

CHAPTER 28 : GAS CONNECTION WORKS

Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalganj)	Unit Rate (Rajshahi, Rangpur)
28.1	Pipe line installation: Installation of 50 psi, API, 5L, Grade-B, ERW Natural pipe line for supplying Titas Gas including, supplying, fitting, fixing and laying different sizes M.S. pipes with necessary tape and primer including cutting trenches (450 mm x 910 mm) in all kinds of soil, cleaning, cutting, applying coal-tar, wrapping the pipes, marking the pipeline with 200mm X 200mm demarcation plate (C.C./ M.S. plate) @ 15m interval and back filling the trenches, excavating earth including, leveling, dressing and removing excess earth in all respect as per specification of Titas Gas T and D Co. Ltd. and accepted by the Engineer-in-charge. [Rate is excluding the cost of welding and back filling with sand at the bottom by 300 mm in thickness (compacted)] (Pipes manufactured by National Tubes Limited under Steel & Engineering Corporation, Ministry of Industries, Government of Bangladesh shall be given priority)					
28.1.1	100 mm ND (114.30 mm O.D) M.S pipe, weight of min 14.4 kg/m, standard test pressure 176 kg/ m ² , wall thickness of min 5.4 mm	meter	Tk. 4,135.00	Tk. 4,129.00	Tk. 4,113.00	Tk. 4,113.00
28.1.2	75 mm N.D (88.90 mm O.D) M.S pipe, weight of min 10.1 kg/m, standard test pressure 176 kg/ m ² , wall thickness of min 4.85 mm	meter	Tk. 2,356.00	Tk. 2,351.00	Tk. 2,334.00	Tk. 2,334.00
28.1.3	50 mm N.D. (60.30 mm O.D) M.S pipe, weight of min 6.17 kg/m, standard test pressure 176 kg/ m ² , wall thickness of min 4.47 mm	meter	Tk. 1,422.00	Tk. 1,416.00	Tk. 1,400.00	Tk. 1,400.00
28.1.4	25 mm N.D. (33.80 mm O.D) M.S pipe weight of min 3.84 kg/m, standard test pressure 50 kg/ m ² , wall thickness of min 4.05 mm	meter	Tk. 849.00	Tk. 843.00	Tk. 827.00	Tk. 827.00
28.1.5	20 mm N.D. (27.20 mm O.D) M.S pipe weight of min 1.90 kg/m, standard test pressure 50 kg/ m ² , wall thickness of min 3.25 mm	meter	Tk. 667.00	Tk. 661.00	Tk. 644.00	Tk. 644.00
28.2	Providing Butt welded joints with pipes to Tees, Elbows, Saddles, end caps etc above or below ground including, cutting and V-leveling in each end of the pipe, grinding by machine etc. complete as per specification of Titas Gas T and D C Ltd. and accepted by the Engineer-in-charge.					
28.2.1	75 mm N.D (88.90 mm O.D)-6.95 mm	each	Tk. 280.00	Tk. 280.00	Tk. 280.00	Tk. 280.00
28.2.2	50 mm N.D (60.30 mm O.D)-5.15 mm	each	Tk. 240.00	Tk. 240.00	Tk. 240.00	Tk. 240.00
28.2.3	25 mm N.D (33.40 mm O.D)-4.2mm	each	Tk. 187.00	Tk. 187.00	Tk. 187.00	Tk. 187.00
28.2.4	20 mm N.D (26.70 mm O.D)-3.35mm	each	Tk. 160.00	Tk. 160.00	Tk. 160.00	Tk. 160.00
28.3	Supplying, fitting and fixing the following materials including carriage to the work site from Titas Gas Store as per specification of Titas Gas (T and D) Co. Ltd. and accepted by the Engineer-in-charge. (Rate is excluding the cost of welding)					
28.3.1	50 mm x 50 mm x 50 mm (N.D) equal tee	each	Tk. 315.00	Tk. 314.00	Tk. 314.00	Tk. 314.00
28.3.2	50 mm x 50 mm x 25 mm (N.D) reducing tee	each	Tk. 513.00	Tk. 513.00	Tk. 512.00	Tk. 512.00
28.3.3	25 mm x 25 mm x 25 mm (N.D) equal tee	each	Tk. 182.00	Tk. 181.00	Tk. 180.00	Tk. 180.00
28.3.4	50 mm x 90° elbow	each	Tk. 255.00	Tk. 255.00	Tk. 254.00	Tk. 254.00
28.3.5	25 mm x 90° elbow	each	Tk. 215.00	Tk. 215.00	Tk. 214.00	Tk. 214.00

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Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalgonj)	Unit Rate (Rajshahi, Rangpur)
28.3.6	50 mm x 25 mm 45° elbow	each	Tk. 117.00	Tk. 117.00	Tk. 116.00	Tk. 116.00
28.3.7	50 mm x 25 mm reducer.	each	Tk. 135.00	Tk. 135.00	Tk. 134.00	Tk. 134.00
28.3.8	20 mm plug, socket	each	Tk. 529.00	Tk. 528.00	Tk. 527.00	Tk. 527.00
28.3.9	50mm X 20 mm saddle	each	Tk. 435.00	Tk. 435.00	Tk. 434.00	Tk. 434.00
28.3.10	50 mm dia end cap	each	Tk. 104.00	Tk. 104.00	Tk. 103.00	Tk. 103.00
28.3.11	25 mm dia end cap	each	Tk. 113.00	Tk. 113.00	Tk. 112.00	Tk. 112.00
28.4	Supplying, welding, fitting and fixing of different size valve tee/ service tee to connect the pipe line with the Titas Gas Main pipe line etc. all complete in all respect as per specification of Titas Gas T and D Co. Ltd. approved and accepted by the Engineer-in-charge.					
28.4.1	50 mm x 50 mm Valve Tee (50 mm and above 50 mm low pressure line) Sch 40	each	Tk. 16,799.00	Tk. 16,737.00	Tk. 16,489.00	Tk. 16,489.00
28.4.2	50 mm x 25 mm Valve Tee	each	Tk. 3,071.00	Tk. 3,024.00	Tk. 2,837.00	Tk. 2,837.00
28.4.3	25 mm x 25 mm Service Tee	each	Tk. 6,976.00	Tk. 6,936.00	Tk. 6,776.00	Tk. 6,776.00
28.4.4	50 mm x 25 mm Service Tee	each	Tk. 13,618.00	Tk. 13,565.00	Tk. 13,351.00	Tk. 13,351.00
28.5	Supplying, fitting and fixing in position different dia I/F (Insulated Flange) etc. all complete in all respect as per specification of Titas Gas T and D Co. Ltd. approved and accepted by the Engineer-in-charge. 50 mm N.D. (60.30 mm O.D) Insulation Flange.	each	Tk. 7,190.00	Tk. 7,130.00	Tk. 6,889.00	Tk. 6,889.00
28.6	Construction of 1520 mm x 1520 mm x 1370 mm (depth) water-tight valve pit , enclosed by 250 mm thick brick wall in 1:6, plastered on each face in 1:4 with net cement finishing, having a 75 mm thick C.C (1:3:6) bed upon a layer of brick flat soling, over laid by 38 mm thick patent stone flooring including standard M.S. sheet valve pit cover as per drawing and specification of Titas Gas T and D Co. Ltd. etc. all complete in all respect and accepted by the Engineer-in-charge.	each	Tk. 121,986.00	Tk. 121,708.00	Tk. 119,912.00	Tk. 119,730.00
28.7	Supplying, fitting and fixing of ball valve class 150 RF including supplying of 2 Nos. flange along with necessary nuts and bolts, welding the flange etc. all complete in all respect as per specification of Titas Gas T and D Co. Ltd. approved and accepted by the Engineer-in-charge.					
28.7.1	50 mm ball valve class 150 RF. 2" dia	each	Tk. 18,713.00	Tk. 18,616.00	Tk. 18,229.00	Tk. 18,229.00
28.7.2	25 mm ball valve class 150 RF. 1" dia	each	Tk. 14,479.00	Tk. 14,382.00	Tk. 13,995.00	Tk. 13,995.00
Part - B (Domestic & Commercial line)						
28.8	Riser Pipe line installation: Installation of 2 psi, API, 5L, Grade-B, ERW Natural pipe line for supplying Titas Gas including, supplying, fitting, fixing and laying different sizes M.S. pipes with necessary tape and painting in all respect as per specification of Titas Gas T and D Co. Ltd. and accepted by the Engineer-in-charge. [Rate is excluding the cost of welding and tee, elbow socket etc fittings] (Pipes manufactured by National Tubes Limited under Steel & Engineering Corporation, Ministry of Industries, Government of Bangladesh shall be given priority)					
28.8.1	12 mm N.D. with wall thickness 2 mm	each	Tk. 319.00	Tk. 318.00	Tk. 312.00	Tk. 312.00
28.8.2	20 mm N.D. with wall thickness 2.35 mm	each	Tk. 387.00	Tk. 385.00	Tk. 379.00	Tk. 379.00

Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalganj)	Unit Rate (Rajshahi, Rangpur)
28.9	Supplying, fitting and fixing in position different dia one-way brass stop cock (best quality and heavy type) etc. complete in all respect as per specification of Titas Gas T and D Co. Ltd. approved and accepted by the Engineer-in-charge.					
28.9.1	12 mm x 6 mm N.D.	each	Tk. 404.00	Tk. 403.00	Tk. 401.00	Tk. 401.00
28.9.2	20 mm x 20 mm N.D.	each	Tk. 729.00	Tk. 728.00	Tk. 723.00	Tk. 723.00
28.10	Cutting of permanent pucca (rigid/flexible) road and mending good the damages etc. all complete in all respect and accepted by the Engineer-in-charge.					
28.10.1	Bituminous Road	sqm	Tk. 1,356.00	Tk. 1,331.00	Tk. 1,232.00	Tk. 1,232.00
28.10.2	R.C.C. Road	sqm	Tk. 2,027.00	Tk. 1,991.00	Tk. 1,843.00	Tk. 1,843.00
28.11	Testing and purging of the house line properly as per specifications Titas Gas T and D Co. Ltd. and accepted by the Engineer-in-charge.	meter	Tk. 29.00	Tk. 29.00	Tk. 29.00	Tk. 29.00
28.12	Supplying and installation the complete LP Gas Reticulated System for highrise buildings (Upto 40 unit 20 storied) with Storage facility (45 KG POL Valve cylinders/Bulk Tank) with isolation and safety valve, pressure gauges, LPG transfer hose, Seamless MS pipe network, LPG Regulator (1st Stage and 2nd Stage), Household LP Gas meter, Safety fittings & accessories, system design, documentation, supervision and commissioning etc. (as per standard of department of Explosive and NFPA-58) all complete and accepted by engineer in charge.					
28.12.1	Cylinder heading line for multistoried Building with 40 unit apartment, 2X10 Nos cylinder Heading line, 45 Kg LP Gas Cylinder Bank Vapor Off Take (VOT) System with MS Seamless SCH 40 pipes. (min. dia 25 mm), Flanze Type MS 150 class ball valve, Pressure Gauge (100 mm dia) liquid type (range: 0-20 Bar), Bleed Valve, Safety Relief Valve (LPG Type, Relief at 14.6 Bar)), LP Gas pigtail, Ball valve and necessary fittings suitable for LP Gas as per standard of department of Explosive and NFPA-58) , Supply, Installation of Medium pressure main distribution pipeline, MS Seamless (Sch-40) 50 mm dia pipe upto 100 meter length , Flanze Type MS Valve 150 Class Dia 50 mm, Sch 40 MS 50 mm TEE, Sch 40 MS 50 mm Elbow, 150 Class 50 mm MS Flanze, Painting, Pipe support with MS Clamp, First Stage Regulator; Brand: REGO / FISHER / CAVAGNA or similar from USA or EU, MS Seamless SCH 40 pipes, Flanze Type MS 150 class ball valve, Pressure Gauge (100 mm dia) liquid type (range: 0-20 Bar), Bleed Valve, Safety Relief Valve (LPG Type, Relief at 14.6 Bar) etc. as per requirement all complete, approved and accepted by the Engineer-in-charge. (All the welding joints must be TIG welded) (Rate is excluding the cost of shed, perimeter fencing and RCC floor).	set	Tk. 1,159,540.00	Tk. 1,159,540.00	Tk. 1,159,540.00	Tk. 1,159,540.00
28.12.2	Reduction cost per unit below 40 unit connection for all necessary arrangement including heading line.	each	Tk. 10,000.00	Tk. 10,000.00	Tk. 10,000.00	Tk. 10,000.00
28.12.3	Additional cost per apartment upto 100 apartment for all necessary arrangement including heading line.	each	Tk. 9,203.00	Tk. 9,203.00	Tk. 9,203.00	Tk. 9,203.00

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Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalganj)	Unit Rate (Rajshahi, Rangpur)
28.12.4	Supplying and installation of 45 Kg LP Gas empty cylinder cylinder [Water capacity: 108 litre; design code: DOT, Service pressure 17 Kgs/cm2, test pressure 34 Kgs/cm2, Steel grade SG295 or equiv.], certified by Department of Explosives.	each	Tk. 7,362.00	Tk. 7,362.00	Tk. 7,362.00	Tk. 7,362.00
28.13	Supplying and instalation of LP Gas Prepaid meter with smart recharging system. (Smart card for recharge gas, Meter connection, Second Stage Regulator, Gas meter header with individual valves (MS 150 class) in both ends of meter and other fittings etc. all complete and accepted by the Engineer-in-charge.	each	Tk. 24,541.00	Tk. 24,541.00	Tk. 24,541.00	Tk. 24,541.00
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