



Drill Pipe

TMK provides high quality drill pipe for the oil and gas industry. Drill pipe is produced at the Sinarsky plant (Russia), TAGMET (Russia). Weld-on tool joints are produced and delivered by OMZ (Russia), which is part of TMK Oilfield Services, certified by API Spec 7-1, API Spec 7-2. Pipe sizes range from 2 3/8 up to 5 1/2 inches and can be produced in grades E75, X95, G105 and S135. Ambridge drill pipe can be produced as green tube for further finishing.

During production, all pipe undergoes required heat treatment and NDT inspection. TMK drill pipe can be produced to lengths both in Range 2 and Range 3. To prevent corrosion, each pipe is covered with a protective coating. Drill pipe connections are coated with an anti-corrosion thread compound and API composite thread protectors are applied. Delivery is carried out in strict accordance to API loading and transportation standards.

Drill Pipe Producers

Plant Location	Products	OD	WT	Grades
Sinarsky Pipe Plant /Russia/	Drill Pipe	2 3/8 - 4	0.280" - 0.449"	E75, X95, G105, S135
TAGMET /Russia/	Drill Pipe	4 1/2 - 5 1/2	0.337" - 0.500"	E75, X95, G105, S135

Drill Pipe Dimensional Range and Performance Properties

Pipe Figures										
Plant	Nominal Size	Nominal Weight	Wall thickness	Inside Diameter	Grade	Upset	Tensile Yield	Torsional Yield	Internal Pressure	Collapse
	in	lb/ft	in	in			lb	ft-lb	psi	psi
	mm	kg/m	mm	mm			kN	Nm	bar	bar
3	2 3/8 60,3	6.65 9,34	0.280 7,11	1.815 46,13	E75	EU	138 214 615	6 250 8 474	15 474 1 067	15 599 1 075
		6.65 9,34	0.280 7,11	1.815 46,13	X95	EU	175 072 779	7 917 10 734	19 600 1 351	19 759 1 362
		6.65 9,34	0.280 7,11	1.815 46,13	G105	EU	193 500 861	8 751 11 864	21 663 1 493	21 839 1 505
3	2 7/8 73,0	10.4 15,49	0.362 9,19	2.151 54,64	E75	EU	214 344 953	11 554 15 665	16 526 1 139	16 509 1 138
		10.4 15,49	0.362 9,19	2.151 54,64	X95	EU	271 503 1208	14 635 19 842	20 933 1 443	20 911 1 441
		10.4 15,49	0.362 9,19	2.151 54,64	G105	EU	300 082 1335	16 176 21 932	23 137 1 595	23 112 1 593
		10.4 15,49	0.362 9,19	2.151 54,64	S135	EU	385 820 1716	20 798 28 198	29 747 2 051	29 716 2 048
3	3 1/2 88,9	13.3 19,81	0.368 9,35	2.764 70,20	E75	EU	271 569 1208	18 551 25 152	13 800 951	14 113 973
		13.3 19,81	0.368 9,35	2.764 70,20	X95	EU	343 988 1530	23 498 31860	17 480 1 205	17 877 1 232
		13.3 19,81	0.368 9,35	2.764 70,20	G105	EU	380 197 1691	25 972 35213	19 320 1 332	19 758 1 362
		13.3 19,81	0.368 9,35	2.764 70,20	S135	EU	488 825 2174	33 392 45 273	24 840 1 712	25 404 1 751
		15.5 23,09	0.449 11,4	2.602 66,10	E75	EU	322 775 1436	21 086 28 589	16 838 1 160	16 774 1 156
		15.5 23,09	0.449 11,4	2.602 66,10	X95	EU	408 848 1819	26 708 36 211	21 328 1 470	21 247 1 465
		15.5 23,09	0.449 11,4	2.602 66,10	G105	EU	451 885 2010	29 520 40 023	23 573 1 625	23 484 1 619
		15.5 23,09	0.449 11,4	2.602 66,10	S135	EU	580 995 2585	37 954 51 459	30 308 2 090	30 194 2 081
3	4 101,6	14.0 20,85	0.330 8,38	3.340 84,84	E75	IU	258 359 1269	23 288 31574	10 828 746	11 354 782
		14.0 20,85	0.330 8,38	3.340 84,84	X95	IU	361 454 1608	29 498 39 994	13 716 945	14 382 992
		14.0 20,85	0.330 8,38	3.340 84,84	G105	IU	399 502 1777	32 603 44 204	15 159 1 045	15 896 1 096

Plant designation: 3 – Sinarsky/Rus/; 4 – TAGMET/Rus/

Tool Joint Figures							Assembly		
Connection	Outside Diameter	Inside Diameter	Tong Length Pin	Tong Length Box	Tensile Yield	Torsional Yield	Aprox. Weight	Torsional Ratio, pin to pipe	Make-up torque
	in	in	in	in	lb	ft-lb	lb/ft		ft-lb
	mm	mm	mm	mm	kN	Nm	kg/m		Nm
NC26	3 3/8 85,725	1 3/4 27,15	7 177,8	8 203,2	313 681 1 395	6 875 9 321	6.99 10,41	1.10	4 125 5 593
NC26	3 3/8 85,725	1 3/4 27,15	7 177,8	8 203,2	313 681 1 395	6 875 9 321	7.11 10,59	0.87	4 125 5 593
NC26	3 3/8 85,725	1 3/4 27,15	7 177,8	8 203,2	313 681 1 395	6 875 9 321	7.11 10,59	0.79	4 125 5 593
NC31	4 1/8 104,8	2 1/8 53,98	7 177,8	9 228,6	447 130 1 989	11 790 15 985	10.87 16,19	1.02	7 122 9 656
NC31	4 1/8 104,8	2 50,80	7 177,8	9 228,6	495 726 2 205	13 158 17 839	11.09 16,52	0.90	7 918 10 735
NC31	4 1/8 104,8	2 50,80	7 177,8	9 228,6	495 726 2 205	13 158 17 839	11.09 16,52	0.81	7 918 10 735
NC31	4 3/8 111,1	1 5/8 41,28	7 177,8	9 228,6	623 844 2 775	16 809 22 790	11.55 17,20	0.81	10 167 13 785
NC38	4 3/4 120,7	2 11/16 68,26	8 203,2	10 1/2 266,7	587 308 2 613	18 071 24 500	13.93 20,75	0.97	10 864 14 730
NC38	5 127,0	2 9/16 65,09	8 203,2	10 1/2 266,7	649 158 2 888	20 095 27 245	14.62 21,78	0.86	12 196 16 536
NC38	5 127,0	2 7/16 61,91	8 203,2	10 1/2 266,7	708 063 3 150	22 035 29 875	14.71 21,91	0.85	13 328 18 070
NC38	5 127,0	2 1/8 53,98	8 203,2	10 1/2 266,7	842 440 3 748	26 503 35 933	14.92 22,22	0.79	15 909 21 570
NC38	5 127,0	2 9/16 65,09	8 203,2	10 1/2 266,7	649 158 2 888	20 095 27 245	16.54 24,64	0.95	12 196 16 536
NC38	5 127,0	2 7/16 61,91	8 203,2	10 1/2 266,7	708 063 3 150	22 035 29 875	16.82 25,05	0.86	13 328 18 070
NC38	5 127,0	2 1/8 53,98	8 203,2	10 1/2 266,7	842 440 3 748	26 503 35 933	17.03 25,37	0.90	15 909 21 570
NC40	5 1/2 139,7	2 1/4 57,15	7 177,8	10 254,0	979 996 4 360	32 693 44 325	17.57 26,17	0.86	19 766 26 799
NC40	5 1/4 133,4	2 13/16 71,44	7 177,8	10 254,0	711 611 3 166	23 279 31 562	15.04 22,40	1.00	17 092 19 106
NC40	5 1/4 133,4	2 11/16 68,26	7 177,8	10 254,0	776 406 3 454	25 531 34 615	15.34 22,85	0.87	15 404 20 885
NC40	5 1/2 139,7	2 7/16 61,91	7 177,8	10 254,0	897 161 3 991	29 764 40 354	15.91 23,70	0.91	18 068 24 497

Drill Pipe Dimensional Range and Performance Properties

Pipe Figures										
Plant	Nominal Size	Nominal Weight	Wall thickness	Inside Diameter	Grade	Upset	Tensile Yield	Torsional Yield	Internal Pressure	Collapse
	in	lb/ft	in	in			lb	ft-lb	psi	psi
	mm	kg/m	mm	mm			kN	Nm	bar	bar
4	4 1/2 114,3	16.6 24,73	0.337 8,56	3.826 97,18	E75	IEU	330 558 1 470	30 807 41 774	9 829 678	10 392 717
		16.6 24,73	0.337 8,56	3.826 97,18	X95	IEU	418 707 1 863	39 022 52 914	12 450 859	12 765 880
		16.6 24,73	0.337 8,56	3.826 97,18	G105	IEU	462 781 2 059	43 130 58 484	13 761 949	13 825 953
		16.6 24,73	0.337 8,56	3.826 97,18	S135	IEU	595 004 2 647	55 453 75 194	17 693 1 220	16 773 1157
		20.00 29,79	0.430 10,92	3.64 92,46	E75	IEU	412 358 1 834	36 901 50 038	12 542 865	12 964 894
		20.00 29,79	0.430 10,92	3.64 92,46	X95	IEU	522 320 2 323	46 741 63 381	15 886 1 096	16 421 1132
		20.00 29,79	0.430 10,92	3.64 92,46	G105	IEU	577 301 2 568	51 661 70 052	17 558 1 211	18 149 1252
		20.00 29,79	0.430 10,92	3.64 92,46	S135	IEU	742 244 3 302	66 421 90 067	2 2575 1 557	23 335 1609
4	5 127,0	19.50 29,05	0.362 9,19	4.276 108,62	E75	IEU	395 595 1 760	41 167 55 822	9 503 655	9 962 687
		19.50 29,05	0.362 9,19	4.276 108,62	E75	IEU	395 595 1 760	41 167 55 822	9 503 655	9 962 687
		19.50 29,05	0.362 9,19	4.276 108,62	X95	IEU	501 087 2 229	52 144 70 707	12 037 830	12 026 829
		19.50 29,05	0.362 9,19	4.276 108,62	X95	IEU	501 087 2 229	52 144 70 707	12 037 830	12 026 829
		19.50 29,05	0.362 9,19	4.276 108,62	G105	IEU	553 833 2 464	57 633 78 150	13 304 918	12 999 896
		19.50 29,05	0.362 9,19	4.276 108,62	G105	IEU	553 833 2 464	57 633 78 150	13 304 918	12 999 896
		19.50 29,05	0.362 9,19	4.276 108,62	S135	IEU	712 070 3 168	74 100 100 480	17 105 1180	15 672 1 081
		19.50 29,05	0.362 9,19	4.276 108,62	S135	IEU	712 070 3 168	74 100 100 480	17 105 1180	15 672 1 081
		25.60 38,13	0.50 12,70	4.000 101,60	E75	IEU	530 144 2 358	52 257 70 860	13 125 905	13 500 931
		25.60 38,13	0.50 12,70	4.000 101,60	E75	IEU	530 144 2 358	52 257 70 860	13 125 905	13500 931

Plant designation: 3 – Sinarsky; 4 – TAGMET;

Tool Joint Figures							Assembly		
Connection	Outside Diameter	Inside Diameter	Tong Length Pin	Tong Length Box	Tensile Yield	Torsional Yield	Aprox. Weight	Torsional Ratio, pin to pipe	Make-up torque
	in	in	in	in	lb	ft-lb	lb/ft		ft-lb
	mm	mm	mm	mm	kN	Nm	kg/m		Nm
NC 46	6 1/4 158,8	3 1/4 82,55	7 177,8	10 254,0	901 164 4 009	33 228 45 057	18.37 27,35	1.09	20.396 27 657
NC 46	6 1/4 158,8	3 76,20	7 177,8	10 254,0	1 048 426 4 664	38 998 52 881	18.79 27,98	1.01	20.396 27 657
NC 46	6 1/4 158,8	3 76,20	7 177,8	10 254,0	1 048 426 4 664	38 998 52 881	18.79 27,98	0.91	23.795 32 266
NC 46	6 1/4 158,8	2 3/4 69,85	7 177,8	10 2 54,0	1 183 908 5 266	44 359 60 151	19.00 28,29	0.81	26.923 36 508
NC 46	6 1/4 158,75	3 76,20	7 177,8	10 254,0	1 048 426 4 664	38 998 52 881	22.09 32,89	1.07	23.795 32 266
NC 46	6 1/4 158,75	2 3/4 69,85	7 177,8	10 254,0	1 183 908 5 266	44 359 60 151	22.67 33,76	0.96	26.923 36 508
NC 46	6 1/4 158,75	2 1/2 63,50	7 177,8	10 254,0	1 307 608 5 817	49 297 66 847	22.86 34,03	0.96	29.778 40 379
NC 46	6 1/4 158,75	2 1/4 57,15	7 177,8	10 254,0	1 419 527 6 315	53 800 79 953	23.03 34,29	0.81	
NC 50	6 5/8 168,28	3 3/4 95,25	7 177,8	10 254,0	939 095 4 177	37 269 50 537	20.85 31,05	0.92	22.836 30 966
51/2 FH	7 177,8	3 3/4 95,25	8 203,2	10 254,0	1 448 407 6 443	62 903 85 296	22.28 33,17	1.53	
NC 50	6 5/8 168,28	3 1/2 88,90	7 177,8	10 254,0	1 109 920 4 937	44 456 60 282	21.45 31,94	0.86	27.076 36 715
51/2 FH	7 177,8	3 3/4 95,25	8 203,2	10 254,0	1 448 407 6 443	62 903 85 296	22.62 33,68	1.21	
NC 50	6 5/8 168,28	3 1/4 82,55	7 177,8	10 254,0	1 268 963 5 645	51 217 69 450	21.93 32,65	0.89	31.025 42 070
51/2 FH	7 177,8	3 3/4 95,25	8 203,2	10 254,0	1 448 407 6 443	62 903 85 296	22.62 33,68	1.09	
NC 50	6 5/8 168,28	2 3/4 69,85	7 177,8	10 254,0	1551706 6903	63 393 85 961	22.61 33,67	0.86	38.044 51 588
51/2 FH	7 1/4 184,15	3 1/2 88,90	8 203,2	10 254,0	1 619 231 7 203	72 213 97 921	23.48 34,96	0.98	43.490 58 972
NC 50	6 5/8 168,28	3 1/2 88,90	7 177,8	10 254,0	1 109 920 4 937	44 156 59 876	26.85 39,98	0.86	27.076 36 715
51/2 FH	7 177,8	3 1/2 88,90	8 203,2	10 254,0	1 619 231 7 203	62 903 85 296	28.27 42,09	1.21	37.742 51 178

Drill Pipe Dimensional Range and Performance Properties

Pipe Figures										
Plant	Nominal Size	Nominal Weight	Wall thickness	Inside Diameter	Grade	Upset	Tensile Yield	Torsional Yield	Internal Pressure	Collapse
	in	lb/ft	in	in			lb	ft-lb	psi	psi
	mm	kg/m	mm	mm			kN	Nm	bar	bar
4	5 127,0	25.60 38,13	0.50 12,70	4.000 101,60	X95	IEU	671 515 2 987	66 192 89 756	16 625 1 147	17 100 1179
		25.60 38,13	0.50 12,70	4.000 101,60	X95	IEU	671 515 2 987	66 192 89 756	16 625 1 147	17 100 1179
		25.60 38,13	0.50 12,70	4.000 101,60	G105	IEU	742 201 3 302	73 159 99 204	18 375 1 267	18 900 1303
		25.60 38,13	0.50 12,70	4.000 101,60	G105	IEU	742 201 3 302	73 159 99 204	18 375 1 267	18 900 1303
		25.60 38,13	0.50 12,70	4.000 101,60	S135	IEU	954 259 4 245	94 062 127 548	23 625 1 629	24 300 1676
4	5 1/2 139,7	21.90 32,62	0.361 9,17	4.778 121,36	E75	IEU	437 116 1 944	50 710 68 763	8 615 594	8 413 580
		21.90 32,62	0.361 9,17	4.778 121,36	X95	IEU	553 681 2 463	64 233 87 100	10 912 753	10 019 691
		21.90 32,62	0.361 9,17	4.778 121,36	G105	IEU	611 963 2 722	70 994 96 258	12 061 832	10 753 742
		21.90 32,62	0.361 9,17	4.778 121,36	S135	IEU	786 809 3 500	91 278 123 773	15 507 1 069	12 679 874
		24.70 36,79	0.415 10,54	4.670 118,62	E75	IEU	497 222 2 212	56 574 76 714	9 903 683	10 464 722
		24.70 36,79	0.415 10,54	4.670 118,62	X95	IEU	629 814 2 802	71 660 97 171	12 544 865	12 933 892
		24.70 36,79	0.415 10,54	4.670 118,62	G105	IEU	696 111 3 097	79 204 107 401	13 865 956	14 013 966
		24.70 36,79	0.415 10,54	4.670 118,62	S135	IEU	894 999 3 981	101 833 138 086	17 826 1229	17 023 1 174

Plant designation: 3 – Sinarsky; 4 – TAGMET;

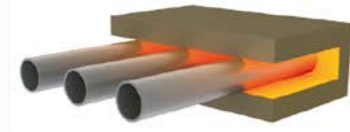
Tool Joint Figures							Assembly		
Connection	Outside Diameter	Inside Diameter	Tong Length Pin	Tong Length Box	Tensile Yield	Torsional Yield	Aprox. Weight	Torsional Ratio, pin to pipe	Make-up torque
	in	in	in	in	lb	ft-lb	lb/ft		ft-lb
	mm	mm	mm	mm	kN	Nm	kg/m		Nm
NC 50	6 5/8 168,28	3 76,20	7 177,8	10 254,0	1 416 225 6 300	57 534 78 016	27.87 41,50	0.86	34.680 47026
51/2 FH	7 177,8	3 1/2 88,90	8 203,2	10 254,0	1 619 231 7 203	62 903 85 296	28.59 42,57	0.95	37.742 51178
NC 50	6 5/8 168,28	2 3/4 69,85	7 177,8	10 254,0	1 619 231 7 203	63 393 85 961	28.32 42,17	0.87	38.044 51588
51/2 FH	7 1/4 184,15	3 1/2 88,90	8 203,2	10 254,0	1 551 706 6 903	72 213 97 921	29.16 43,42	0.99	43.490 58972
51/2 FH	7 1/4 184,15	3 1/4 82,55	8 203,2	10 254,0	1 778 274 7 910	78 716 106 739	29.43 43,82	0.83	47.230 64044
51/2 FH	7 177,8	4 101,60	8 203,2	10 254,0	1 265 802 5 631	55 687 75 512	23.77 35,39	1.11	33.560 45507
51/2 FH	7 177,8	3 3/4 95,25	8 203,2	10 254,0	1 448 407 6 443	62 903 85 296	24.53 36,53	0.98	37.742 51178
51/2 FH	7 1/4 184,15	3 1/2 88,9	8 203,2	10 254,0	1 619 231 7 203	72 213 97 921	25.38 37,79	1.02	43.490 58972
51/2 FH	7 1/2 190,50	3 76,20	8 203,2	10 254,0	1 925 536 8 566	86 765 117 653	26.50 39,46	0.96	52.302 70922
51/2 FH	7 177,8	4 101,60	8 203,2	10 254,0	1 265 802 5 631	55 687 75 512	26.33 39,21	0.99	33.560 45507
51/2 FH	7 1/4 184,15	3 1/2 88,9	8 203,2	10 254,0	1 619 231 7 203	72 213 97 921	27.85 41,47	1.01	43.490 58972
51/2 FH	7 1/4 184,15	3 1/2 88,9	8 203,2	10 254,0	1 619 231 7 203	72 213 97 921	27.85 41,47	0.92	43.490 58972
51/2 FH	7 1/2 190,50	3 76,20	8 203,2	10 254,0	1 925 536 8 566	86 765 117 653	27.77 41,35	0.86	52.302 70922

Drill Pipe Flowchart

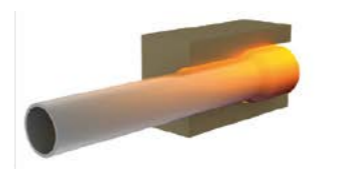
1. Inspection table



2. Heating



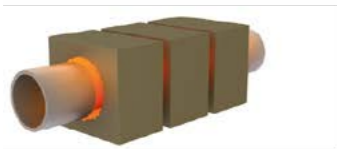
3. Upsetting



4. Magnetic particle inspection (MPI) of pipe end



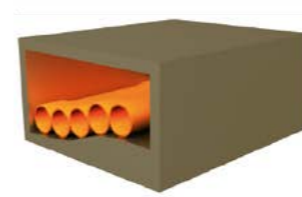
5. Heat treatment of pipe



6. Quenching. Water cooling



7. Tempering



8. Straightening



9. Ultrasonic NDT of pipe and MPI of pipe end



10. Pipe ready for welding



a. Tool-joint delivery from Manufacturer
b. Tool-joint depreservation
c. Incoming inspection of tool-joint



11. Friction welding of tool-joint to drill pipe



12. Heating and heat treatment of weld area



13. Finish machining of weld area



14. Seam test for bending



15. Flaw detecting of weld point



16. Inspection, weighing, marking, stamping



17. Finished drillpipe



18. Paint pipe body and protection of treading



19. Storage

