

STAINLESS TUBING

Specifications: ASTM-A-269 Welded & Seamless 304, 316, 321—For commercial applications.
 MIL-T-8504 W&D and CDS 304—Annealed aircraft hydraulic line.
 MIL-T-6845 W&D and CDS 304—1/8 Hard aircraft hydraulic line.
 DMS-1578 W&D and CDS 304—McDonnell Douglas version of MIL-T-6845.
 MIL-T-8808 W&D and CDS 321, 347—Annealed aircraft hydraulic line.

WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.	WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.
.031 OD					3/16 OD Cont.				
.010	.011	.002	S304	A632	.049	.090	.073	S304	8504
					.065	.058	.086	S304	A269
1/16 OD					1/4 OD				
.016	.023	.008	S304	A269	.010	.230	.026	S304	8504
3/32 OD					.016	.218	.040	S304	8504
.020	.054	.016	S321	8808	.020	.210	.049	W304	A269
1/8 OD					.020	.210	.049	S304	A269
.012	.101	.014	S304	8504	.020	.210	.049	S304	8504
.016	.093	.018	S304	8504	.020	.210	.049	W316	A269
.020	.085	.022	S304	8504	.020	.210	.049	S316	A269
.020	.085	.022	S316	A269	.020	.210	.049	S316L	A269
.020	.085	.022	S316L	A269	.020	.210	.049	S321	8808
.028	.069	.029	W304	8504	.020	.210	.049	S INCONEL	
.028	.069	.029	W304	A269	.028	.194	.066	W304	A269
.028	.069	.029	S304	A269	.028	.194	.066	S304	6845
.028	.069	.029	S304	8504	.028	.194	.066	S304	A269
.028	.069	.029	S304	8504	.028	.194	.066	S304	8504
.028	.069	.029	S304	6845	.028	.194	.066	S316	A269
.028	.069	.029	S316	A269	.028	.194	.066	S316L	A269
.028	.069	.029	S316L	A269	.028	.194	.066	S321	8808
.028	.069	.029	COILS	C-22	.035	.180	.080	W304	A269
.035	.055	.033	S304	A269	.035	.180	.080	W304	8504
.035	.055	.033	S304	8504	.035	.180	.080	S304	A269
.035	.055	.033	S316	A269	.035	.180	.080	S304	6845
.035	.055	.033	S316L	A269	.035	.180	.080	S304	8504
5/32 OD					.035	.180	.080	W316	A269
.016	.124	.024	W304	8504	.035	.180	.080	S316	A269
3/16 OD					.035	.180	.080	S316L	A269
.010	.168	.019	W304	A269	.035	.180	.080	S316L	COILS
.010	.168	.019	S304	8504	.035	.180	.080	HASTELLOY	C-22
.016	.156	.029	S304	8504	.035	.180	.080	S-NICKEL	200
.020	.148	.035	W304	A269	.049	.152	.105	W304	8504
.020	.148	.035	S304	A269	.049	.152	.105	S304	6845
.020	.148	.035	S304	6845	.049	.152	.105	S304	A269
.020	.148	.035	S304	8504	.049	.152	.105	S304	8504
.028	.132	.047	W304	A269	.049	.152	.105	S316	A269
.028	.132	.047	W304	8504	.058	.130	.119	S316L	A269
.028	.132	.047	S304	6845	.065	.120	.128	S304	A269
.028	.132	.047	S304	8504	.065	.120	.128	S304	8504
.028	.132	.047	S316	A269	.065	.120	.128	S316	A269
.035	.118	.057	S304	6845	.083	.084	.148	S304	A269
.035	.118	.057	S304	A269	5/16 OD				
.035	.118	.057	S304	8504	.020	.273	.062	S304	A269
.035	.118	.057	S316	A269	.020	.273	.062	S304	6845
.035	.118	.057	S316L	A269	.028	.257	.085	S304	8504

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 DMS-1578 W&D and CDS 304—McDonnell Douglas version of MIL-T-6845.
 MIL-T-8808 W&D and CDS 321, 347—Annealed aircraft hydraulic line.

WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.	WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.
5/16 OD Cont.					7/16				
.028	.257	.085	S304	6845	.028	.381	.123	S304	A269
.028	.257	.085	S321	8808	.028	.381	.123	S304	8504
.035	.243	.103	W304	A269	.035	.368	.150	W304	A269
.035	.243	.103	S304	A269	.035	.368	.150	W304	8504
.035	.243	.103	S304	8504	.049	.340	.203	W304	A269
.035	.243	.103	S304	6845	.065	.308	.258	S304	A269
.035	.243	.103	S321	8808	1/2 OD				
.049	.215	.138	S304	A269	.020	.460	.102	S304	A269
.049	.215	.138	S304	8504	.020	.460	.102	S304	8504
.065	.183	.172	S304	A269	.028	.444	.141	W304	A269
.095	.123	.221	S304	A269	.028	.444	.141	W304	8504
.095	.123	.221	S304	8504	.028	.444	.141	S304	6845
3/8 OD					.028	.444	.141	S321	8808
.016	.343	.061	S304	A269	.035	.430	.173	W304	A269
.016	.343	.061	S304	6845	.035	.430	.173	S304	A269
.020	.335	.075	S304	A269	.035	.430	.173	W304	8504
.020	.335	.075	S316	A269	.035	.430	.173	S304	6845
.028	.319	.103	W304	6845	.035	.430	.173	S304	8504
.028	.319	.103	W304	A269	.035	.430	.173	W316	A269
.028	.319	.103	W304	8504	.035	.430	.173	S316	A269
.028	.319	.103	S304	A269	.035	.430	.173	S316L	A269
.028	.319	.103	S304	6845	.049	.402	.236	W304	A269
.028	.319	.103	S304	8504	.049	.402	.236	S304	A269
.028	.319	.103	S321	8808	.049	.402	.236	S304	8504
.035	.305	.127	W304	A269	.049	.402	.236	W316	A269
.035	.305	.127	S304	A269	.049	.402	.236	S316	A269
.035	.305	.127	S304	6845	.049	.402	.236	S316L	A269
.035	.305	.127	S304	8504	.049	.402	.236	HASTELLOY	C-22
.035	.305	.127	W316	A269	.058	.384	.273	S304	8504
.035	.305	.127	S316	A269	.065	.370	.302	S304	A269
.035	.305	.127	S316L	A269	.065	.370	.302	S304	8504
.035	.305	.127	HASTELLOY	C-22	.065	.370	.302	S304	6845
.049	.277	.170	W304	A269	.065	.370	.302	S316	A269
.049	.277	.170	W304	8504	.065	.370	.302	S316L	A269
.049	.277	.170	S304	A269	.065	.370	.302	S321	8808
.049	.277	.170	S304	8504	.083	.334	.369	S304	A269
.049	.277	.170	S316	A269	.120	.260	.487	S304	A269
.049	.277	.170	S316L	A269	9/16 OD				
.058	.259	.196	W304	A269	.065	.432	.346	S304	A269
.065	.245	.215	S304	A269	.125	.313	.584	S304	A269
.065	.245	.215	S304	6845	5/8 OD				
.065	.245	.215	S304	8504	.020	.585	.129	W304	A269
.065	.245	.215	S316	A269	.028	.569	.178	S347	8808
.083	.209	.258	W304	A269	.035	.555	.221	W304	A269
.083	.209	.258	S304	A269					
.083	.209	.258	S304	6845					
.095	.185	.274	S304	A269					
.120	.125	.327	S304	A269					

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WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.	WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.
5/8 OD Cont.					1 OD Cont.				
.035	.555	.221	S304	A269	.035	.930	.360	S304	A269
.035	.555	.221	S316	A269	.035	.930	.360	S304	6845
.049	.527	.301	W304	A269	.035	.930	.360	S316	A269
.049	.527	.301	S304	A269	.049	.902	.497	W304	A269
.049	.527	.301	S304	8504	.049	.902	.497	W304	ORN
.065	.495	.388	W304L	A269	.049	.902	.497	S304	A269
.065	.495	.388	S304	A269	.049	.902	.497	S304	8504
.065	.495	.388	W316L	A269	.049	.902	.497	W316	A269
.083	.459	.480	S304	A269	.049	.902	.497	S321	8808
.120	.385	.647	S304	A269	.065	.870	.649	W304	ORN
3/4 OD					.065	.870	.649	W304	A269
.028	.694	.215	S347	8808	.065	.870	.649	W304	8504
.035	.680	.267	W304	A269	.065	.870	.649	S304	A269
.035	.680	.267	S304	8504	.065	.870	.649	S304	6845
.035	.680	.267	S304	A269	.065	.870	.649	S316	A269
.035	.680	.267	S304	6845	.065	.870	.649	S316L	A269
.035	.680	.267	S316	A269	.083	.834	.812	S304	A269
.049	.652	.366	W304	ORN	.083	.834	.812	S321	8808
.049	.652	.366	W304	A269	.095	.810	.918	S304	A269
.049	.652	.366	S304	A269	.120	.760	1.128	S304	A269
.049	.652	.366	S304	6845	.188	.624	1.630	S304	A269
.049	.652	.366	S304	8504	.250	.500	2.003	S304	A269
.049	.652	.366	S316	A269	1 1/8 OD				
.058	.633	.428	S316L	A269	.065	.995	.735	W304	A269
.065	.620	.475	W304	A269	1 1/4 OD				
.065	.620	.475	S304	A269	.035	1.180	.454	W304	A269
.065	.620	.475	S304	8504	.035	1.180	.454	W304	8504
.065	.620	.475	S304	6845	.035	1.180	.454	S304	8504
.065	.620	.475	S316	A269	.049	1.152	.628	W304	A269
.065	.620	.475	S316L	A269	.065	1.120	.882	W304	ORN
.083	.584	.591	W304	ORN	.065	1.120	.882	S304	A269
.083	.584	.591	S304	A269	.125	1.000	1.502	S304	A269
.095	.560	.664	S304	A269	.188	.875	2.132	S304	A269
.120	.510	.807	S304	A269	.250	.750	2.670	S304	A269
.188	.375	1.379	S304	A269	1 3/8 OD				
7/8 OD					.049	1.277	.683	W304	A269
.049	.777	.432	W304	A269	1 1/2 OD				
.049	.777	.432	W304	ORN	.035	1.430	.547	W304	A269
.065	.745	.562	S304	A269	.049	1.402	.759	W304	ORN
.188	.499	1.379	S304	A269	.049	1.402	.759	W304	A269
1 OD					.065	1.370	.996	W304	A269
.028	.944	.290	S304	A269	.065	1.370	.996	S304	A269
.028	.944	.290	S304	6845	.065	1.370	.996	W316L	ORN
.035	.930	.360	W304	A269					
.035	.930	.360	W304	8504					

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WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.	WALL	THEOR. I.D.	WT. PER FOOT	TYPE	SPEC.
1 1/2 OD Cont.					2 5/8 OD				
.065	1.370	.996	S316L	A269	.065	2.500	1.781	W321	A269
.083	1.334	1.256	W304	ORN	2 3/4 OD				
.095	1.310	1.426	S304	6845	.125	2.500	3.504	S304	MECH
.120	1.260	1.769	W304	A269	.500	1.750	12.02	S304	MECH
.120	1.260	1.769	S304	A269	3 OD				
.188	1.125	2.634	S304	MECH	.065	2.870	2.037	W304	A269
.250	1.000	3.338	S304	MECH	.083	2.834	2.586	S304	A269
.375	.750	4.506	S304	MECH	.120	2.760	3.691	W304	A269
1 3/4 OD					.188	2.625	5.646	S304	MECH
.065	1.620	1.170	W304	A269	.250	2.500	7.343	S304	MECH
.120	1.510	2.089	W304	ORN	.375	2.250	10.51	S304	MECH
.125	1.500	2.169	S304	MECH	.500	2.000	13.35	S304	MECH
.188	1.375	3.136	S304	MECH	3 1/2 OD				
.250	1.250	4.005	S304	MECH	.065	3.370	2.385	W304	A269
2 OD					.375	2.780	12.52	S304	MECH
.035	1.930	.734	W304	A269	.500	2.500	16.02	S304	MECH
.049	1.902	1.201	W304	ORN	3 3/4 OD				
.049	1.902	1.201	W304	A269	.375	3.000	13.52	S304	MECH
.065	1.870	1.343	W304	ORN	4 OD				
.065	1.870	1.343	W304	A269	.065	3.870	2.732	W304	A269
.065	1.870	1.343	S304	A269	.083	3.834	3.472	S304	A269
.065	1.870	1.343	W316	A269	.180	3.640	7.340	W304	ORN
.065	1.870	1.343	S316L	A269	.250	3.500	10.01	S304	MECH
.083	1.834	1.699	W304	ORN	.375	3.250	14.52	S304	MECH
.095	1.810	1.922	S304	A269	.500	3.000	18.69	S304	MECH
.120	1.760	2.409	W304	A269	5 OD				
.188	1.625	3.638	S304	MECH	.065	4.870	3.426	W304L	A778
.250	1.500	4.673	S304	MECH	.188	4.625	9.782	W304	A269
.375	1.250	6.508	S304	MECH	.500	4.000	24.03	S304	MECH
.500	1.000	8.010	S304	MECH	6 OD				
2 1/4 OD					.065	5.870	4.120	W304	A269
.188	1.875	4.140	S304	MECH	.083	5.834	5.245	W304L	ORN
.250	1.750	5.340	S304	MECH	.120	5.760	7.536	W304L	A778
.375	1.500	7.509	S304	MECH					
2 1/2 OD									
.049	2.370	1.690	W304	A269					
.065	2.370	1.690	W304	A269					
.250	2.000	6.008	S304	MECH					
.375	1.750	8.511	S304	MECH					
.500	1.500	10.680	S304	MECH					

STAINLESS PIPE

Specifications: ASTM A-312

OD	WALL	THEOR. I.D.	WT. PER FOOT	GRADE	OD	WALL	THEOR. I.D.	WT. PER FOOT	GRADE
1/8 Sch 40 (.405)	.068	.269	.244	304W	1 Sch 80 (1.315)	.179	.957	2.172	304W
	.068	.269	.244	316W		.179	.957	2.172	304S
						.179	.957	2.172	316S
1/4 Sch 40 (.540)	.088	.364	.424	304W	1 Sch 160 (1.315)	.250	.815	2.844	304S
	.088	.364	.424	316W					
	.088	.364	.424	316LW	1 1/4 Sch 10 (1.660)	.109	1.442	1.806	316L-S
	.088	.364	.424	316L-S					
3/8 Sch 40 (.675)	.091	.493	.567	304W	1 1/4 Sch 40 (1.660)	.140	1.380	2.273	304W
	.091	.493	.567	316W		.140	1.380	2.273	316W
						.140	1.380	2.273	446S
3/8 Sch 80 (.675)	.126	.423	.738	304S	1 1/2 Sch 10 (1.900)	.109	1.682	2.085	304W
						.109	1.682	2.085	316L-W
						.109	1.682	2.085	316L-S
1/2 Sch 10 (.840)	.083	.674	.671	316L-S	1 1/2 Sch 40 (1.900)	.145	1.610	2.718	304W
						.145	1.610	2.718	304S
1/2 Sch 40 (.840)	.109	.622	.851	304W		.145	1.610	2.718	316W
	.109	.622	.851	W304L		.145	1.610	2.718	316L-W
	.109	.622	.851	304-S					
	.109	.622	.851	316W					
	.109	.622	.851	316L-S	1 1/2 Sch 80 (1.900)	.200	1.500	3.631	304W
1/2 Sch 80 (.840)	.147	.546	1.088	304S		.200	1.500	3.631	304S
	.147	.546	1.088	316S		.200	1.500	3.631	316W
						.200	1.500	3.631	316S
3/4 Sch 5 (1.050)	.065	.920	.683	304W	2 Sch 5 (2.375)	.065	2.125	1.604	304W
3/4 Sch 10 (1.050)	.083	.884	.857	304W	2 Sch 10 (2.375)	.109	2.157	2.638	316L-W
	.083	.884	.857	316L-W		.109	2.157	2.638	316L-S
	.083	.884	.857	316L-S					
3/4 Sch 40 (1.050)	.113	.824	1.131	304W	2 Sch 40 (2.375)	.154	2.067	3.653	304W
	.113	.824	1.131	316W		.154	2.067	3.653	304L-S
	.113	.824	1.131	304-S		.154	2.067	3.653	316W
	.113	.824	1.131	316L-W		.154	2.067	3.653	316L-W
	.113	.824	1.131	316L-S		.154	2.067	3.653	316L-S
3/4 Sch 80 (1.050)	.154	.742	1.474	304S	2 1/2 Sch 40 (2.875)	.203	2.469	5.793	304W
						.203	2.469	5.793	316W
1 Sch 5 (1.315)	.065	1.185	.868	304W		.203	2.469	5.793	316L-W
						.203	2.469	5.793	316L-S
1 Sch 10 (1.315)	.109	1.097	1.404	304W	2 1/2 Sch 80 (2.875)	.276	2.323	7.661	304S
	.109	1.097	1.404	316W		.276	2.323	7.661	316S
	.109	1.097	1.404	316L-W					
	.109	1.097	1.404	316L-S	3 Sch 40 (3.500)	.216	3.068	7.576	304W
1 Sch 40 (1.315)	.133	1.049	1.679	304W		.216	3.068	7.576	304L-W
	.133	1.049	1.679	304S		.216	3.068	7.576	316W
	.133	1.049	1.679	316W		.216	3.068	7.576	316L-W
	.133	1.049	1.679	316L-W					
	.133	1.049	1.679	316L-S	3 Sch 80 (3.500)	.300	2.900	10.250	316S
	.133	1.049	1.679	316L-S		.300	2.900	10.250	304S

STAINLESS PIPE

Specifications: ASTM A-312

OD	WALL	THEOR. I.D.	WT. PER FOOT	GRADE	OD	WALL	THEOR. I.D.	WT. PER FOOT	GRADE
3 ½ Sch 5 (4.000)	.083	3.834	3.472	304W	6 Sch 10 (6.625)	.134	6.357	9.289	304W
4 Sch 5 (4.500)	.083	4.334	3.915	304W	6 Sch 40 (6.625)	.280	6.056	18.970	304W
4 Sch 10 (4.500)	.120	4.260	5.613	316L-S		.280	6.056	18.970	316W
4 Sch 40 (4.500)	.237	4.026	10.790	304W		.280	6.056	18.970	316L-W
	.237	4.026	10.790	304L-W	6 Sch 80 (6.625)	.432	5.761	28.570	304S
	.237	4.026	10.790	316W		.432	5.761	28.570	316L-S
	.237	4.026	10.790	316L-W	8 Sch 40 (8.625)	.322	7.981	28.550	304W
4 Sch 80 (4.500)	.337	3.826	14.980	304S		.322	7.981	28.550	316W
	.337	3.826	14.980	316S		.322	7.981	28.550	316L-W
4 Sch 160 (4.500)	.531	3.438	22.510	321S	10 Sch 10 (10.750)	.165	10.420	18.700	316W
5 Sch 40 (5.563)	.258	5.047	14.620	304W	10 Sch 40 (10.750)	.365	10.020	40.480	304W
	.258	5.047	14.620	316W		.365	10.020	40.480	316W
	.258	5.047	14.620	316L-W		.365	10.020	40.480	316L-W
					12 Sch 40 (12.750)	.375	12.000	49.560	304W
						.375	12.000	49.560	316W
						.375	12.000	49.560	316L-W

STAINLESS SHAPES

WALL	WT. PER FOOT	TYPE	
3/8 × 3/8 OD			
.049	.217	W304	ORN
1/2 × 1/2 OD			
.049	.301	W304	ORN
5/8 × 5/8 OD			
.049	.384	W304	ORN
3/4 × 3/4 OD			
.065	.606	W304	ORN
.120	1.028	W304	ORN
1 × 1 OD			
.049	.634	W304	ORN
.065	.826	W304	ORN
.120	1.436	W304	ORN
1 1/4 × 1 1/4 OD			
.065	1.048	W304	ORN
.120	1.880	W304	ORN
1 1/2 × 1 1/2 OD			
.065	1.269	W304	ORN
.109	2.062	W304	ORN
.120	2.252	W304	ORN
2 × 2 OD			
.065	1.711	W304	ORN
.109	2.803	W304	ORN
.120	3.068	W304	ORN
.188	4.634	W304	ORN
.250	5.710	W304	ORN

WALL	WT. PER FOOT	TYPE	
3 × 3 OD			
.120	4.700	W304	ORN
.188	7.172	W304	ORN
4 × 4 OD			
.120	6.322	W304	ORN
.188	9.590	W304	ORN
.375	18.02	W304	ORN
1/2 × 1 OD			
.065	.605	W304	ORN
1/2 × 1 1/2 OD			
.065	.826	W304	ORN
3/4 × 1 1/2 OD			
.065	.826	W304	ORN
.120	1.640	W304	ORN
1 × 2 OD			
.065	1.269	W304	ORN
.120	2.252	W304	ORN
1 × 3 OD			
.120	3.068	W304	ORN
2 × 3 OD			
.120	4.700	W304	ORN
.188	5.750	W304	ORN
2 × 4 OD			
.120	3.884	W304	ORN
.188	7.190	W304	ORN
4 × 6 OD			
.180	12.14	W304	BUFFED