

**‘YOU’ can make it happen!**



**Jain Pipes**  <sup>TM</sup>

**Life-line for Mankind**

Defying the old equation of time, work & speed, here is the new equation to gain blessings of the thirsty !



Water is Life

# The 1st in India 7.27 kms long 'Urban Water Supply' project, completed using 500 mm dia. Jain PVC Pipes in record period of 45 days.

## Water.... Water ..... Water .....

The trading business town, Jalgaon quietly grown, to be fondly known as Pipe City over the past two decades. But simultaneously, has been raising many questions. Population crossed 4,00,000 mark. The industrial & domestic water requirement kept on increasing. A time arrived to search for water everywhere in Khandesh. Water-supply only twice a week brought tears to the people of Jalgaon. Talk of the town everywhere was water, water, water.

Jalgaon become Jalgaon



Projects with different pipe line materials like CI, MS & Cement Pressure Pipes were studied. But none of these could fit into the limited available time period & funds. Hence the Municipal Council approached the next door i.e. Jain Pipes.

## This is why the Pipe Line...

Jalgaon M.I.D.C. gets water from the river Tapi. It was possible to get some water out of this for Jalgaon City.

It was very necessary to get this water during the summer of year 2001. At least twice a week 20 MLD water could be sought. M.I.D.C. water storage tank to Jalgaon water central distribution tank distance was around 7 kms. But who will take-up this challenge and complete the job in the short time-span. Jain Irrigation Systems Limited accepted the challenge.



## Scope of Work...

500 mm diameter to be installed into 3.5 feet wide & 6 feet deep trenches.

The pipe line was to pass through roads, open surface, drains, rocks undulated terrains, industrial areas & densely populated residential areas. To manufacture these large dia. PVC Pipes, transport them to sites, lower in trenches & commission the line without a single drop of water leaking out.

This gigantic work was to be completed in mere 45 days.



Use water carefully to obviate its scarcity.

# Competent People alongwith Modern Machine & Equipment make effective the equation of time, work & speed.

## Machines & Equipment...

Considering the vast scope of work and a very short time span available, the entire planning and designing of the project was done with the help of computer. The entire pipe-line was divided into 4 sections, and the work started in all the 4 sections simultaneously. 2 Procklain + 2 Jeeps, 2 Tempos, 2 Buses, 6 Mobile Phones and wire-less sets were utilized. For medical services one emergency-Van was kept ready. A 40 feet long special trailer truck and 20' long trollies, were provided for the pipe transportation.



## The Manpower...

The Human factor was most important. Recognising this, the force was organised. Skilled forces Sr. & Jr. Engineers, Fitters, Plumbers about 25 people. In addition, about 200 to 250 unskilled workers Drivers and casual labourers to be counted separately. As the work was to go day and night appropriate lighting arrangement, hence the electricians, wiremen, security-men. A separate team was taking care of Food & Water at the sites.



## Human Reaction...

The citizen of Jalgaon were appreciating the `JAIN-PIPE' associates working in hot sunlight to bring water as `Bhagirat' (who brought river Ganga to earth). At the same time few were annoyed and angry as their telecom cables and water pipe-lines were damaged during the excavation. Both type of citizen after-all belong to the same Jalgaon city. We are heartily thankful to both of them for their co-operation.

## Thanks...

To complete this challenging project successfully we received immense co-operation from many. MLA Shri Sureshdada Jain - who planned for this project with fore-sight and was determined to execute it, Guardian Minister for the district Shri Lakshamanrao Dhobale and Rural Development Minister of Maharashtra Shri R.R. Patil sought all Govt. sanctions on priority - immediately, without any obstruction from the `red-tapism' . Maharashtra Industrial Development Corporation, Maharashtra Jeevan Pradhikaran, Maharashtra State Electricity Board, Public Works Deptt., Aakashwani, Bharat Sanchar Nigam Limited also extended their help for the task in time.



**Water is limited. Let us all conserve it!**

# Salient Technical Features :

With the scorching summer sun-shine at around 42-45°C temperature, the 'Pipe-Line' Project of Jalgaon Municipal council was completed on war-footing in record-time. The salient features of the project are as follows. For more information, please contact Jain Irrigation Systems Ltd., Jalgaon.

- 1) Nature of work : For water-supply to Jalgaon City to install PVC Pipe-line (Gravity-flow) between MIDC and Girna Tank, Jalgaon.
- 2) Length : 7270 meters.
- 3) Discharge : 232 LPS
- 4) Pipe Diameter : 500mm (outside), 475.4mm (inside)
- 5) Pressure Rating : 6 Kg/cm<sup>2</sup> Test Pressure length - 6110 Mtrs.  
: 9 Kg/cm<sup>2</sup> Test Pressure length - 1160 Mtrs.
- 6) Min. Water Level at source : 100 Meters
- 7) Storage Tank Max. Water Level : 76.75 Meters (Girna Tank)
- 8) Total Head : 23.25 Meters
- 9) Friction-loss in pipe-line : 19.64 Meters.
- 10) Residual Head : 3.61 Meters
11. Trench Dimensions : 1.2 Meters Width, 1.8 Meters Depth.
- 12) Jointing Method : Solvent Cement Jointing
- 13) Expansion Joint : 15
- 14) Air - Release Valve : 13 Nos. 4" Size (Double Action kinetic type)
- 15) Sluice Valve : 2 (500 mm)
- 16) Scour Valve : 2 (200 mm)
- 17) Water Meter : 1 No.
- 18) Throst - Block : 8
- 19) Total Culvert & Road crossing : 10
- 20) Date of Start of work : 25 February 2001
- 21) Date of commissioning Line : 11 April 2001
- 22) Date of Testing Pipe-Line : 16 April 2001



**Save Water, Save life!**

# How to get your work done effectively in the 21<sup>st</sup> Century : Few Guidelines ...

## 'Turn-Key'...

The days have gone, when a project was divided in pieces & the piece-work were dealt with separately. Now are the days to get a project completed on "Turn-Key" basis. Entire work executed by one & only one agency. No trivial matters to bother you. But to accept these kind of works is not a job of everybody. For this first one needs strong financial base and in addition equally important Technical & Administrative expertise. `Jain Irrigation' has enough experience to work on such `Turn-key' basis, not only in India but also in foreign countries.

## Design...

Jain Irrigation is fond of taking up big project works & work on them as if it is a Research & Development project. To study the work on hand scientifically, to compare with similar works completed in the past, to confirm the estimates & expected influences by experiments & tests is a continuous process at Jain Irrigation. On the basis of knowledge thus gained & strengthened the designs are drawn, time-tables are scheduled. Expenditure estimates are condensed. Emergency problems are projected & measures to counter them are planned, studied & necessary preparations are made. To execute all this in strict discipline in addition to computers a complete force of expert, experienced, qualified & trained technicians are ever ready.

## Continuous Supply of Material...

The success for any project lies in timely delivery of necessary material at the desired place. The quality of the input material obviously gets reflected in the quality of the completed project. Today 'Jain Irrigation' being a leader in our country in the polymer processing industry, it is easily possible for them to timely provide the different types of pipes & fittings with vary high quality as per International & National standard specifications. That is why they are recognized as the first PVC pipe industry in India to get accredited with ISO-9001 certification from RWTUV of Germany. This is their real strength.

## Work Quality & Speed...

Jain Irrigation has got all kinds of machines & equipment necessary for these kind of gigantic magnitude of works. They also have a fleet of Big cranes, Porclain, Excavators, Road-rollers, Dumpers & similar equipment etc. There are expert hands behind these machines & equipment to operate them. There are technicians to maintain & repair them. Jain Irrigation also has the `EYE' & `VISION' to see that while everything is being organised and managed, QUALITY is not neglected even for a moment.

## Write Your Own Success-Story...

Once you have selected `Jain Irrigation' to do this kind of works, you will ensure writing your own `Story of success'. Because, resting your load of responsibility on our strong shoulders, means success.

It is a glorious & guiding success-story for Municipal Councils, Municipal Corporation, Jilha Parishads, rural & Urban Water Supply Projects, Lift Irrigation Schemes, Irrigation Projects, Industrial Corporations, Development Authorities, Sugar Industries, Agriculture & Farm-houses, etc.



**The 3rd World-War, if ever fought, will be fought on Water!**

# Tell us the exact application and immediately we will advise you the correct type of pipe !

Conveyance, Distribution, Protection, Disposal or Lifting of Potable / Drinking water Irrigation water; Sewage water; Soil & Rain Water; various chemicals; Molasses; various Gases; Different types of Wires & Cables Ducting etc.. In short for infinite applications, 'JAIN PIPES' are at your service.



**PVC & HDPE Pressure Pipe** - High pressure water pipe-lines for Agriculture, Rural & Urban Water Supply, Lift Irrigation, etc.

**PVC & HDPE Suction & Delivery Pipe** - For Agriculture pumpsets in open-wells.

**PVC Well Casing & Screen Pipe** - For Tube-well & Bore-well.

**PVC & HDPE Sewage & Drainage Pipe** - For Soil & Waste water conveyance.

**SWR Pipe** - Soil, Waste & Rain-water drainage in buildings.

**PVC Column/Riser Pipe** - For Power-pumps & Hand-pump.

**HDPE Sprinkler Pipe** - For Sprinkler Irrigation can be laid over ground and shifted easily.

**PE Spray Pipe** - High pressure spraying of Pesticides and Insecticides.

**PE OFC Duct Pipe** - For Tele-Communication & Internet Cable Protection.

**PE Column/Riser Pipe** - For Tubewell & Borewell, with very less number of joints.

**MDPE Gas & Water Pipe** - For conveying Gas and Water specially.

**HDPE Land-fill Gas Extraction Pipe** - To get Gas from Waste.

**Pipe & Fittings** - All types of fittings available for PVC & PE pipes 20mm to 500mm N.D.



**Variety of Jain Pipes to suit your different needs!**

# Once you have decided to accept Micro Irrigation System, we will give you a range of alternatives....

## XXXXX XXXX XXXXXXXXXXXXX

The most experienced in the country, working satisfactorily on more than 40 crops spread over 700,000 acres - The one and only one Micro-Irrigation System "JAIN DRIP".

For Water supply & management, modern irrigation and high-technology farming Jain Irrigation has a wide range of its products.

**J-Turboline (Dripper-Line)** - During manufacturing itself the J-Turboline drippers are fitted inside the tubing. It can be installed over-ground and buried underground as well. J-Turboline is also available with Pressure-compensation. Available in 12 & 16mm diameter with various Drippers spacing to specifically suit different crops.

**Drippers / Emitters** - 21 different types of drippers, classified based on different discharge rates; openable to facilitate cleaning; factory sealed unopenable; could be fitted on-



line; factory fitted In-line with different spacings; Externally visible colour-coded to identify discharge rate; different shapes & models suitable for crop-specific needs etc..

**Polytubes & Hoses** - With integral 'Yellow-Line' as an identification mark for Jain's, with different diameters & thickness as per different international and national standard specifications.

**Spray-Heads, Jets & Foggers** - To satisfy need of higher dispersed discharge rates. Can be fitted with micro-tube / normal tubing. Small mini/ micro sprinklers and jets. Very fine atomised spray/ mist created by Foggers.

**Filters** - Different types of water filters suitable for the filters, quality of water. Screen filters, Dis Media (Sand) filters & combination of both; small suitable for even domestic application to big ones for large areas; vertical and horizontal; operated manually, semi-automatic & completely automatic; made of metal and plastic, etc.

**Sprinklers** - Made of metal, spring-loaded & impact sprinklers; plastic with no moving part except a silicon rubber tube. Different models suitable for domestic gardens to large farm-lands & ore-mines (for dust suppression) with different discharge rates, area of coverage / wetting-patterns available with all spares.

**Pop-ups** - Remain under-ground un-visible when not in use. Nozzle pops-up and sprinkles water in different wetting patterns like 90°, 180°, 270° & 360°.

**Rain-Guns** - Big-size sprinklers for rain-like sprinkling of water at high pressure on large-areas suitable for farm-lands and dust-suppression.

**Valves** - For very good effective control on pressure & flow of water and air in pre-line without any leakages. Made of PVC / NYLON / ABS in size range of 0.5" to 3" nom. Diameter. Could be operated manually, semi-automatic or fully automatic with computer control.

**Automation Equipments** - To control time, quantity, direction, speed / rate, area of application semi-automatically or fully automatically. Range of different systems operated with or without computer as need by customer.

**Fertigation System** - For fertilizer application in specific concentration & doses as per time-schedule in liquid form with irrigation.

**Whatever may be the type of climate soil, water, crop, fertilizer and your budget you may directly come to Jain Irrigation. We will not only provide you the answer to exactly satisfy your need but would also supply, install, commission it and also train you to operate & maintain it.**



**Jain Irrigation Systems Ltd.**

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