveness to our products.

With our in-built modern quality control systems WE NOT ONLY CHECK QUALITY, WE PRODUCE IT.



ISO 9001 : 2008



OHSAS 18001 : 2007



CE for EUROPE



ISO 14001 : 2004



UL for USA



SGS



ASTM A-795* (Black & Galvanised Steel Pipes for Fire Protection)

Nominal Bore		Outside Diameter		SCH 10				No. of Piece per Bundle	SCH 40/30*				No. of Piece per Bundle
				Wall Thickness		Weight Plain End			Wall Thickness		Weight Plain End		
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
20	3/4	26.7	1.050	2.11	0.083	1.28	0.96	90	2.87	0.113	1.69	1.13	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	90	3.38	0.133	2.50	1.68	60
32	1 ^{1/4}	42.2	1.660	2.77	0.109	2.69	1.81	61	3.56	0.14	3.39	2.27	42
40	1 ^{1/2}	48.3	1.900	2.77	0.109	3.11	2.09	61	3.68	0.145	4.05	2.72	36
50	2	60.3	2.375	2.77	0.109	3.93	2.64	37	3.91	0.154	5.45	3.66	26
65	2 ^{1/2}	73.0	2.875	3.05	0.120	5.26	3.53	29	5.16	0.205	8.68	5.80	18
80	3	88.9	3.500	3.05	0.120	6.46	4.34	24	5.49	0.216	11.29	7.58	14
90	3 ^{1/2}	101.6	4.000	3.05	0.120	7.41	4.98	21	5.74	0.226	13.58	9.12	12
100	4	114.3	4.500	3.05	0.120	8.37	5.62	19	6.02	0.237	16.09	10.8	10
125	5	141.3	5.563	3.4	0.134	11.58	7.78	10	6.55	0.258	21.79	14.63	8
150	6	168.3	6.625	3.4	0.134	13.85	9.30	10	7.11	0.280	28.29	18.99	7
200	8	219.1	8.625	4.78	0.188	25.26	16.96	5	7.04*	0.277	36.82	24.72	5

*This specification conforms to UL certification conferred by Underwriters Laboratories, USA

ASTM A 135 GRADE A & B (Black and Galvanised Steel Pipes)

Nominal Bore		Outside Diameter		SCH 10				No. of Piece per Bundle
				Wall Thickness		Weight Plain End		
mm	inch	mm	inch	mm	inch	mm	inch	
20	3/4	26.7	1.050	2.11	0.083	1.28	0.96	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	90
32	1 ^{1/4}	42.2	1.66	2.77	0.109	2.69	1.81	61
40	1 ^{1/2}	48.3	1.900	2.77	0.109	3.11	2.09	61
50	2	60.3	2.375	2.77	0.109	3.93	2.64	37
65	2 ^{1/2}	73.0	2.875	3.05	0.120	5.26	3.53	29
80	3	88.9	3.500	3.05	0.120	6.46	4.34	24
90	3 ^{1/2}	101.6	4.000	3.05	0.120	7.41	4.98	21
100	4	114.3	4.500	3.05	0.120	8.37	5.62	19
125	5	141.3	5.563	3.40	0.134	11.58	7.78	14

Tolerance

Outside Diameter	Pipes size upto & including Dn40	+ 1-0.4mm
	Pipes size DN 50 or latger	+ 1-1%
Thickness		-12.5 (max)
Weight		+ 10%

Mechanical Properties

Chemical Properties

	Grade A	Grade B		Carbon	Manganese	Phosphorus	Sulphur
Yield Strength	205 Mpa (Min)	240 Mpa (Min)	Grade A	0.25	0.05	0.035	0.035
Tensile Strength	330 Mpa (Min)	415 Mpa (Min)	Grade B	0.3	1.2	0.35	0.035
Elongation %	35	30					

Galvanising

Minimum	0.490 kg/Sq Mtr.
Average	0.550 kg/Sq Mtr.



HOLLOW SECTION

Hollow Section

Size - RHS 20*15-300*250
SHS 20*20-275*275
Thickness: 1.0 mm to 8.0 mm
Length: 3.0 mm to 12.0 mm

APPLICATIONS

- Construction
- Machinery
- Automotive
- Furniture
- Storage System
- Transmission Tower

PRODUCTION STANDARD

- IS4932:1997
- EN10219-1:2006
- ASTM A-500

TESTS PERFORMED

- Visual and Dimensional Inspection
- Tensile Test
- Flattening and Flaring Test
- Impact Test
- Chemical Analysis
- Plain End-square cut
- Cut Lengths

SURFACE PROTECTION

- Black (Self Coloured uncoated)
- Varnish/Oil Coating
- Hot Dip Galvanized
- Pre-Galvanized

NOTE: For details please refer specification sheet.

in
METRO



Black (SELF COLORED UNCOATED)



Oiled/Varnish



Hot Dip Galvanized



Pre-Galvanized

Square Hollow Section (SHS) IS : 4923 : 1997/EN 10219-1 : 2006*/ASTM A-500												
SHS	Thickness	Sec Area	Unit Wt	Moment of Inertia		Radius of Gyration		Elastic Modulus		Torsional Constants		Outer Surface Area per m
				I _{xx}	I _{yy}	r _{xx}	r _{yy}	Z _{xx}	Z _{yy}	J	B	
D X B	t	A	W	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ⁴	cm ³	cm ²
mm	mm	cm ²	kg/m									
25 x 25	1.6	1.43	1.12	1.28	1.28	0.94	0.94	1.02	1.02	1.96	1.46	0.092
	2.0	1.74	1.36	1.48	1.48	0.92	0.92	1.19	1.19	2.29	1.68	0.090
	2.6	2.16	1.69	1.72	1.72	0.89	0.89	1.38	1.38	2.86	1.92	0.087
	3.2	2.53	1.98	1.89	1.89	0.86	0.86	1.51	1.51	2.96	2.07	0.084
	2.0	2.30	1.80	3.36	3.36	1.21	1.21	2.10	2.10	5.30	5.30	0.118
32 x 32	2.6	2.88	2.26	4.02	4.02	1.18	1.18	2.51	2.51	6.45	6.45	0.115
	3.2	3.42	2.69	4.54	4.54	1.15	1.15	2.84	2.84	7.41	7.41	0.112
	2.0	2.76	2.18	5.88	5.88	1.46	1.46	3.10	3.10	9.31	9.31	0.142
	2.6	3.51	2.75	7.14	7.14	1.43	1.43	3.76	3.76	11.51	11.51	0.139
	3.2	4.19	3.29	8.18	8.18	1.40	1.40	4.30	4.30	13.45	13.45	0.136
40 x 40	4.0	5.03	3.95	9.26	9.26	1.36	1.36	4.87	4.87	15.67	15.67	0.131
	2.6	3.72	2.92	8.45	8.45	1.51	1.51	4.22	4.22	13.63	13.63	0.147
	2.9	4.09	3.21	9.11	9.11	1.49	1.49	4.56	4.56	14.85	14.85	0.145
	3.2	4.45	3.49	9.72	9.72	1.48	1.48	4.86	4.86	16.00	16.00	0.144
	4.0	5.35	4.20	11.07	11.07	1.44	1.44	5.54	5.54	18.75	18.75	0.139s
49.5 x 49.5	2.6	4.70	3.69	16.91	16.91	1.90	1.90	6.83	6.83	27.19	27.19	0.185
	2.9	5.19	4.07	18.37	18.37	1.88	1.88	7.42	7.42	29.81	29.81	0.183
	3.6	6.28	4.93	21.42	21.42	1.85	1.85	8.66	8.66	35.54	35.54	0.179
	4.5	7.58	5.95	24.64	24.64	1.80	1.80	9.96	9.96	42.15	42.15	0.175
	2.6	5.80	4.55	31.33	31.33	2.33	2.33	10.44	10.44	50.08	50.08	0.227
60 x 60	2.9	6.41	5.03	34.21	34.21	2.31	2.31	11.40	11.40	56.12	56.12	0.225
	3.2	7.01	5.50	36.94	36.94	2.30	2.30	12.31	12.31	60.02	60.02	0.224
	4.0	8.55	6.71	43.55	43.55	2.26	2.26	14.52	14.52	72.41	72.41	0.219
	4.8	10.01	7.85	49.22	49.22	2.22	2.22	16.41	16.41	83.86	83.86	0.215
	3.2	8.54	6.71	66.32	66.32	2.79	2.79	18.42	18.42	106.81	106.81	0.272
72 x 72	4.0	10.47	8.22	79.03	79.03	2.75	2.75	21.95	21.95	129.85	129.85	0.267
	4.0	12.31	9.66	90.31	90.31	2.71	2.71	25.09	25.09	151.55	151.55	0.263
	3.2	9.57	7.51	92.71	92.71	3.11	3.11	23.18	23.18	148.55	148.55	0.304
	4.0	11.75	9.22	111.04	111.04	3.07	3.07	27.76	27.76	181.22	181.22	0.299
	4.8	13.85	10.87	127.58	127.58	3.04	3.04	31.89	31.89	212.26	212.26	0.295
91.5 x 91.5	3.6	12.32	9.67	156.49	156.49	3.56	3.56	34.21	34.21	251.17	251.17	0.347
	4.5	15.40	11.88	187.57	187.57	3.52	3.52	41.00	41.00	306.78	306.78	0.343
	5.4	17.85	14.01	215.68	215.68	3.48	3.48	47.14	47.14	359.76	359.76	0.338
	4.0	14.95	11.73	226.35	226.35	3.89	3.89	45.27	45.27	364.75	364.75	0.379
	5.0	18.36	14.41	271.10	271.10	3.84	3.84	54.22	54.22	441.84	441.84	0.374
113.5 x 113.5	6.0	21.63	16.98	311.47	311.47	3.79	3.79	62.29	62.29	511.80	511.80	0.369
	4.8	20.28	15.92	393.30	393.30	4.40	4.40	69.30	69.30	637.45	637.45	0.429
	5.4	22.60	17.74	432.58	432.58	4.38	4.38	76.23	76.23	708.69	708.69	0.426
	4.8	23.83	16.71	634.39	634.39	5.16	5.16	96.12	96.12	1018.30	1018.30	0.503
	5.4	26.59	20.88	700.11	700.11	5.13	5.13	106.08	106.08	1134.25	1134.25	0.500
150 x 150	4.0	22.95	18.01	807.82	807.82	5.93	5.93	107.71	107.71	1273.46	1273.46	0.579
	5.0	28.36	22.26	982.12	982.12	5.89	5.89	130.95	130.95	1569.09	1569.09	0.574
	6.0	33.63	26.40	1154.91	1154.91	5.84	5.84	152.7g	152.7g	1856.18	1856.18	0.569
	7.0	38.78	30.44	1299.44	1299.44	5.79	5.79	173.26	173.26	2134.99	2134.99	0.564
	8.0	43.79	44.38	1443.00	1443.00	5.74	5.74	192.40	192.40	2405.78	2405.78	0.559
180 x 180	4.0	27.75	21.78	1421.74	1421.74	7.16	7.16	157.97	157.97	2224.31	2224.31	0.699
	5.0	43.36	26.97	1736.87	1736.87	7.11	7.11	192.99	192.99	2747.93	2747.93	0.694
	6.0	40.83	32.05	2036.52	2036.52	7.06	7.06	226.28	226.28	3259.23	3259.23	0.689
	7.0	47.18	33.03	2321.04	2321.04	7.01	7.01	257.89	257.89	3758.53	3758.53	0.684
	8.0	53.39	41.90	2590.73	2590.73	6.97	6.97	287.86	287.86	4246.16	4246.16	0.679
220 x 220	4.0	34.15	26.61	2639.14	2639.14	8.79	8.79	239.92	239.92	4099.49	4099.49	0.859
	5.0	42.36	33.25	3238.02	3238.02	8.74	8.74	294.37	294.37	5076.22	5076.22	0.854
	6.0	50.43	39.59	3813.36	3813.36	8.70	8.70	346.67	346.67	6034.73	6034.73	0.849
	7.0	58.38	45.83	4365.55	4365.55	8.65	8.65	396.67	396.67	6974.82	6974.82	0.844
	8.0	66.19	51.96	4894.99	4894.99	8.60	8.60	445.00	445.00	7897.48	7897.48	0.839
250 x 250*	4.0	38.95	30.57	3907.30	3907.30	10.02	10.02	312.58	312.58	6045.40	6045.40	0.979
	5.0	48.36	37.96	4805.01	4805.01	9.97	9.97	384.40	384.40	7494.83	7494.83	0.974
	6.0	57.63	45.24	5672.00	5672.00	9.92	9.92	453.76	453.76	8920.44	8920.44	0.969
	7.0	66.78	52.42	6508.73	6508.73	9.87	9.87	520.70	520.70	10322.70	10322.70	0.964
	8.0	75.79	59.50	7315.65	7315.65	9.82	9.82	585.25	585.25	11702.07	11702.07	0.959

Note: These sizes would be included in our regular range of production in the near future. Sizes and Thicknesses other than listed above can be supplied on order to order basis. * This specification conforms to CE Mark conferred by Det Norske Veritas, Netherlands.

OTHER ALLOWABLE STRESSES VALUES (in Mpa)

Steel Grade	Minimum Yield Stress	Minimum UTS	Axial Street in Tension	Bending Stress in Ten of Compn.	Shear Stress	Bearing Stress	Equivalent Stress
Yst 210	210	--	--	--	--	--	--
Yst 240	240	410	144	158	108	180	216
Yst 310	310	450	186	205	140	232	279

Note: Minimum % Elongation: 10% for GR. Yst 240 & 20 % for Yst 210

