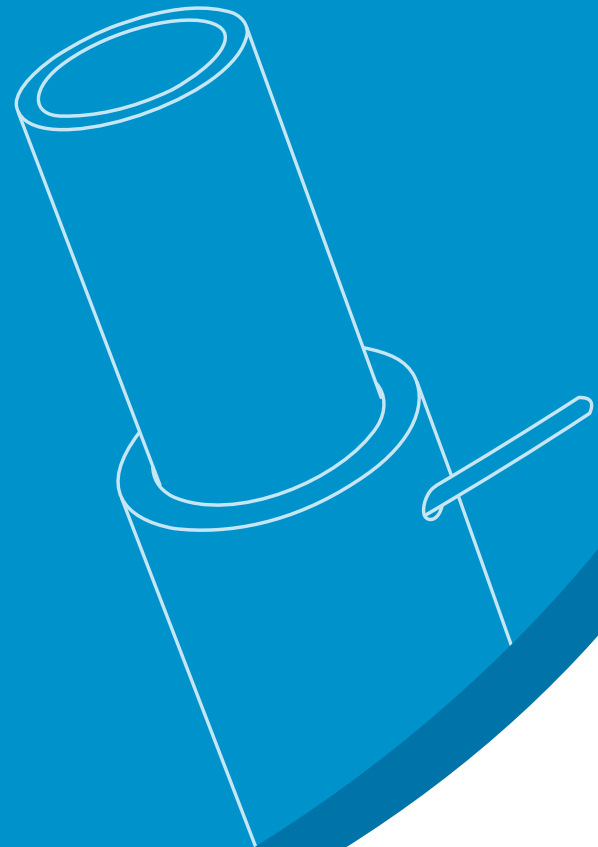


For the first time,
Simple but Durable

Jain Thread Loc Plus™

Column Piping System



Jain Irrigation Systems Limited is a Company globally renowned for our uPVC products used for Ground Water Tapping , Aquifer Recharge Wells, Rain water Harvesting Systems as well as Infiltration and Sub Soil Drainage Systems. Our products have gained the confidence of users throughout the world and this has encouraged us at Jains to get our R & D to design and manufacture yet another product which will be a forward integration of the above Group of Ground Water Extraction Pipe System. This will convey the tapped water with efficiency combined with economy and have a long life .Introducing Jain Thread Loc Plus™ COLUMN PIPES for use in TUBE and BORE WELLS to pump water efficiently and economically with SUBMERSIBLE PUMPS.

Introduction

Features and Advantages:

- Manufactured with high quality virgin PVC raw material, specially compounded with Lead & Tin free additives.
- The product is produced with high impact modifier to provide extra strength against impact loading.
- The compound is tested safe for potable water application.
- Long life - as PVC compound is totally chemical and corrosion resistant.
- Smooth inner wall, no scale build-up or erosion.
- Efficient pumping due to low friction loss - resulting in energy saving of over 10%
- Jain Thread Loc Plus™ Joint is designed for both the ends with temporary connections.
- Jain Thread Loc Plus™ joint is designed with special lock at both the ends to restrict the movement due to torque at start and stop of the pump.
- 100% leak proof joint
- Light in weight, Easy to handle, transport and install.
- Easy and quick-assemble / dis-assemble system with no external tools.
- Lowering and removal of pump for maintenance made easy and fast.
- No effect on column pipe installation due to extreme weather conditions.
- No curing period required, allows immediate testing & Commissioning of system .
- Low installation costs – does not require wrenches, nut bolts or solvent cement
- Complete range of column pipe, fittings and accessories are available ex-stock in all JAIN Depots and Dealer point.

Standard and Range

The Jain Thread Loc Plus™ Joint PVC Column Pipes are manufactured from specially formulated PVC compound that conforms to or exceeds the requirements of uPVC compounds of cell classification 12454 as per ASTM D 1784. The compound has a Hydrostatic Design Stress of 2000 psi for water at 73.4° F tested in accordance with ASTM D 2837.



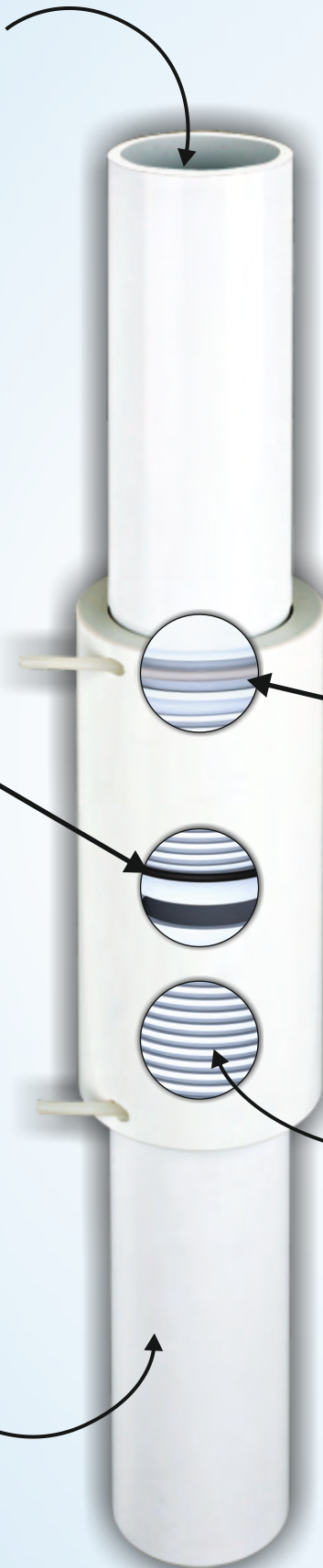
Smooth inner wall,
no scale build-up or
erosion, Resulting in
energy saving of over 10 %

100 % leak proof joint
with two rubber 'o' rings
in each coupler

Joint is with special lock
at both end of the coupler
to restrict the movement
due to torque at start
and stop of the pump

Square threads for
fast & easy jointings

The product is produced
with high impact modifier
to provide extra strength
against impact loading



Material Properties

Properties	Standard	Unit	Typical Value
Tensile Strength	ASTM D638	PSI	7000
Modulus of Elasticity in Tension	ASTM D638	PSI	400,000
Izod Impact Strength	ASTM D256	Ft-lb/in of notch	>0.65
Heat Distortion Temperature at 264 psi	ASTM D648	°F	158
Burning Rate	ASTM D635	-	Self Extinguishing
Vicat Softening Temperature		IS 12235-2	°C80
Density	IS 12235-14	gm/cc	Below 1.43

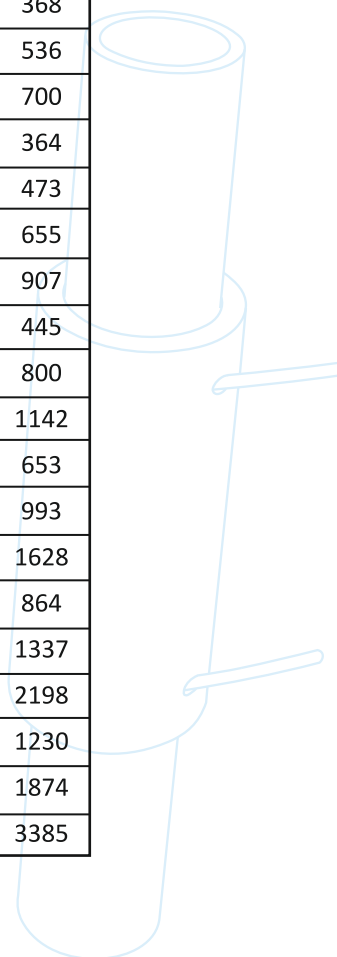
Product Range

Jain Thread Loc Plus™ Joint uPVC Column Pipes conforming to above specifications along with Fittings & Accessories are available in V4, Shallow, Medium and Deep Well Series for various depths of installation in sizes ranging from 1" to 4" diameter and in standard lengths of 3 meters.

Pipe Selection Chart

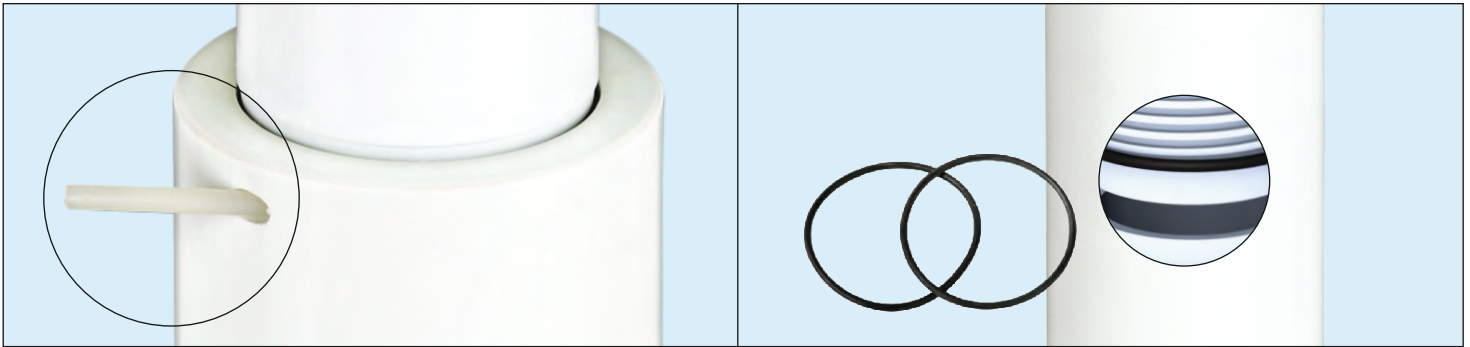
Size	Design Pressure	Ultimate Braking Load*	Pump & Cable Weight	Depth of Installation Considered	Max. Discharge	Frictional Head Loss	Pipe String Weight
	Kg/ cm2	Kg	Kg	Feet	Lpm	(M/M)	Kg
1"V4-15Kg	15.00	890	65	150	65.40	0.1049	178
1" Shallow	20.00	1050	120	250	60.00	0.1104	275
1"Medium	35.00	1600	150	500	48.00	0.1268	415
1.25" V4-15Kg	15.00	1420	65	150	104.40	0.0784	245
1.25" Shallow	20.00	1740	120	250	99.00	0.0811	368
1.25"Medium	30.00	2200	150	500	86.40	0.0883	536
1.25"Deep	35.00	2775	200	750	75.60	0.0960	700
1.5"V4-15Kg	15.00	1810	130	150	137.40	0.0662	364
1.5"Shallow	20.00	2250	150	250	129.00	0.0690	473
1.5"Medium	25.00	2600	200	500	120.00	0.0720	655
1.5"Deep	35.00	3610	260	750	99.60	0.0809	907
2"Shallow	10.00	2490	150	250	231.00	0.0480	445
2"Medium	19.00	3725	200	500	207.00	0.0532	800
2"Deep	27.00	4800	265	750	185.40	0.0550	1142
2.5"Shallow	10.00	3890	200	250	367.20	0.0360	653
2.5"Medium	15.00	5175	255	500	338.40	0.0379	993
2.5"Deep	25.00	7320	340	750	294.00	0.0413	1628
3"Shallow	10.00	4490	220	250	510.60	0.0293	864
3"Medium	15.00	6380	300	500	467.40	0.0310	1337
3"Deep	25.00	9180	400	750	414.00	0.0334	2198
4"Shallow	9.00	6790	270	250	855.60	0.0213	1230
4"Medium	14.00	10060	320	500	795.60	0.0223	1874
4"Deep	25.00	15350	450	750	685.20	0.0245	3385

* Considering average tensile strength of 500kg/cm²



Accessories

Following factory supplied fittings and accessories are recommended for trouble-free installation of Jain Thread Loc Plus™ PVC threaded Column Pipes



Hi-Tensile Spline: Made of engineering plastic material with high tensile strength

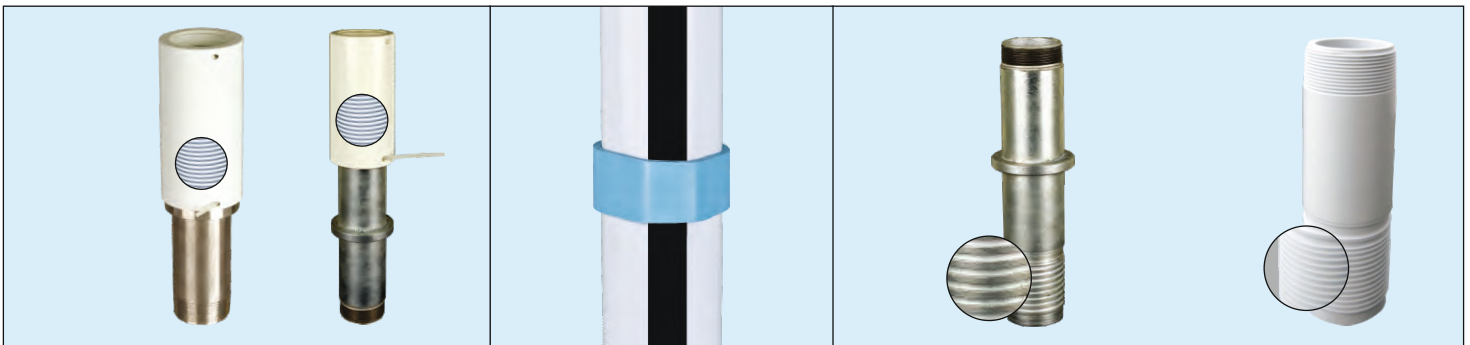
Rubber 'O' Rings: Made of material conforming to Industry standard and of the suitable Profile to make 100% leak-proof joint



Holding /Split Clamps: Made of high quality steel flats with powder coating and bolts & nuts to hold the assembly safely and securely at the well head

Pump Guard: Made of High quality steel plates with powder coating and stainless steel studs and nut, which helps to prevent the pump from falling down due to dry run & over heating of pump

Lifting Cap: The lifting cap is made of high quality PVC material. One end is machined to suit the Jain Thread Loc Plus™ coupler and other end is provided with two holes to match the handle



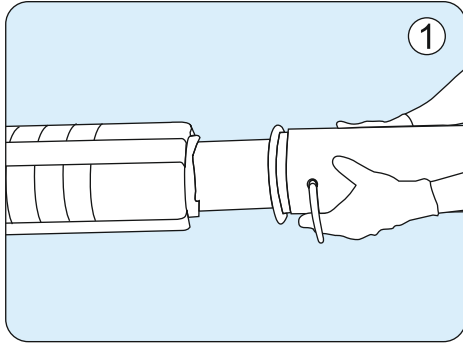
Pump Connector: The pump connector is fabricated assembly of stainless steel pipe / Cast Iron having one end threaded to match the socket threads of the pump and the other end to match with the Jain Thread Loc Plus™ coupler

Cable Clips: Cable Clips are made of PVC or other plastic materials suitable to hold cables along the column pipe

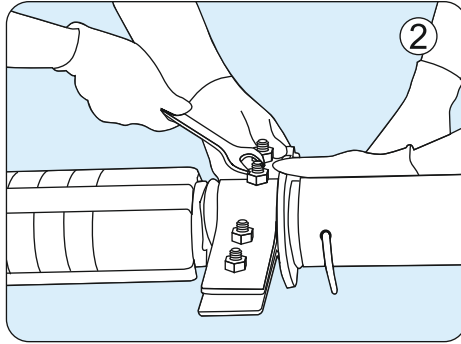
Top Connector: The Top Connector is made of high quality PVC / Cast Iron and is machined to suit the Jain Thread Loc Plus™ coupler at one end and other end threaded as per 'BIS 554'

Installation Procedure

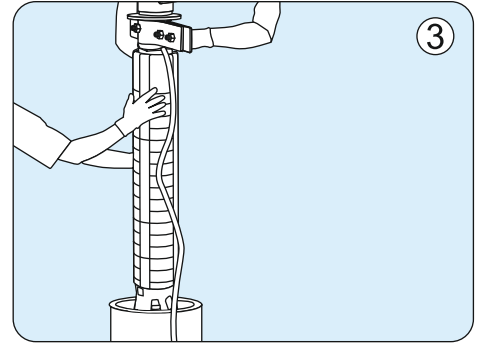
Please refer the following step-by-step procedure for trouble free installation of Jain Thread Loc Plus™ column pipes.



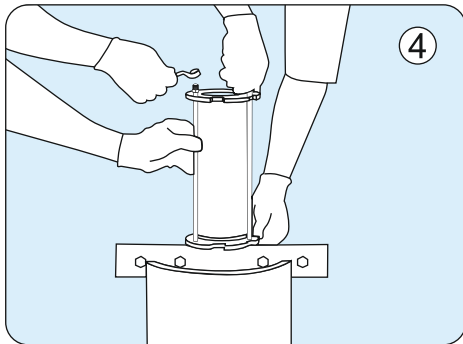
Connect the Pump connector with the Pump



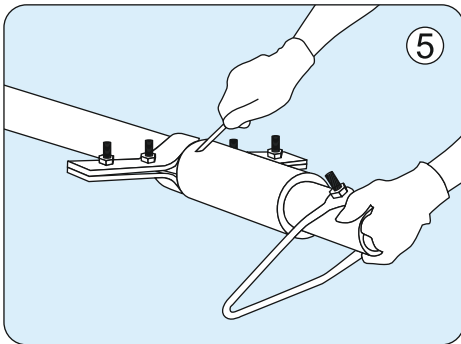
Mount the Holding clamp



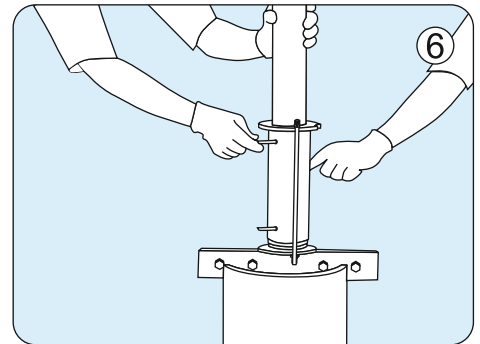
Lower the Pump



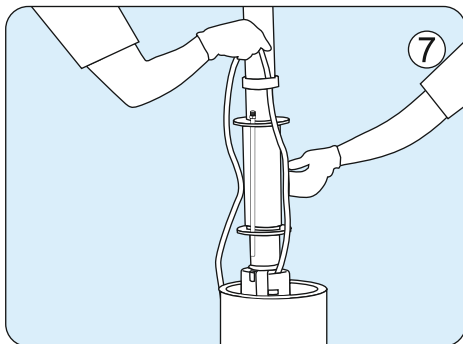
Connect the Pump Guard



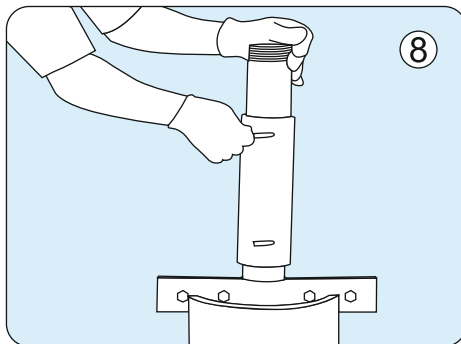
Prepare the next Pipe for Lowering



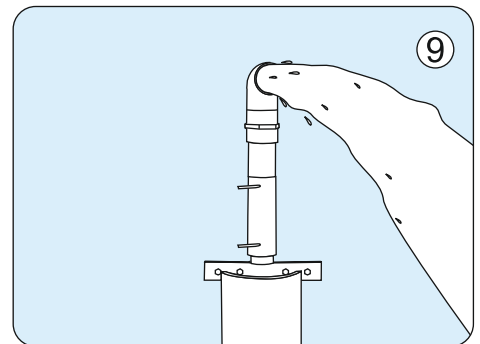
Connect the Pipe



Lock the Cable using cable clip



Repeat the Step 5,6 & 7 till all the pipes are lowered and connected to the top Connector



The well is ready to use



Why Jain Thread Loc Plus™ Column Pipe

Jain Thread Loc Plus™ PVC column piping system is recommended because -

- The joint can hold pump and motor dead weight.
- Can withstand the pressure developed by the pump.
- Can withstand the reverse thrust created during pumping.
- Can withstand the water hammer effect during “start / stop” of the pump
- Can withstand the TORQUE developed during “start & stop” of the pump.
- Is corrosion free, being made of specific PVC compound.
- Installation is made easy due to its light weight.
- Being thermoplastic, very smooth inner bore with “C” value of about 150 against 100 of GI pipes, so the frictional loss is kept at the minimum possible level.
- Due to very smooth inner bore of pipe (with “C” value 150) which remains the same throughout its service life as it is inert to corrosive nature of water, the friction head loss on the pump is constant and at minimum level. This reduces energy consumption. Due to above advantages, the system becomes energy efficient and pays for its cost out of the savings during its service life.

Do's

- Always refer the pipe selection chart for correct pipe selection.
- The Jain Thread Loc Plus™ Column Pipe should be used in tube wells where the diameter of the tube well is at least two inches more than the diameter of the pump.
- If the pump does not have open discharge at the well head, another Non Return Valve should be installed at the well head between top connector and system to be connected.
- Use double split clamps to hold the column pipe at the well head.
- Always mount the split clamp on pipe, below the coupler
- Use plain water or soap solution to lubricate the rubber ring and the spigot end of the pipe.
- Store the pipes under shade and on level ground in ventilated space .
- During installation, ensure that the rubber ring is at its place in the coupler.
- Always use the standard fittings supplied by the company.

Don'ts

- Do not install the pump without the non return valve in the pump.
- Do not use any grease or lubricant other than the one recommended during assembly.
- Do not use pipes with damaged / scratched ends as such a joint may leak or fail.
- Do not disturb the factory fitted assembly of pump connector.
- Do not remove the coupler by holding the pipe alone in the split clamp.
- Do not use any tool to lock or unlock the pipe.



THE COMPANY

Jain Irrigation Systems Ltd. is a diversified company with turnover in excess of ₹ 4200 crore. We have a Pan-India & Global Presence with 26 manufacturing bases spread over 4 continents. Our products are supplied to over 116 countries with able assistance from more than 3000 Dealers and Distributors worldwide.

We are the second largest Micro Irrigation company in the world. Our businesses include Complete range of Micro Irrigation Systems and Components; PVC and PE Piping Systems; PVC Sheets; Solar Water Heaters; Lighting & Pumping; Processed Fruits & Vegetables; Tissue-Culture, Green Houses etc.

We have the distinction of being the largest processor of Thermoplastic Piping in India. We annually process over 3,00,000 MT of various polymers.

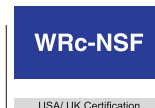
We extrude and injection mold PVC, PE, PP along with other engineering polymers like Polycarbonate, Polyamide, PBT, ABS etc. in our ISO 9001, ISO 14001 & BS OHSAS 18001 certified manufacturing facilities.

We have an enviable track record as a 'Total Solution Provider' for various Piping Systems for Water, Sewerage, Drainage, Sub-Soil Drainage, SWR, HSC, Lift / Drip / Sprinkler Irrigation, Effluents, Chemicals, Ash / Slurry, Offshore / Marine Outfall, Gas & Cable Ducting etc.

Our unending efforts in the pursuit of excellence with ongoing Research and Development have earned the Company the highest R & D awards of the country. Numerous other awards and recognition for our performance have been earned in Exports, Fair Business Practices, Quality, Excellence, Innovation, Environment, Product development etc. under the leadership of our Chairman Padmashree Dr. B.H. Jain.

The Corporation has pioneered the Piping Industry in India and helped harbingers a Second Green Revolution.

The reward has been millions of smiling farmers and scores of customers across the globe.



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