Aluminum Seamless Bus Pipe Products

WMWA enables companies to fulfill their project requirements with a wide selection of excellent quality aluminum bus pipe products. Aluminum is critical to a diverse range of applications in industries ranging from transportation, electronics, and construction, to packaging, household items, and recreational products.

Our aluminum pipe products are available in various sizes, and we are also able to accommodate custom orders. Simply send us your component specifications, and we will be glad to help you bring your design to life.

At WMWA, quality is of utmost priority. All our locations carry ISO/9001 certification, and all employees undergo ongoing training to meet the exacting needs of our customers.

We are also committed to helping customers meet their deadlines. With our just in time delivery system and eight locations nationwide, we help customers maintain timely projects.

Aluminum Bus Pipe - Seamless & Structural
6101-T6 or 6063-T6

SCHEDULE 40 - Nominal Dimensions

INCHES	O.D	I.D	WALL	WT/FT
1/2	0.84	0.622	0.109	0.294
3/4	1.05	0.824	0.113	0.391
1	1.315	1.049	0.133	0.581
1 1/4	1.66	1.38	0.014	0.786
1 1/2	1.9	1.61	0.145	0.94
2	2.375	2.067	0.154	1.264
2 1/2	2.875	2.469	0.203	2.004
3	3.5	3.068	0.216	2.621
3 1/2	4	3.548	0.226	3.151
4	4.5	4.026	0.237	3.733
5	5.563	5.047	0.258	5.057
6	6.625	6.065	0.28	6.564
8	8.625	7.981	0.322	9.878

Stock Lengths: 20', 30', 40'
Special Order Lengths available up to 50'

SCHEDULE 80 - Nominal Dimensions

INCHES	O.D	I.D	WALL	WT/FT
1/2	0.84	0.546	0.147	0.376
3/4	1.05	0.742	0.154	0.51
1	1.315	0.957	0.179	0.751
1 1/4	1.66	1.278	0.191	1.037
1 1/2	1.9	1.5	0.2	1.256
2	2.375	1.939	0.218	1.737
2 1/2	2.875	2.323	0.276	2.65
3	3.5	2.9	0.3	3.547
3 1/2	4	3.364	0.318	4.326
4	4.5	3.826	0.337	5.183
5	5.563	4.813	0.375	7.188
6	6.625	5.761	0.432	9.884
8	8.625	7.625	0.5	15.01

Special sizes of bus pipe produced to order.
Bus packaging available.

Seamless bus pipe is an extruded tubular product used to convey electricity. It is manufactured to a "nominal," not actual, inside diameter. The wall thickness is described by a "schedule." The schedules are determined by the American Standards Association. Seamless bus pipe is generally made of 6063-T6 alloy in ANSI Schedule 40 pipe because of its excellent mechanical and electrical properties. 6061-T6 alloy tubular bus is used where high strength and lower conductivity are required.

Aluminum Bus Pipe - Physical and Electrical Properties
6063-T6

SCHEDULE 40 PIPE

INCHES	O.D	WALL	AREA	WEIGHT LBS/FT	I.R.	DC RES	60Hz RAC/RDC	AC RES	CURR RATINGS
1	1.315	0.133	0.494	0.581	68.24	31.120	1.00039	36.580	681
1 1/4	1.660	0.140	0.669	0.786	62.68	22.990	1.00050	27.030	859
1 1/2	1.900	0.145	0.800	0.940	59.45	19.220	1.00064	22.600	984
2	2.375	0.154	1.075	1.264	54.15	14.300	1.00082	16.820	1234
2 1/2	2.875	0.203	1.704	2.004	49.85	9.019	1.00220	10.620	1663
3	3.500	0.216	2.228	2.621	45.19	6.897	1.00300	8.126	2040
3 1/2	4.000	0.226	2.680	3.151	42.05	5.736	1.00380	6.761	2347
4	4.500	0.237	3.174	3.733	39.28	4.842	1.00470	5.712	2664
4 1/2	5.001	0.247	3.688	4.337	36.81	4.167	1.00570	4.920	2984
5	5.563	0.258	4.300	5.057	34.31	3.574	1.00680	4.224	3348
6	6.625	0.280	5.581	6.564	30.23	2.754	1.00950	3.263	4064

SCHEDULE 80 PIPE

INCHES	O.D	WALL	AREA	WEIGHT LBS/FT	I.R.	DC RES	60Hz RAC/RDC	AC RES	CURR RATINGS
1	1.315	0.179	0.639	0.751	68.81	24.060	1.00100	28.300	774
1 1/4	1.660	0.191	0.882	1.037	63.14	17.440	1.00140	20.520	985
1 1/2	1.900	0.200	1.068	1.256	59.89	14.390	1.00200	16.940	1137
2	2.375	0.218	1.477	1.737	54.56	10.400	1.00280	12.260	1446
2 1/2	2.875	0.276	2.254	2.650	50.23	6.820	1.00720	8.071	1907
3	3.500	0.300	3.016	3.547	45.55	5.096	1.01030	6.050	2363
3 1/2	4.000	0.318	3.678	4.326	42.39	4.178	1.01380	4.972	2735
4	4.500	0.337	4.407	5.183	39.61	3.487	1.01710	4.168	3118
4 1/2	5.001	0.355	5.180	6.092	37.13	2.967	1.02100	3.559	3505
5	5.563	0.375	6.112	7.188	34.63	2.515	1.02600	3.032	3949
6	6.625	0.432	8.405	9.844	30.58	1.829	1.04570	2.247	4891

1. Current ratings listed in the Tables are based on 30C temperature rise over 40C ambient horizontally mounted conductors, with spacing sufficient to eliminate proximity effects, generally assumed not to be significant if spacing is 18 in. or over. Conduction of heat by supporting structures and taps can appreciably affect the ratings.
2. Conductors with a 2ft/sec crosswind. Nominal oxidized surface (e=0.50)
3. Current Ratings for direct current are close to those of alternating current for all except the larger sizes; and for them, the increase for dc bus is about 1.5 percent.
4. NEMA Standard SG1-3.02 (7/13/60) lists current rating for tubes of 57%-61% IACS conductivity, but without stated emissivity factors. However, even after adjustment for the 53% IACS conductivity of 6063-T6 alloy (and 43% for 6061-T6 alloy), the ratings differ somewhat from those of this table

Aluminum Bus Pipe - Physical and Electrical Properties
6061-T6

SCHEDULE 40 PIPE

INCHES	O.D	WALL	AREA	WEIGHT LBS/FT	I.R.	DC RES	60Hz RAC/RDC	AC RES	CURR RATINGS

1	1.315	0.133	0.494	0.581	68.24	38.360	1.00032	43.820	622
1 1/4	1.660	0.140	0.669	0.786	62.68	28.340	1.00039	32.370	705
1 1/2	1.900	0.145	0.800	0.940	59.45	23.690	1.00046	27.070	900
2	2.375	0.154	1.075	1.264	54.15	17.630	1.00055	20.140	1128
2 1/2	2.875	0.203	1.704	2.004	49.85	11.170	1.00150	12.710	1520
3	3.500	0.216	2.228	2.621	45.19	8.500	1.00180	9.725	1865
3 1/2	4.000	0.226	2.680	3.151	42.05	7.070	1.00220	8.091	2145
4	4.500	0.237	3.174	3.733	39.28	5.968	1.00270	6.834	2436
4 1/2	5.001	0.247	3.688	4.337	36.81	5.136	1.00330	5.885	2728
5	5.563	0.258	4.300	5.057	34.31	4.406	1.00400	5.051	3063
6	6.625	0.280	5.581	6.564	30.23	3.394	1.00540	3.897	3719

SCHEDULE 80 PIPE

INCHES	O.D	WALL	AREA	WEIGHT LBS/FT	I.R.	DC RES	60Hz RAC/RDC	AC RES	CURR RATINGS
1	1.315	0.179	0.639	0.751	68.81	29.650	1.00075	33.840	707
1 1/4	1.660	0.191	0.882	1.037	63.14	21.490	1.00105	24.570	901
1 1/2	1.900	0.200	1.068	1.256	59.89	17.730	1.00150	20.280	1039
2	2.375	0.218	1.477	1.737	54.56	12.820	1.00210	14.670	1322
2 1/2	2.875	0.276	2.254	2.650	50.23	8.406	1.00390	9.647	1746
3	3.500	0.300	3.016	3.547	45.55	6.281	1.00490	7.225	2199
3 1/2	4.000	0.318	3.678	4.326	42.39	5.150	1.00750	5.935	2507
4	4.500	0.337	4.407	5.183	39.61	4.298	1.00950	4.965	2862
4 1/2	5.001	0.355	5.180	6.092	37.13	3.657	1.01160	4.236	3221
5	5.563	0.375	6.112	7.188	34.63	3.099	1.01650	3.604	3631
6	6.625	0.432	8.405	9.844	30.58	2.254	1.02120	2.656	4532

1. Current ratings listed in the Tables are based on 30C temperature rise over 40C ambient horizontally mounted conductors, with spacing sufficient to eliminate proximity effects, generally assumed not to be significant if spacing is 18 in. or over. Conduction of heat by supporting structures and taps can appreciably affect the ratings.
2. Conductors with a 2ft/sec crosswind. Nominal oxidized surface (e=0.50)
3. Current Ratings for direct current are close to those of alternating current for all except the larger sizes; and for them, the increase for dc bus is about 1.5 percent.
4. NEMA Standard SG1-3.02 (7/13/60) lists current rating for tubes of 57%-61% IACS conductivity, but without stated emissivity factors. However, even after adjustment for the 53% IACS conductivity of 6063-T6 alloy (and 43% for 6061-T6 alloy), the ratings differ somewhat from those of this table