

USSR STATE STANDARD

SEAMLESS COLD-FORMED STEEL PIPES

GOST
8734-75*.

Range of sizes

In place of
GOST 8734-58

Period of validity set by Decree No. 2604, dated 13.10.75 of the State Committee for Standards under the USSR Council of Ministers

from 01.01 1977.
until 01.01 1982.

Failure to comply with this Standard will result in legal proceedings

1. External diameter, wall thickness and estimated weight of pipes shall comply with the values stipulated in table 1.

2. Pipes shall be subdivided into the following groups depending on the ratio of external the diameter (D_e) to the wall thickness (s):

extra thin-walled with D_e/s over 40 and pipe 20 mm or less in diameter with 0.5 mm thick wall and thicker;

thin-walled with D_e/s from 12.5 to 40 and pipe 20 mm or less in diameter with a wall of 1.5 mm thick;

thick-walled with D_e/s from 6 to 12.5;

extra thick-walled with D_e/s less than 6.

3. Pipes with the following lengths shall be produced:

with non-standard lengths from 1.5 to 11.5 m;

with standard lengths from 4.5 to 9 m with +10 mm maximum deviations of length;

lengths, multiples of standard lengths from 1.5 to 9 m with the allowance for every cut of 5 mm (if another allowance has not been stipulated in the order) and with the maximum deviations for the total length not exceeding the values coordinated for the pipes of standard lengths. No more than 5% of the pipes of non-standard lengths no shorter than 2.5 m shall be allowed in every batch of pipes of standard lengths.

4. Maximum deviations of external diameter and wall thickness of the pipes shall not exceed the values stipulated in table 2.

Official Edition

Reprinting is prohibited

* Revised Edition (February 1979) with Amendment No. 1,
Published in September, 1978.

© Standards Publishing House, 1979

p. 2 GOST 8734-75

External diameter, mm	Estimated weight of 1 m of pipe, kg						
	0.3	0.4	0.5	0.6	0.8	1.0	1.2
	Extra thin-walled			Thin-walled			
5	0.0348	0.0454	0.0555	0.0651	0.0829	0.0986	0.112
6	0.0422	0.0552	0.0678	0.0799	0.103	0.123	0.142
7	0.0496	0.0651	0.0801	0.0947	0.122	0.148	0.172
8	0.0570	0.0750	0.0925	0.110	0.142	0.173	0.201
9	0.0644	0.0847	0.105	0.124	0.162	0.197	0.231
10	0.0718	0.0947	0.117	0.139	0.182	0.222	0.260
11	0.0792	0.105	0.129	0.154	0.201	0.247	0.290
12	0.0866	0.114	0.142	0.169	0.221	0.271	0.320
13	0.0940	0.124	0.154	0.184	0.241	0.296	0.349
14	0.101	0.134	0.166	0.198	0.260	0.321	0.379
15	0.109	0.144	0.179	0.213	0.280	0.345	0.408
16	0.116	0.154	0.191	0.228	0.300	0.370	0.438
17	0.124	0.164	0.203	0.243	0.320	0.395	0.468
18	0.131	0.174	0.216	0.258	0.339	0.419	0.497
19	0.138	0.183	0.228	0.272	0.359	0.444	0.527
20	0.146	0.193	0.240	0.287	0.375	0.469	0.556
21	—	0.203	0.253	0.302	0.399	0.493	0.586
22	—	0.213	0.265	0.317	0.418	0.518	0.616
23	—	0.223	0.277	0.331	0.438	0.543	0.645
24	—	0.233	0.290	0.346	0.458	0.567	0.675
25	—	0.243	0.302	0.361	0.477	0.592	0.704
26	—	0.253	0.314	0.376	0.497	0.617	0.734
27	—	0.262	0.327	0.391	0.517	0.641	0.764
28	—	0.272	0.339	0.405	0.537	0.666	0.793
30	—	0.292	0.364	0.435	0.576	0.715	0.852
32	—	0.312	0.388	0.465	0.616	0.764	0.911
34	—	0.331	0.413	0.494	0.655	0.814	0.971
35	—	0.341	0.425	0.509	0.675	0.838	1.000
36	—	0.351	0.438	0.524	0.694	0.863	1.030
38	—	0.371	0.462	0.553	0.734	0.912	1.089
40	—	0.391	0.487	0.583	0.773	0.962	1.148

Table 1

with wall thickness of, mm

1.4	1.5	1.6	1.8	2.0	2.2	2.5
Thin-walled		Thick-walled		Extra-thick-walled		
0.124	0.129	—	—	—	—	—
0.159	0.166	0.174	0.186	0.197	—	—
0.193	0.208	0.213	0.231	0.247	0.260	0.277
0.228	0.240	0.253	0.275	0.296	0.315	0.339
0.262	0.277	0.292	0.320	0.345	0.369	0.401
0.297	0.314	0.332	0.364	0.395	0.426	0.462
0.331	0.351	0.371	0.408	0.444	0.477	0.524
0.366	0.388	0.410	0.453	0.493	0.532	0.586
0.401	0.425	0.450	0.497	0.543	0.586	0.647
0.435	0.462	0.489	0.542	0.592	0.640	0.709
0.470	0.499	0.529	0.586	0.641	0.694	0.771
0.504	0.536	0.568	0.630	0.691	0.749	0.832
0.539	0.573	0.608	0.675	0.740	0.803	0.894
0.573	0.610	0.647	0.719	0.789	0.857	0.956
0.608	0.647	0.687	0.764	0.838	0.911	1.017
0.642	0.684	0.726	0.808	0.888	0.966	1.079
0.677	0.721	0.765	0.852	0.937	1.020	1.141
0.711	0.758	0.805	0.897	0.986	1.074	1.202
0.746	0.795	0.844	0.941	1.036	1.129	1.264
0.780	0.832	0.884	0.985	1.085	1.183	1.326
0.815	0.869	0.923	1.030	1.134	1.237	1.387
0.849	0.906	0.963	1.074	1.184	1.291	1.449
0.884	0.943	1.002	1.119	1.233	1.346	1.511
0.918	0.980	1.042	1.163	1.282	1.400	1.572
0.987	1.054	1.121	1.252	1.381	1.508	1.695
1.056	1.128	1.200	1.341	1.480	1.617	1.819
1.126	1.202	1.278	1.429	1.578	1.725	1.942
1.160	1.239	1.318	1.474	1.628	1.780	2.004
1.195	1.276	1.357	1.518	1.677	1.834	2.065
1.264	1.350	1.436	1.607	1.776	1.942	2.189
1.333	1.424	1.515	1.696	1.874	2.051	2.312

p. 4 GOST 8734 –75

External diameter, mm	Estimated weight of 1 m of pipe, kg.					
	2.8	3.0	3.2	3.5	4.0	
Extra thick-walled						
5	—	—	—	—	—	
6	—	—	—	—	—	
7	—	—	—	—	—	
8	—	—	—	—	—	
9	—	—	—	—	—	
10	0.497	0.518	0.537	0.561	—	
11	0.566	0.592	0.616	0.647	—	
12	0.635	0.666	0.694	0.734	—	
13	0.704	0.740	0.773	0.820	0.888	
14	0.773	0.814	0.852	0.906	0.986	
15	0.842	0.888	0.931	0.993	1.085	
16	0.911	0.962	1.010	1.079	1.184	
17	0.981	1.036	1.089	1.165	1.282	
18	1.050	1.110	1.168	1.252	1.381	
19	1.119	1.184	1.247	1.338	1.480	
20	1.188	1.258	1.326	1.424	1.578	
21	1.257	1.332	1.405	1.511	1.677	
22	1.326	1.406	1.484	1.597	1.776	
23	1.395	1.480	1.563	1.683	1.874	
24	1.464	1.554	1.641	1.769	1.973	
25	1.533	1.628	1.720	1.856	2.072	
26	1.602	1.702	1.800	1.942	2.170	
27	1.671	1.776	1.878	2.028	2.269	
28	1.740	1.850	1.957	2.115	2.368	
30	1.878	1.998	2.115	2.287	2.565	
32	2.016	2.146	2.273	2.460	2.762	
34	2.154	2.294	2.430	2.633	2.959	
35	2.223	2.367	2.510	2.719	3.058	
36	2.293	2.441	2.588	2.805	3.157	
38	2.431	2.589	2.746	2.978	3.354	
40	2.569	2.737	2.904	3.150	3.551	

Table 1 (cont.)

with wall thickness of, mm					
4.5	5.0	5.5	6.0	6.5	7.0
thick-walled					
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
1.276	1.356	—	—	—	—
1.387	1.480	—	—	—	—
1.498	1.603	—	—	—	—
1.609	1.726	—	—	—	—
1.720	1.850	1.967	2.072	—	—
1.831	1.973	2.102	2.220	—	—
1.942	2.096	2.238	2.368	—	—
2.053	2.220	2.374	2.515	—	—
2.164	2.343	2.509	2.663	2.805	—
2.275	2.466	2.645	2.811	2.965	3.107
2.386	2.589	2.781	2.959	3.125	3.280
2.497	2.713	2.916	3.107	3.286	3.453
2.608	2.836	3.052	3.255	3.446	3.625
2.830	3.083	3.323	3.551	3.767	3.971
3.052	3.329	3.594	3.847	4.087	4.316
3.274	3.576	3.866	4.143	4.408	4.661
3.385	3.699	4.001	4.291	4.568	4.834
3.496	3.822	4.137	4.439	4.728	5.006
3.718	4.069	4.408	4.735	5.049	5.352
3.940	4.316	4.680	5.031	5.369	5.697

p. 6 GOST 8734-75

External diameter, mm	Estimated weight of 1 m of pipe, kg,					
	7.5	8.0	8.5	8.0	9.5	10
Extra thick-walled						
5	—	—	—	—	—	—
6	—	—	—	—	—	—
7	—	—	—	—	—	—
8	—	—	—	—	—	—
9	—	—	—	—	—	—
10	—	—	—	—	—	—
11	—	—	—	—	—	—
12	—	—	—	—	—	—
13	—	—	—	—	—	—
14	—	—	—	—	—	—
15	—	—	—	—	—	—
16	—	—	—	—	—	—
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—
20	—	—	—	—	—	—
21	—	—	—	—	—	—
22	—	—	—	—	—	—
23	—	—	—	—	—	—
24	—	—	—	—	—	—
25	—	—	—	—	—	—
26	—	—	—	—	—	—
27	—	—	—	—	—	—
28	—	—	—	—	—	—
30	4.162	4.340	—	—	—	—
32	4.531	4.735	—	—	—	—
34	4.901	5.129	—	—	—	—
35	5.086	5.327	—	—	—	—
36	5.271	5.524	—	—	—	—
38	5.641	5.919	6.184	6.437	—	—
40	6.011	6.313	6.603	6.881	—	—

Table 1 (cont.)

with wall thickness of, mm

[illegible]

p. 8 GOST 8734– 75

External diameter, mm	Estimated weight f 1 m of pipe, kg						
	0.3	0.4	0.5	0.6	0.8	1.0	1.2
	Extra thin-walled						Thin-walled
42	—	—	—	—	—	1.011	1.207
45	—	—	—	—	—	1.085	1.296
48	—	—	—	—	—	1.159	1.385
50	—	—	—	—	—	1.208	1.444
51	—	—	—	—	—	1.233	1.474
53	—	—	—	—	—	1.282	1.533
54	—	—	—	—	—	1.307	1.563
56	—	—	—	—	—	1.356	1.622
57	—	—	—	—	—	1.381	1.651
60	—	—	—	—	—	1.455	1.740
63	—	—	—	—	—	1.529	1.829
65	—	—	—	—	—	1.578	1.888
68	—	—	—	—	—	1.652	1.977
70	—	—	—	—	—	1.702	2.036
73	—	—	—	—	—	1.776	2.125
75	—	—	—	—	—	1.825	2.184
76	—	—	—	—	—	1.850	2.214
80	—	—	—	—	—	—	2.331
83	—	—	—	—	—	—	2.420
85	—	—	—	—	—	—	2.480
89	—	—	—	—	—	—	2.598
90	—	—	—	—	—	—	2.628
95	—	—	—	—	—	—	2.776
100	—	—	—	—	—	—	—
102	—	—	—	—	—	—	—
108	—	—	—	—	—	—	—
110	—	—	—	—	—	—	—
120	—	—	—	—	—	—	—
130	—	—	—	—	—	—	—
140	—	—	—	—	—	—	—
150	—	—	—	—	—	—	—
160	—	—	—	—	—	—	—
170	—	—	—	—	—	—	—

Table 1 (cont.)

with wall thickness of, mm

1.4	1.5	1.6	1.8	2.0	2.2	2.5
Thin-walled						
1.402	1.498	1.594	1.785	1.973	2.159	2.435
1.505	1.609	1.712	1.918	2.121	2.322	2.620
1.609	1.720	1.831	2.051	2.269	2.435	2.805
1.678	1.794	1.910	2.140	2.368	2.594	2.929
1.712	1.831	1.949	2.184	2.417	2.648	2.990
1.782	1.905	2.028	2.273	2.515	2.756	3.114
1.816	1.942	2.068	2.317	2.565	2.810	3.175
1.885	2.016	2.147	2.406	2.663	2.919	3.298
1.920	2.053	2.186	2.450	2.713	2.973	3.360
2.023	2.164	2.304	2.584	2.861	3.136	3.545
2.127	2.275	2.423	2.717	3.009	3.499	3.730
2.196	2.349	2.502	2.806	3.107	3.407	3.853
2.299	2.460	2.620	2.939	3.255	3.570	4.038
2.368	2.534	2.699	3.027	3.354	3.673	4.162
2.472	2.645	2.817	3.161	3.502	3.841	4.347
2.541	2.719	2.896	3.249	3.601	3.930	4.470
2.576	2.756	2.936	3.294	3.650	4.004	4.532
2.714	2.904	3.094	2.471	3.847	4.221	4.778
2.817	3.015	3.212	3.605	3.995	4.383	4.963
2.886	3.089	3.291	3.693	4.094	4.492	5.086
3.024	3.237	3.449	3.871	4.291	4.709	5.333
3.059	3.274	3.488	3.915	4.340	4.763	5.395
3.232	3.459	3.685	4.137	4.587	5.034	5.703
—	3.644	3.883	4.359	4.834	5.306	6.011
—	3.718	3.962	4.448	4.933	5.414	6.135
—	3.940	4.198	4.714	5.228	5.740	6.504
—	4.014	4.277	4.803	5.327	6.849	6.628
—	4.384	4.672	5.247	5.820	6.391	7.244
—	4.754	5.066	5.691	6.313	6.934	7.861
—	—	5.461	6.135	6.807	7.476	8.477
—	—	—	6.579	7.300	8.019	9.094
—	—	—	—	7.793	8.561	9.710
—	—	—	—	8.286	9.104	10.327

p. 10 GOST 8734-75

External diameter, mm	Estimated weight of 1 m of pipe, kg				
	2.8	3.0	3.2	3.5	4 0
	Thin-walled			Thick-walled	
42	2.707	2.885	3.062	3.323	3.749
45	2.914	3.107	3.299	3.582	4.044
48	3.121	3.329	3.535	3.841	4.340
50	3.259	3.477	3.693	4.014	4.538
51	3.328	3.551	3.772	4.100	4.636
53	3.466	3.699	3.930	4.273	4.834
54	3.535	3.773	4.009	4.359	4.932
56	3.674	3.921	4.167	4.532	5.130
57	3.743	3.995	4.246	4.618	5.228
60	3.950	4.217	4.482	4.877	5.524
63	4.157	4.439	4.719	5.136	5.820
65	4.295	4.587	4.877	5.308	6.017
68	4.502	4.809	5.113	5.567	6.313
70	4.640	4.957	5.271	5.740	6.511
73	4.847	5.179	5.508	5.999	6.807
75	4.986	5.327	5.666	6.172	7.004
76	5.055	5.401	5.745	6.258	7.103
80	5.331	5.697	6.060	6.603	7.497
83	5.538	5.919	6.298	6.862	7.793
85	5.676	6.067	6.455	7.035	7.990
89	5.952	6.363	6.771	7.380	8.385
90	6.021	6.437	6.850	7.466	8.484
95	6.367	6.867	7.244	7.898	8.977
100	6.712	7.176	7.639	8.329	9.470
102	6.850	7.324	7.797	8.502	9.667
108	7.264	7.768	8.270	9.020	10.259
110	7.402	7.916	9.428	9.193	10.456
120	8.093	8.656	9.217	10.056	11.443
130	8.783	9.396	10.007	10.919	12.429
140	9.474	10.136	10.796	11.782	13.416
150	10.164	10.876	11.584	12.645	14.402
160	10.855	11.616	12.374	13.508	15.389
170	11.546	12.355	13.163	14.371	16.375
Extra thin-walled					

Table 1 (cont.)

with wall thickness of, mm					
4.5	5.0	5.5	6.0	6.5	7.0
Thick-walled					
4.162	4.562	4.951	5.327	5.690	6.042
4.495	4.932	5.358	5.771	6.171	6.560
4.827	5.302	5.765	6.215	6.652	7.078
5.049	5.549	6.036	6.511	6.972	7.423
5.160	5.672	6.172	6.659	7.132	7.596
5.382	5.919	6.443	6.955	7.453	7.941
5.493	6.042	6.578	7.103	7.613	8.114
5.715	6.289	6.850	7.398	7.934	8.459
5.826	6.412	6.985	7.546	8.095	8.632
6.159	6.782	7.392	7.990	8.575	9.149
6.492	7.152	7.799	8.434	9.056	9.667
6.714	7.398	8.070	8.730	9.377	10.013
7.047	7.768	8.477	9.174	9.857	10.530
7.269	8.015	8.749	9.470	10.178	10.876
7.602	8.385	9.156	9.914	10.659	11.394
7.824	8.631	9.427	10.210	10.980	11.739
7.935	8.755	9.562	10.358	11.140	11.911
8.379	9.248	10.105	10.950	11.781	12.602
8.712	9.618	10.512	11.394	12.263	13.120
8.934	9.865	10.783	11.690	12.584	13.465
9.378	10.358	11.326	12.281	13.225	14.156
9.489	10.481	11.461	12.429	13.385	14.328
10.043	11.098	12.140	13.169	14.187	15.191
10.598	11.714	12.818	13.909	14.988	16.055
10.820	11.961	13.089	14.205	15.308	16.400
11.486	12.701	13.903	15.093	16.269	17.436
11.708	12.947	14.174	15.389	16.590	17.781
12.818	14.180	15.531	16.868	18.193	19.507
13.928	15.413	16.887	18.348	19.796	21.233
15.037	16.646	18.243	19.828	21.400	22.960
16.147	17.880	19.600	21.308	23.003	24.686
17.257	19.113	20.956	22.787	24.606	26.412
18.367	20.346	22.312	24.267	26.209	28.139

p. 12 GOST 8734–75

External diameter, mm	Estimated weight of 1 m of pipe, kg					
	7.5	8.0	8.5	9.0	9.5	10
Extra thick-walled						
42	6.381	6.708	7.023	7.324	–	–
45	6.936	7.300	7.651	7.990	8.317	8.632
48	7.491	7.892	8.280	8.656	9.020	9.371
50	7.861	8.286	8.699	9.110	9.489	9.865
51	8.046	8.484	8.909	9.322	9.723	10.111
53	8.416	8.878	9.328	9.766	10.191	10.604
54	8.601	9.075	9.538	9.988	10.426	10.851
56	8.971	9.470	9.957	10.432	10.894	11.345
57	9.156	9.667	10.167	10.654	11.128	11.591
60	9.710	10.259	10.796	11.320	11.831	12.331
63	10.265	10.851	11.424	11.985	12.534	13.070
65	10.635	11.246	11.844	12.429	13.003	13.564
68	11.190	11.838	12.473	13.095	13.706	14.304
70	11.560	12.232	12.892	13.539	14.174	14.797
73	12.115	12.824	13.521	14.205	14.877	15.537
75	12.485	13.219	13.940	14.649	15.345	16.030
76	12.670	13.416	14.150	14.871	15.580	16.276
80	13.410	14.205	14.988	15.759	16.517	17.263
83	13.965	14.797	15.617	16.425	17.220	18.003
85	14.334	15.191	16.036	16.868	17.688	18.496
89	15.074	15.981	16.875	17.756	18.626	19.483
90	15.259	16.178	17.084	17.978	18.860	19.729
Thin-walled	95	16.184	17.164	18.132	19.088	20.031
	100	17.109	18.151	19.180	20.198	21.203
	102	17.479	18.545	19.600	20.642	21.671
	108	18.589	19.729	20.857	21.973	23.077
	110	18.959	20.124	21.277	22.417	23.546
	120	20.808	22.097	23.373	24.637	25.888
	130	22.658	24.070	25.469	26.856	28.231
	140	24.507	26.043	27.565	29.076	30.574
	150	26.357	28.016	29.662	31.295	32.917
	160	28.207	29.988	31.758	33.515	35.260
170	30.056	31.961	33.854	35.733	37.603	39.458

Table 1 (cont.)

with wall thickness of, mm

11	12	14	16	18	20	22	24
Extra thick-walled							
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
10.580	11.246	—	—	—	—	—	—
10.851	11.542	—	—	—	—	—	—
11.394	12.133	—	—	—	—	—	—
11.665	12.429	—	—	—	—	—	—
12.207	13.021	—	—	—	—	—	—
12.479	13.317	—	—	—	—	—	—
13.293	14.205	—	—	—	—	—	—
14.106	15.093	—	—	—	—	—	—
14.649	15.685	—	—	—	—	—	—
15.463	16.573	—	—	—	—	—	—
16.005	17.164	—	—	—	—	—	—
16.819	18.052	—	—	—	—	—	—
17.362	18.644	—	—	—	—	—	—
17.633	18.940	—	—	—	—	—	—
18.718	20.124	—	—	—	—	—	—
19.532	21.012	—	—	—	—	—	—
20.074	21.603	—	—	—	—	—	—
21.160	22.787	—	—	—	—	—	—
21.431	23.083	—	—	—	—	—	—
22.787	24.563	—	—	—	—	—	—
24.144	26.043	29.692	33.145	36.400	—	—	—
24.686	26.634	30.383	33.934	37.288	—	—	—
26.314	28.410	32.455	36.302	39.952	—	—	—
26.856	29.002	33.145	37.091	40.839	44.39	47.745	—
29.569	31.961	36.598	41.037	45.278	49.323	53.170	—
32.282	34.921	40.050	44.983	49.718	54.255	58.596	—
34.995	37.880	43.503	48.928	54.157	59.188	64.021	—
37.707	40.839	46.955	52.874	58.596	64.120	69.447	—
40.420	43.799	50.408	56.820	63.035	69.052	74.872	—
43.133	46.758	53.861	60.766	67.174	73.984	80.298	86.414

p. 14 GOST 8734-75

External diameter, mm	Estimated weight of 1 m of pipe, kg						
	0.3	0.4	0.5	0.6	0.8	1.0	1.2
Extra thin-walled							
180	–	–	–	–	–	–	–
190	–	–	–	–	–	–	–
200	–	–	–	–	–	–	–
210	–	–	–	–	–	–	–
220	–	–	–	–	–	–	–
240	–	–	–	–	–	–	–
250	–	–	–	–	–	–	–

External diameter, mm	Estimated weight of 1 m of pipe, kg				
	2.8	9.0	3.2	3.0	4.0
Extra thin-walled					
180	12.236	13.095	13.952	15.235	17.362
190	12.927	13.835	14.742	16.098	18.348
200	–	14.575	15.531	16.961	19.335
210	–	15.315	16.320	17.824	20.321
220	–	16.055	17.109	18.687	21.308
240	–	–	–	–	–
250	–	–	–	–	–

External diameter, mm	Estimated weight of 1 m of pipe, kg					
	7.5	8.0	8.6	9.0	9.5	10
Thin-walled						
180	31.906	33.934	35.950	37.954	39.945	41.925
190	33.755	35.907	38.046	40.174	42.283	44.391
200	35.605	37.880	40.143	42.393	44.631	46.857
210	37.455	39.853	42.239	44.613	46.974	49.323
220	39.304	41.826	44.335	46.832	49.317	51.789
240	43.003	45.772	48.528	51.271	54.002	56.721
250	44.853	47.744	50.624	53.491	56.345	59.188

Notes:

1. Estimated weight of a 1 m length of pipe shall be calculated in kilograms using the formula:
 $M=0.02466148 \times s (De-s)$,

where M – weight, kg, De is the external diameter, mm; s is the wall thickness, mm,

Steel density of 7.85 g/cm³ shall be accepted as a reference value during determination of the estimated weight of 1 m of the pipe.

2. Production of pipes 4 mm in diameter with walls from 2.0 to 20 mm thick, and with the following dimensions: 29 × 5.5; 32 × 8.5; 33 × 1.5; 33 × 8.0; 39 × 3.0; 41 × 5.5; 43 × 8.0; 44 × 3.0; 46 × 6.0; 46 × 6.0; 55 × 9.0; 58 × 4.0, and 84 × 8.0 mm shall be allowed at the customer's request.

3. Pipes over 100 mm in diameter with the ratio De/s over 50 and pipes with lower De/s ratio which are delivered, shall be in accordance with specifications agreed with the customer.

(Amended Wording – “Standards Detail Index” No. 9 1978).

Table 1 (cont.)

with wall thickness of, mm						
1.4	1.5	1.6	1.8	2.0	2.2	2.5
Thin-walled						
	—	—	—	8.779	9.647	10.944
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

(cont.)

with wall thickness, mm					
4.5	5.0	5.5	6.0	6.5	7.0
Thin-walled					
19.476	21.579	23.669	25.747	27.812	29.865
20.586	22.812	25.025	27.226	29.415	31.591
21.696	24.045	26.382	28.706	31.018	33.318
22.806	25.278	27.738	30.186	32.621	35.044
23.915	26.511	29.094	31.665	34.224	36.770
26.1336	28.977	31.807	34.625	37.430	40.223
27.244	30.210	33.164	36.104	39.033	41.949

(cont.)

with wall thickness of, mm							
11	12	14	16	18	20	22	24
Thin-walled				Thick-walled			
45.846	49.718	57.313	64.712	74.913	78.917	85.723	92.333
48.558	52.677	60.766	68.658	76.352	83.849	91.149	98.251
51.271	55.636	64.218	72.603	80.791	88.781	96.574	104.170
53.984	58.596	67.671	76.549	85.230	93.714	102.000	110.089
56.697	61.555	71.124	80.495	89.669	98.646	1107.425	116.008
62.122	67.474	78.029	88.387	98.547	108.511	118.276	127.845
64.835	70.433	81.481	92.333	102.986	113.443	123.702	133.764

p. 16 GOST 8734–755

By the agreement between the customer and the manufacturer pipes may be produced with combined maximum deviations, for example, of increased accuracy in accordance with GOST 9567–75 for the external diameter, and of standard accuracy for the wall thickness, or with unilateral allowance for the dimensions. The value of the estimated weight shall be calculated as the mean arithmetic average of the sum of positive and negative maximum deviations stipulated in table 2.

Table 2

Pipe dimensions	Maximum deviations
External diameter, mm:	
from 5 to 10 inclusive	± 0.15 mm
over 10 to 30 inclusive	± 0.30 mm
over 30 to 50 inclusive	± 0.40 mm
over 50	$\pm 0.8\%$
Wall thickness, mm:	
up to 1	± 0.12 mm
over 1 to 5 inclusive	$\pm 10\%$
over 1 to 2.5 with the diameter of	
110 mm or more	$\pm 12.5\%$
over 5	$\pm 8\%$

6. External diameter and wall thickness shall be taken into account during production of pipes. External diameter and wall thickness, as well as external and internal diameters and variation in wall thickness shall be taken into account during production of pipes at the customer's request.

Maximum deviations for the internal diameter of the pipes shall not exceed respective maximum deviations of the external diameter.

Maximum deviations for the pipes with external diameters of 10 mm or less shall be established by agreement between the customer and the manufacturer.

7. Ovality and variation in wall thickness of pipes shall not take the dimensions of pipes over the maximum deviations for the external diameter and wall thickness respectively.

8. Curvature of any part of the pipe on 1 m of its length shall not exceed the following values:

- 3 mm – for pipes from 5 to 8 mm in diameter;
- 2 mm – for pipes from 8 to 10 mm in diameter;
- 1.5 mm – for pipes over 10 mm in diameter.

At the customer's request, curvature of pipes 20 to 90 mm in diameter shall not exceed 1 micron on 1 m of its length.

Note. Standards for curvature of the pipes with ratio of external diameter D_e to the wall thickness s , equal to 50 or more, produced without heat treatment, shall be established by agreement between the customer and the manufacturer.

9. The material of pipes and their technical requirements shall be in accordance with GOST 8733–74.

Examples of conventional designations:

A pipe with an external diameter of 70 mm, 2.0 mm thick wall, length multiple of 1 250 mm, from steel of grade 20, group B chemical composition, in accordance with GOST 8733–74:

$$Tpy6a \frac{70 \times 2120 \text{ } \kappa p \text{ } \text{ГОСТ } 8734 - 75}{B \text{ } 20 \text{ } \text{ГОСТ } 8733 - 74}$$

As above, 6 000 mm long (standard length), from steel of grade 20, group B mechanical properties and chemical composition, in accordance with group GOST 8733–74:

$$Tpy6a \frac{70 \times 6000 \text{ } \text{ГОСТ } 8734 - 75}{B \text{ } 20 \text{ } \text{ГОСТ } 8733 - 74}$$

As above, with combined maximum deviations (with the diameter of increased accuracy in accordance with GOST 9567–75, with wall of standard accuracy):

$$Tpy6a \frac{70n \times 6000 \text{ } \kappa p \text{ } \text{ГОСТ } 8734 - 75}{B \text{ } 20 \text{ } \text{ГОСТ } 8733 - 74}$$

As above, non–standard length, delivered with non–standardized mechanical properties and chemical composition, but with the indication of the values of hydraulic pressure) (in accordance with group Д) GOST 8733–74:

$$Tpy6a \frac{70 \times 2 \text{ } \text{ГОСТ } 8734 - 75}{Д \text{ } \text{ГОСТ } 8733 - 74}$$

As above, from steel of grade 10, delivered with mechanical properties being inspected by comparison with standard heat treated samples, and with the chemical composition (in accordance with group Г) GOST 8733–74:

$$Tpy6a \frac{70 \times 2 \text{ } \text{ГОСТ } 8734 - 75}{Г \text{ } 10 \text{ } \text{ГОСТ } 8733 - 74}$$

Pipe with internal diameter of 70 mm and 2.5 mm thick wall, of non–standard length, from steel of grade 40X, delivered in accordance with group B in accordance with GOST 8733–74:

$$Tpy6a \frac{D_{BH} 70 \times 2.5 \text{ } \text{ГОСТ } 8734 - 75}{B \text{ } 40 \text{ } X \text{ } \text{ГОСТ } 8733 - 74}$$

Amendment No. 2 GOST 8734–75 Seamless Cold–Formed Steel Pipes. Range of sizes

Date of introduction set by Decree No. 5143, dated 27.11.81 of the USSR State Committee for Standards

from 01.12.81

The codes “OKP 13 4400, 13 5100” shall be put under the title of this Standard.

The designation “(CMEA Standard 1483–78)” shall be added to the cover sheet and to the first page.

Clause 1a shall be added to this Standard before clause 1:

“1a. This Standard fully complies with CMEA Standard 1483–78.”

Clause 4. Table 2. Standards: “from 5 to 10 mm” shall be replaced with “from 4 to 10 mm”; $\pm 12.5\%$ shall be replaced with $\pm 12\%$.

Clause 5. The text “The value of the unilateral allowance shall not exceed the sum of the bilateral maximum deviations stipulated in table 2” shall be added after the text “unilateral allowance for the dimensions”.

Clause 8. Replace the standard “from 5 to 8 mm” with “from 4 to 8 mm”.

IUS (Standards Information Catalog) No. 2 1982

Amendment No. 3 GOST 8734–75 Seamless Cold–Formed Steel Pipes. Range of sizes

Date of introduction set by Decree No. 8923, dated 29.03.88 of the USSR State Committee for Standards

Date of Introduction 01.01.89

Clause 3. The text “pipes shall be manufactured with standard lengths from 4 to 9 m with maximum deviations for the length of + 10 mm, shall be produced by the order of the foreign trade organizations” shall be added to the third paragraph;

last paragraph. The text: “No more than 5% of pipes of non–standard length no shorter than 2.5 m shall be allowed in each batch of pipes of standard length”.

(IUS No. 6 1988)