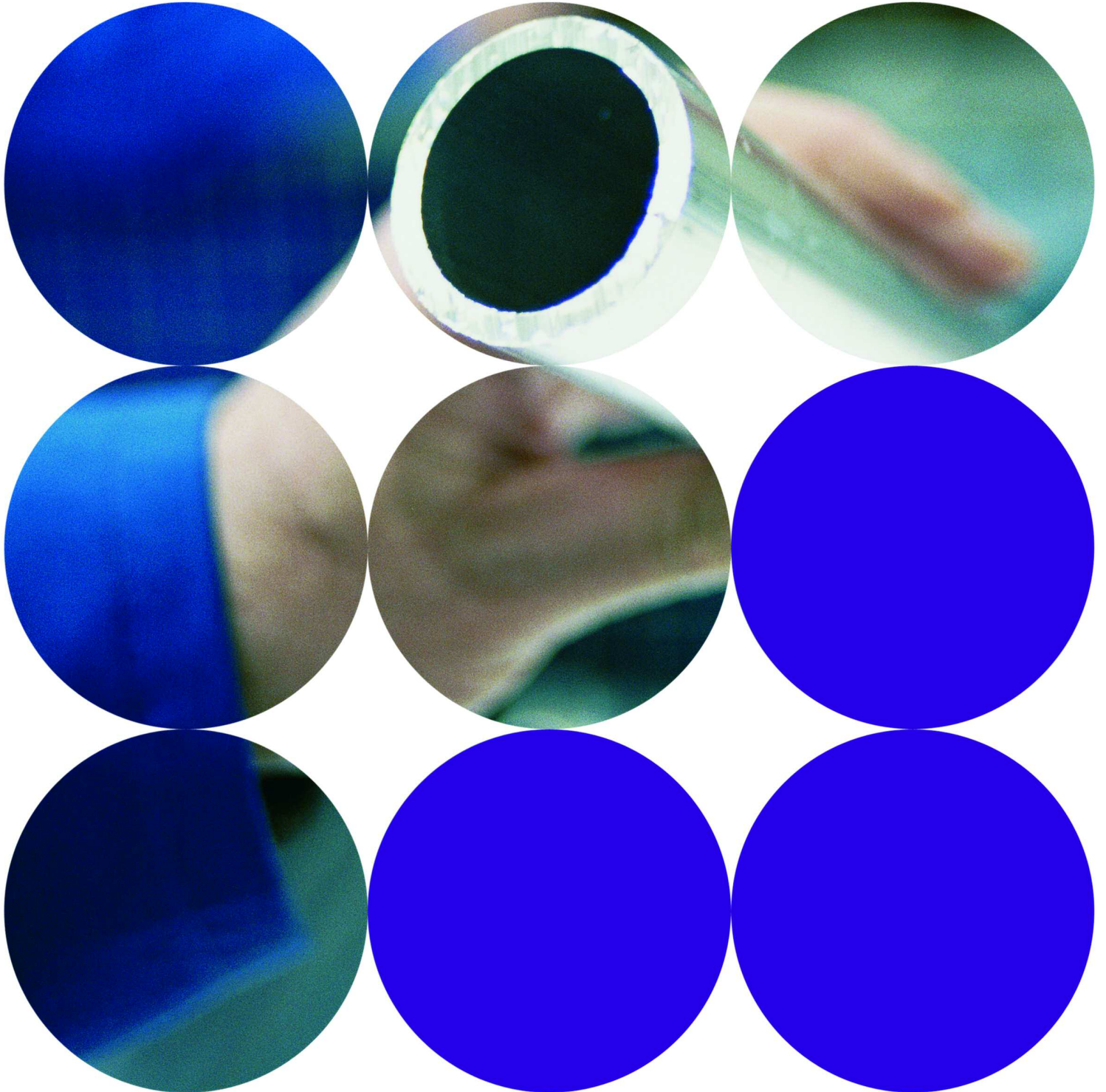




North Liberty, IN

Standard Shapes





HYDRO

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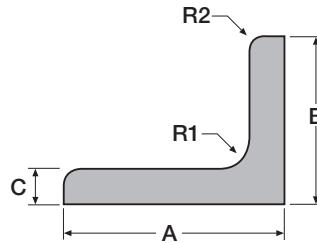
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A wide variety of standard shapes are available from Hydro facilities in North America. To view and download interactive PDF files of standard shapes for other Hydro facilities, go to:

www.hydro.com/northamerica/standardshapes

Alternatively, you can contact other locations for standard shapes information via the following toll-free numbers:

Belton, South Carolina	(888) 935-5754
Kalamazoo, Michigan	(888) 935-5758
Monett, Missouri	(888) 935-5755
Phoenix, Arizona	(800) 459-3030
St. Augustine, Florida	(800) 835-6502

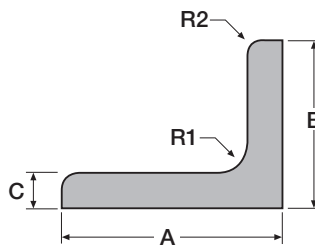


Structural Angle

Rounded inside angle, rounded inside corners

North Liberty, IN

Die	A (in.)	B (in.)	C (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
10972	0.375	0.375	0.062	0.015	0.015	0.052	1.500
15109	0.500	0.500	0.062	0.031	0.015	0.070	2.000
4104	0.750	0.250	0.055	0.015	0.015	0.062	2.000
66	0.750	0.750	0.125	0.015	0.015	0.206	3.000
8892	1.000	1.000	0.056	0.031	0.015	0.131	3.970
5958	1.000	1.000	0.062	0.015	0.015	0.144	4.000
15526	1.000	1.000	0.085	0.031	0.015	0.196	3.960
13104	1.000	1.000	0.090	0.015	0.015	0.206	4.000
99	1.000	1.000	0.093	0.015	0.015	0.218	4.090
6019	1.000	1.000	0.093	0.015	0.015	0.212	4.000
8097	1.000	1.000	0.125	0.031	0.031	0.281	3.920
10073	1.000	1.000	0.125	0.015	0.015	0.281	4.000
2447	1.000	1.500	0.125	0.015	0.015	0.356	5.000
77	1.004	1.004	0.125	0.015	0.015	0.290	4.000
12740	1.100	1.500	0.125	0.015	0.015	0.431	6.000
8036	1.250	1.250	0.125	0.188	0.125	0.356	4.770
8866	1.250	1.250	0.125	0.015	0.015	0.356	5.000
9438	1.250	1.250	0.187	0.187	0.125	0.520	4.810
12243	1.500	0.625	0.062	0.015	0.015	0.154	4.250
12240	1.500	1.000	0.060	0.015	0.020	0.175	4.950
12241	1.500	1.000	0.090	0.015	0.020	0.259	4.950
14848	1.500	1.000	0.125	0.156	0.125	0.354	4.830
15236	1.500	1.000	0.188	0.031	0.031	0.520	4.920
17362	1.500	1.500	0.090	0.031	0.031	0.313	5.920
9602	1.500	1.500	0.187	0.031	0.031	0.630	5.920
17318	1.500	1.500	0.187	0.040	0.040	0.629	5.908
9451	1.500	1.500	0.188	0.188	0.125	0.636	5.810
14847	1.500	1.500	0.188	0.188	0.125	0.640	5.810
12998	1.500	1.500	0.250	0.312	0.250	0.818	5.650
17319	1.500	1.500	0.250	0.031	0.031	0.824	5.920
15870	1.575	1.575	0.236	0.314	0.236	0.818	6.010



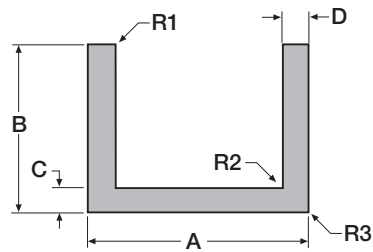
HYDRO

Structural Angle

Rounded inside angle, rounded inside corners

North Liberty, IN

Die	A (in.)	B (in.)	C (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
15396	1.750	1.250	0.250	0.031	0.015	0.824	6.000
9549	1.750	1.750	0.187	0.187	0.125	0.748	6.770
1118	2.000	1.000	0.125	0.015	0.015	0.430	6.000
11214	2.000	1.000	0.188	0.125	0.015	0.638	5.920
7983	2.000	1.500	0.125	0.031	0.031	0.505	6.920
14849	2.000	1.500	0.125	0.188	0.125	0.508	6.810
9440	2.000	1.500	0.187	0.187	0.125	0.744	6.810
15098	2.000	1.500	0.187	0.031	0.031	0.743	6.920
13206	2.000	2.000	0.125	0.015	0.015	0.581	8.000
15140	2.000	2.000	0.125	0.250	0.125	0.589	7.790
15732	2.000	2.000	0.125	0.250	0.125	0.589	7.785
4020	2.000	2.000	0.250	0.250	0.125	1.110	8.030
8800	2.000	2.000	0.250	0.250	0.250	1.109	7.680
17320	2.000	2.000	0.250	0.031	0.031	1.124	7.920
17424	2.000	2.500	0.250	0.188	FULL	1.267	10.656
17914	2.500	1.375	0.125	0.031	0.031	0.562	7.670
9452	2.500	1.500	0.188	0.188	0.125	0.862	7.810
10356	2.500	2.500	0.188	0.250	0.125	1.093	9.790
10054	2.500	2.500	0.250	0.015	0.015	1.426	10.000
17361	3.000	1.000	0.125	0.031	0.031	0.580	7.920
12999	3.000	1.500	0.250	0.312	0.250	1.268	8.650
9550	3.000	2.000	0.187	0.187	0.125	1.080	9.770
15100	3.000	2.000	0.250	0.031	0.031	1.423	9.930
17343	3.000	3.000	0.125	0.015	0.015	0.881	11.961
2290	3.000	3.000	0.250	0.250	0.250	1.708	11.700
8801	3.000	3.000	0.250	0.312	0.250	1.718	11.650
6851	3.000	3.000	0.312	0.031	0.031	2.129	11.920
15872	3.150	3.150	0.200	0.314	0.236	1.709	6.010
10014	4.000	2.000	0.187	0.187	0.015	1.313	11.920
16841	4.500	4.500	0.250	0.312	0.250	2.618	17.670
15905	5.512	2.204	0.236	0.236	0.236	2.516	14.950
7993	6.693	2.441	0.500	0.312	0.125	5.891	17.950



HYDRO

Channel

Architectural Channel

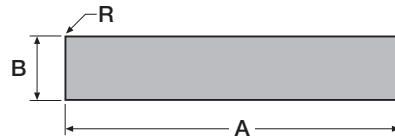
North Liberty, IN

Die	A (in.)	B (in.)	C/D (in.)	R1 (in.)	R2 (in.)	R3 (in.)	Weight/ft. (lb.)	Perimeter (in.)
19537	0.750	0.750	0.125	0.015	0.015	0.015	0.298	4.198
4107	1.250	0.310	0.060	0.015	0.015	0.015	0.145	3.600
14123	1.250	1.250	0.125	0.015	0.015	0.015	0.525	7.250
12238	1.372	1.375	0.062	0.015	0.015	0.015	0.299	8.120
15570	1.492	1.500	0.056	FULL	0.015	0.025	0.290	8.790
1106	1.500	0.750	0.062	0.015	0.015	0.015	0.213	5.875
12239	1.500	1.500	0.062	0.015	0.015	0.015	0.326	8.870
15251	2.000	2.000	0.122	0.015	0.015	0.015	0.845	11.700
18030	2.886	10.000	0.526	0.140	0.340	0.020	8.819	29.459
10371	3.000	1.250	0.125	0.015	0.015	0.015	0.786	10.640
15728	3.000	1.500	.130/.200	0.015	0.250	0.015	1.157	11.461
15729	4.000	2.000	.150/.230	0.015	0.250	0.015	1.774	15.480
15403	4.000	2.000	0.250	0.031	0.125	0.031	2.256	15.310
15733	4.000	2.250	.190/.290	0.015	0.250	0.015	2.378	16.410
11748	4.000	2.875	.500/.250	0.015	0.125	0.250	3.800	18.180
16667	6.220	3.250	.210/.360	0.016	0.125	0.375	4.129	24.560



HYDRO

Flat Bar



Rectangular bar, rounded corners

North Liberty, IN

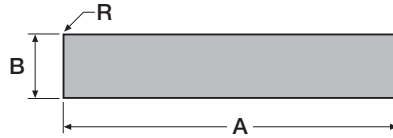
Die	A (in.)	B (in.)	R (in.)	Weight/ft. (lb.)	Perimeter (in.)
7789	0.125	1.000	0.030	0.149	2.200
1300	0.125	1.250	0.015	0.187	2.750
17338	0.750	0.250	0.015	0.225	1.974
14641	0.875	0.188	0.015	0.197	2.100
5378	1.000	0.187	0.093	0.216	2.210
14413	1.000	0.188	0.015	0.224	2.350
17422	1.000	0.250	0.031	0.299	2.447
10010	1.000	0.380	0.015	0.456	2.760
17328	1.125	0.250	0.015	0.337	2.724
1016	1.250	0.187	0.015	0.281	2.900
6154	1.474	1.474	0.187	2.572	5.600
1576	1.500	0.125	0.015	0.224	3.250
17412	1.500	0.250	0.030	0.449	3.449
10308	1.500	0.250	0.031	0.449	3.450
17438	1.500	0.250	0.250	0.434	3.285
13996	1.500	0.750	0.015	1.350	4.470
3558	1.500	0.750	0.062	1.346	4.393
10009	1.770	0.250	0.250	0.494	3.830
6584	2.000	0.080	0.015	0.192	4.160
6563	2.000	0.125	0.015	0.300	4.250
6408	2.000	0.187	0.015	0.449	4.370
6676	2.000	0.375	0.015	0.900	4.750
9362	2.000	0.625	FULL	1.399	4.710
1301	2.500	0.187	0.015	0.561	5.370
5265	2.500	0.250	FULL	0.734	5.500
12775	3.000	0.090	0.015	0.324	6.180
17337	3.000	0.125	0.015	0.450	6.224
10591	3.000	0.250	0.015	0.900	6.500

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Flat Bar

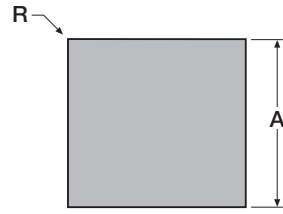


HYDRO

Rectangular bar, rounded corners

North Liberty, IN

Die	A (in.)	B (in.)	R (in.)	Weight/ft. (lb.)	Perimeter (in.)
6857	3.000	0.312	0.031	1.122	6.571
13994	3.000	0.750	0.015	2.700	7.470
15263	3.060	1.510	0.030	5.544	9.090
10056	4.000	0.450	0.031	2.159	8.850
13995	4.000	0.750	0.015	3.600	9.470
7457	4.000	2.000	0.125	9.584	11.785
13150	5.000	0.250	0.031	1.499	10.450
10310	6.000	0.250	0.062	1.796	12.390
4641	6.000	0.375	0.031	2.700	12.750
15909	6.300	0.354	0.015	2.674	13.330
10072	6.500	0.187	0.015	1.459	13.370



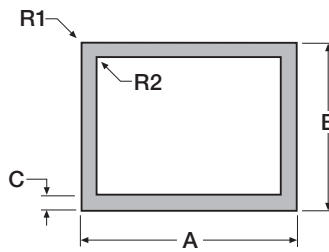
HYDRO

Square Bar

Sharp corners

North Liberty, IN

Die	A (in.)	R (in.)	Weight/ft. (lb.)	Perimeter (in.)
6154	1.474	0.187	2.578	5.600



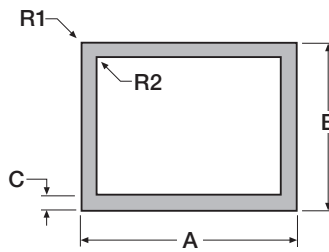
Rectangular Tube

Rectangular tube, round corners

North Liberty, IN

Die	A (in.)	B (in.)	C (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
14767	0.781	0.500	0.062	0.031	0.015	0.172	4.550
17761	1.000	0.750	0.060	0.020	0.020	0.235	6.451
17682	1.000	2.000	0.125	0.125	0.063	0.797	10.677
13327	1.005	0.905	0.050	0.070	0.040	0.226	7.450
9694	1.437	0.937	0.043	0.125	0.082	0.227	8.800
15039	1.438	0.938	0.040	0.125	0.085	0.211	8.820
5316	1.500	0.500	0.062	0.031	0.031	0.280	7.500
14768	1.500	0.500	0.125	0.031	0.031	0.526	6.890
15949	1.500	0.750	0.040	0.125	0.015	0.199	8.320
12842	1.500	0.750	0.062	0.015	0.015	0.316	8.500
12193	1.500	1.000	0.040	0.157	0.117	0.221	9.210
14262	1.500	1.000	0.090	0.032	0.032	0.502	9.170
17502	1.500	1.000	0.120	0.031	0.031	0.651	8.934
17526	1.500	1.000	0.180	0.063	0.020	0.921	8.418
15429	1.500	2.703	0.125	0.062	0.062	1.186	15.710
18031	1.875	1.250	0.188	0.375	0.188	1.129	10.034
3631	2.000	0.750	0.093	0.015	0.015	0.572	10.260
13103	2.000	1.000	0.040	0.125	0.085	0.264	11.350
10042	2.000	1.000	0.050	0.125	0.082	0.338	11.260
19338	2.000	1.000	0.090	0.125	0.035	0.595	11.005
17192	2.000	1.000	0.118	0.030	0.030	0.782	10.953
17503	2.000	1.000	0.120	0.031	0.031	0.795	10.930
14951	2.000	1.000	0.125	0.125	0.015	0.809	10.760
14124	2.188	1.250	.125/.219	0.125	0.015	1.166	12.140
15685	2.500	1.000	0.050	0.157	0.107	0.395	13.150
17499	2.500	1.000	0.055	0.077	0.031	0.447	13.454
19698	2.500	1.250	0.125	0.062	0.062	1.050	13.786
17501	2.500	1.500	0.057	0.031	0.015	0.532	15.465

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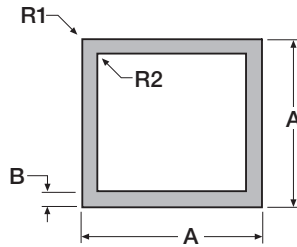
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Rectangular Tube

Rectangular tube, round corners

North Liberty, IN

Die	A (in.)	B (in.)	C (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
315	2.500	1.500	0.125	0.015	0.015	1.126	15.000
17500	3.000	1.500	0.060	0.062	0.031	0.628	17.360
15055	3.000	1.500	0.120	0.030	0.200	1.002	16.810
16872	3.000	1.500	0.125	0.125	0.125	1.237	16.570
12387	3.000	1.750	0.125	0.030	0.015	1.349	17.950
14228	3.000	1.750	0.188	0.015	0.015	1.972	17.440
10823	3.000	2.000	0.125	0.015	0.015	1.426	19.000
9320	3.000	2.000	0.187	0.015	0.015	2.076	18.500
19525	3.000	2.000	0.250	0.020	0.020	2.700	17.932
14274	3.250	1.750	0.120	0.020	0.020	1.370	18.970
14225	3.500	3.010	.220/.281	0.187	0.062	3.550	23.610
11058	4.000	2.000	0.125	0.015	0.015	1.725	23.000
14943	4.000	2.000	0.125	0.375	0.250	1.644	21.930
14227	4.500	2.500	0.188	0.062	0.062	2.987	26.280
18077	5.000	1.000	0.125	0.063	0.063	1.726	11.892
15122	5.000	2.000	0.093	0.016	0.016	1.519	27.200
934	5.000	2.000	0.125	0.015	0.015	2.024	27.000
10238	6.000	2.000	0.125	0.015	0.015	2.326	31.000
18698	6.044	2.024	0.250	0.031	0.031	4.541	30.166
19697	8.000	2.000	0.250	0.020	0.020	5.700	19.946
18697	8.054	4.034	0.250	0.031	0.031	6.953	46.246



HYDRO

Square Tube

North Liberty, IN

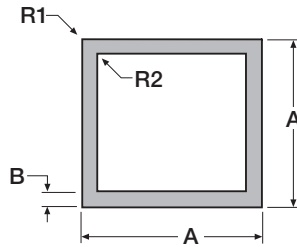
Die	A (in.)	B (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
2530	0.750	0.062	0.093	0.031	0.196	5.290
11233	0.750	0.090	0.093	0.093	0.277	5.070
12182	0.875	0.040	0.157	0.157	0.149	6.210
15243	0.937	0.040	0.157	0.117	0.161	6.710
15370	0.938	0.054	0.156	0.102	0.216	6.630
12244	1.000	0.045	0.078	0.078	0.200	7.450
3289	1.000	0.050	0.125	0.125	0.228	7.600
14226	1.000	0.058	0.047	0.047	0.259	7.430
15533	1.000	0.060	0.125	0.065	0.259	7.190
10122	1.000	0.062	0.032	0.032	0.279	7.410
4326	1.000	0.065	0.125	0.125	0.290	7.480
15684	1.000	0.086	0.125	0.040	0.361	7.030
19339	1.000	0.090	0.125	0.020	0.379	7.005
19336	1.000	0.120	0.125	0.062	0.492	6.791
11458	1.000	0.125	0.015	0.015	0.525	7.000
15369	1.125	0.058	0.187	0.187	0.277	7.990
15331	1.125	0.065	0.156	0.091	0.314	8.060
11291	1.250	0.056	0.125	0.125	0.310	9.220
12870	1.250	0.060	0.090	0.035	0.359	10.180
2749	1.250	0.090	0.125	0.035	0.487	9.250
18116	1.250	0.125	0.125	0.063	0.814	10.693
9554	1.353	0.125	0.125	0.031	0.721	9.600
15501	1.500	0.040	0.030	0.010	0.280	11.610
12181	1.500	0.045	0.030	0.030	0.314	11.540
12281	1.500	0.055	0.030	0.030	0.382	11.460
2420	1.500	0.125	0.015	0.015	0.852	10.931
16871	1.500	0.125	0.125	0.125	0.801	10.570
10259	1.750	0.125	0.015	0.015	0.975	13.000

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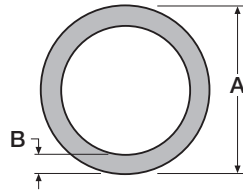
Square Tube



HYDRO

North Liberty, IN

Die	A (in.)	B (in.)	R1 (in.)	R2 (in.)	Weight/ft. (lb.)	Perimeter (in.)
5010	1.750	0.125	0.125	0.015	0.960	12.790
17332	2.000	0.115	0.188	0.073	1.010	14.632
17527	2.000	0.122	0.125	0.125	1.100	14.595
19337	2.000	0.125	0.015	0.015	1.109	14.760
8509	2.000	0.125	0.187	0.031	1.109	14.760
14950	2.000	0.125	0.375	0.250	1.044	13.930
18061	2.000	0.187	0.030	0.375	1.763	13.808
15067	2.000	0.187	0.375	0.187	1.520	13.540
5649	2.500	0.125	0.015	0.015	1.426	19.000
16873	3.000	0.125	0.125	0.125	1.674	22.570
9323	3.000	0.187	0.015	0.015	2.525	22.500
16005	3.000	0.188	0.125	0.062	2.519	22.180
10250	4.000	0.125	0.015	0.015	2.326	31.000
11465	5.000	0.250	0.015	0.015	5.700	38.000



HYDRO

Round Tube

North Liberty, IN

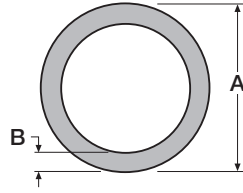
Die	A (in.)	B (in.)	Weight/ft. (lb.)	Perimeter (in.)
11203	0.500	0.083	0.130	2.620
17426	0.750	0.039	0.105	4.464
19531	0.750	0.049	0.130	4.404
6322	0.750	0.125	0.294	3.930
19521	0.875	0.047	0.146	5.203
6808	0.875	0.050	0.156	5.184
14299	0.940	0.065	0.215	5.500
7445	1.000	0.047	0.169	5.900
15101	1.000	0.050	0.179	5.970
7924	1.000	0.062	0.220	5.900
6340	1.000	0.125	0.413	5.500
11071	1.050	0.113	0.399	5.890
15423	1.250	0.065	0.290	7.446
10071	1.315	0.133	0.593	7.430
17427	1.375	0.048	0.240	8.338
15757	1.500	0.083	0.442	8.903
19487	1.500	0.135	0.695	8.576
5509	1.500	0.187	0.928	8.250
19699	1.568	0.083	0.464	4.920
17901	1.625	0.125	0.704	9.428
8678	1.625	0.125	0.707	9.420
9536	1.660	0.140	0.803	9.550
10696	1.890	0.134	0.887	11.030
12700	1.900	0.200	1.284	10.681
15223	1.901	0.143	0.948	11.050
17428	2.000	0.065	0.474	12.158
12362	2.000	0.088	0.635	12.010
12341	2.000	0.125	0.884	11.780
1426	2.375	0.154	1.289	13.954

(continued on next page)



continued

Round Tube



HYDRO

North Liberty, IN

Die	A (in.)	B (in.)	Weight/ft. (lb.)	Perimeter (in.)
12939	3.500	0.187	2.335	20.820
19568	4.000	0.125	1.825	24.347
19567	4.000	0.226	3.216	23.712
19511	4.500	0.237	3.809	26.785



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