

## STAINLESS SUSTAINABLE SAFE



# STAINLESS STEEL INTEGRATED PLUMBING SYSTEM



### **HERITAGE OF JINDALS**

Established in 1970 by steel visionary Mr OP Jindal, Jindal Group has panned across 50+ countries marking a global footprint and positioned as top 5 business conglomerates in India. The group is backed by a workforce of diverse professionals, churning business of over \$25 billion annually.

Jindal Stainless is an eminent part of the massive Jindal Group, contributing a staggering INR 2200 Crs annually through its varied businesses. It is one of the world's largest integrated manufacturer of stainless steel. The group has a state-of-the-art stainless-steel plant in Odisha and is a market leader in galvanized steel and saw pipes.

JSL Lifestyle (JSLL) is an absolute subsidiary of Jindal Stainless Ltd, founded 15 years ago, dedicated towards finished products of stainless steel. JSLL is committed to creating an 'aspirational stainless culture' in India in both B2C and B2B domains. It strives to bring richer life experiences by infusing modern functionalities and designs into stainless steel. With our state-of-the-art massive manufacturing capabilities in Chennai, Rohad and Pathredi, we deliver scale, quality and finish of global repute.



JSL Lifestyle is India's largest integrated stainless solution provider, proffering a range of products and services through its diversified verticals – JSLL Value Engineering (in OEM services), JSLL Mobility (public sector manufacturing projects especially Indian Railways), JSLL Infra (urban development projects), JSLL Plumbing (stainless plumbing solutions), Arc (masstige stainless kitchens and tableware brand), and Arttd'inox (a premium designer home fashion lifestyle brand extending kitchens and homeware solutions).

JSLL commenced its profound journey 15 years back, with India's exclusive stainless home lifestyle brand Arttd'inox. The essential DNA of the brand is in its French-inspired name signifying 'Art in Stainless Steel', that is creating luxury wonders with steel. For many years, the brand has grown to have an effective retail footprint in the domestic market proffering a broad homeware and home-space range for its patrons comprising of Tableware, Home Décor, Bespoke Kitchens, Vanities and Wardrobes.

## **ABOUT US**



An integrated plumbing solution provider in stainless steel with comprehensive pipes and fitting solutions in grade EN 316L and JIS 304 & 316L, guaranteeing quality products with easy installation.



JSLL Mobility is the tender-based manufac turing arm that caters to the mobility sector, especially Indian Railways and Delhi Metro with a wide variety of products like retention tanks, coaches, chassis etc.



It provides a wide variety of infrastructural products such as Railings, Facade, Claddings, BQS, Structures, Benches, Dustbins, Toilets, Sanitary Solutions etc. with a dynamic and versatile service outlook.



A recent addition in our home-lifestyle business, Arc is a revolutionary stainless steel kitchen brand positioned in a mass-prestige segment in the Indian retail landscape



Assisting a variety of companies in procuring stainless steel products and components across industries, it extends exhaustive capabilities and aggressive support in product development and delivery.



India's first um segment proffering a broad home-ware and home-space range for its pa trons, comprising of Tableware, Home Décor, Bespoke Kitchens, Vanities and Wardrobes.



# SUSTAINABLE AND SAFE SOLUTION IN STAINLESS



We are an integrated plumbing solution provider that extends precisely engineered steel pipes and fittings. We deliver solutions that transform job-site efficiencies by understanding the needs of plumbing contractors both from a large project perspective to a single application. Our exhaustive stainless-steel range delves into fixtures of crimped products, surface treatment facilities for pipes and tubes that range from residential buildings to the public and even commercial settings.

In today's world, where consumers are well exposed to the healthy way of living, stainless steel is becoming a way of life. After generations, the present world millenni – als are returning to the old ways with modern sensibili – ties. Our entire product range is exclusively in 316L grade stainless steel. Given that stainless steel is widely known as 'Green Metal', it is the only metallic material that is suitable for 'drinking-water pipes'. With the best in class manufacturing capabilities, global technologies and best in class quality standard assurance, JSLL Plumbing is your one-stop solution for all the plumbing requirements. Being resistant to corrosion and high on hygiene maintenance, the stainless-steel pipes preserves water from contaminating.

### **INHERITED BUSINESS EDGE**

Backed by the House of Jindals, the largest producer of stainless steel in India Backward integration of raw material for most of our products The strong legacy of operating in 'stainless-steel' for decades Forward integration with our retail footprint Honing business partner relationships with long-term vision and perspective 100% customer satisfaction focus and compliance with customer SOP for each process Customised solutions, hassle-free services for all products

### POWERFUL VALUE PROPOSITION FOR CONSUMERS AND BUSINESS PARTNERS

JSLL Plumbing provides sustainable solutions for the versatile domestic market panning from residential to industrial projects in pure stainless-steel, straight from the House of Jindals. Our well-oriented global technology along with the best in class quality assurance extends the exhaustive range for varied use, stretching aggressive support in project development. With the products in exclusive 316L grades, we deliver customer satisfaction with the best quality. Our seasoned and resourceful team is well aligned with the industry needs and extends solutions efficiently in diverse projects.

### WHY US?

category

The exclusive leading player in stainless steel space uniquely with both B2B and B2C interface

- Best in class product portfolio catering to all plumbing needs in SS
- State-of-the-art plant with the ability to serve large quantities in short lead time
- Self-reliant group securing competitive pricing
- A unique blend of manufacturing abilities and marketplace sensibilities
- Strong in-house designing, tooling and sourcing capabilities of global repute
- Zero compromises on product quality
- High level of innovation & technological advancement Powered by a strategic understanding of the market and the

### **DOMINANT PRODUCT EXCELLENCE**

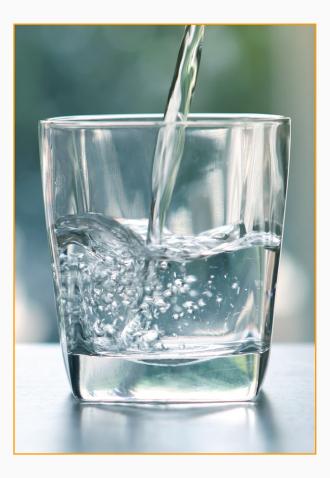
Wide variety of sizes to suit all need Top-notch technology for reliability High-quality standards Secures home investment and ensures product longevity Zero compromises on material grades for high quality, longevity and durability Sustains treated, softened, rain, distilled, osmosised, de-carbonated, de-mineralised & de-ionised water Seamless locking with revolutionary 'press-fitting' systems Easy and hassle-free installation with no flame required Ensure drinking water integrity Designed for minimum 50 years of service Fire-resistant, leak-proof and non-toxic

### WHERE TO USE?

Distribution of Potable Water in Buildings Distribution of Potable Gas in Buildings Plumbing Systems in High-Rise or Independent Projects –

- Commercial (Hospitals, Offices,
  - Hotels, Conveniences)
- Industrial
- Residential

Niche Naval Construction Projects: Offshore & Onshore





### BROAD RANGE IN PLUMBING TO SUIT ALL NEEDS NEEDS IN EN 316L

Comprehensive range of stainless steel plumbing solutions, together with pipes, fittings and press tools , taking care of all plumbing requirements.

Pipes Sizes: from 15 mm to 108 mm diameter

Material: Stainless Steel composition of Austenitic X2CrNiMo17-12-2

Special Manufacturing: Electric Resistance Welding (ERW) Process of Manufacturing

Quality Oriented: 316L grade of SS manufactured according to EN 10312 standard

Fittings: Available in various sizes from 15 mm to 108 mm diameter

## **PRODUCT OVERVIEW**







FTE

XYZ

Sleeve





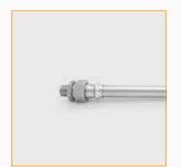
Сар



**FTA** 



Female Union



Male Union



Reducer



ΜΤΑ



Reducing Tee



Socket



Female Tee





Elbow 45

Elbow

### FIRM TECH DILIGENCE FOR SUSTAINABLE DELIVERY

Product	Grade	Standard	Recommended For	Recommended Application			
Pipe				Potable water, drinking			
Fittings	EN 316L X2CrNiMo17-12-2	EN 10312	200-1000 ppm of chloride	water, cold and hot water applications, especially effective for coastal region.			
EPDM o-ring Sealing gasket		681-1	min temp -20'C max temp 110'C	Crimping type V-Press			
Pressure	Working pressure 16 bars & tested up to 25 bars						
Material Code	1.4404 (316L)						

### **HIGH-TECH PIPE MANUFACTURING**

- 1. Longitudinal electro-welding in neutral atmosphere.
- 2. Checked with the eddy current system with procedures s.e.p. 1914 & s.e.p 1925.
- **3**. Dimensional tolerances of the product conform to EN 10312 standard.
- 4. Pipes are marked with indelible inks and plugged on both ends.
- 5. Marked with producer logo, material details, product dimensions and heat number.

### **FINEST FITTING PROFILE**

- Made according to the specification of DVGW W534 (SS fittings for drinking water).
- 2. Type of profile adopted is "v-press" with hexagonal pressing.



### **GASKETS SEALS-O-RING**

- 1. O-ring is made up of EPDM (ethylene propylene diene monomer).
- 2. SS material stands sturdy against ageing, ozone, sunlight and weather.
- 3. Protects against alkaline substances & several chemical compounds.
- 4. Ensures safe and durable use for civil and industrial applications.
- 5. Maximum operating temperature handled by sealing gaskets is 110°C.
- 6. EPDM O-Ring complies with International standard EN 681-1.

### PIPE AND FITTING RANGE DESCRIPTION (IN MM)

OD	15	22	28	35	42	54	76.1	88.9	108
Thickness	1.0	1.2	1.2	1.5	1.5	1.5	2.0	2.0	2.0

### **PRESS TOOLS**

- 1. Electro-hydraulic tool crimps all sizes up to OD 108 mm.
- 2. Equipped with a suitable interchangeable jaw according to the pipe size to crimp.
- 3. On locking of the jaws, a controlled deformation occurs of the fitting-ends & pipe to form a permanent watertight joint.
- 4. Maximum working pressure is 16 bars and is tested up to 25 bars.

## EXTENSIVE RELEVANCE WITH SUPREME QUALITY



### Wide Application Area

Versatile project application: high-rise and independent projects Broad nature of projects: Commercial (Hospitals, Offices, Conveniences, Hotels), Industrial, Residential Used for multiple naval construction sites





### Fit For Drinking Water

Our press-fit system is safe and beneficial in all applications for drinking water Withstands temperature from -20°C to 110° C

### Apt for Heating/Cooling

Suitable for heating or cooling systems with 'speed of system' implementation Owing to the ease of installation, our systems are extremely user-friendly Guarantee of authenticity delivering high quality and resistant materials



#### Suitable for Compressed Air/Gases

Applicable for systems routing compressed air (degreased) Can operate at working pressure of 16 bars

### Sturdy Fire Protection

Stainless pipes are immune to fire hazards Suitable for firefighting & sprinklers system with pressure up to PN 16

### Brilliant 316L Grade Press Fitting

Press fittings of grade 316L can easily be used in systems with non-potable water Water transport for large civil works, systems for treated, softened, rain, distilled, osmosised, de-carbonated, de-mineralised and de-ionized water Suitable for niche developments like shipbuilding in naval construction where internal tracts are to distribute refrigerated water; for sanitary or firefighting systems.

## **WORLD OF BENEFITS**



EPDM polymer is non-resistant to combustible gases, oil, gasoline, turpentine & hydrocarbon in general.

## COMPARISON OF VARIOUS PLUMBING MATERIALS

Parameter	GI	PPR	CPVC	Copper	Stainless Steel	Remarks
Maintenance Free Life	+	+++	++	+++	+++++	No need of replacement for up to 50 years
Saves Installation Time	+	+++	+++	++	+++++	Fast to install (approx. half time of GI piping)
Earthquake Proof	+++	++	++	+++	+++++	Withstands vibrations and shocks due to its ductile nature
Corrosion Resistant	+	+++++	+++++	++++	+++++	Offers best corros <mark>ion</mark> resistance
Ease of Installation	++	++	+++	++	+++++	Fast installation with very few workers

+ - Poor | +++++ - Be<mark>st</mark>











GALVANISED IRON POLYPROPYLENE

CPVC

COPPER



Parameter	GI	PPR	CPVC	Copper	Stainless Steel	Remarks
Cleanability	+	++	++	++++	++++	No deposit buildup due to smooth surface
Fire Resistant	++++	+	+	+++	++++	Withstands high temperatures
Water Quality Effect	+	++++	++++	++++	++++	No change in water quality during storage
Application Range	+++	++	++	++++	+++++	Used for passages of air, water and various other gases
Cost	++	+++	+	+++++	+++++	Offers Best Life Cycle Value

+ - Poor | +++++ - Best



## COMPETENT TOOLS FOR EFFICIENT PERFORMANCE

The tools are designed for effortless handling and installation of the system, even in the most challenging environments.

### **CUTTING TOOL**

Irrespective of the site complications, our tools are designed for effortless handling and installations. Our mechanical cutting tool comes in 3 sizes (15 - 40 mm, 15 - 64 mm and 15 - 108 mm), with a long-lasting changeable cutting blade. The tool is just fitted on the pipe at the required length and rotated.

### **INSTALLATION**

- 1. Tube is cut to the required length using the mechanical cutting tool.
- 2. Tube is pushed in the stainless-steel press fittings until the tube stops.
- **3**. Jaws of the electro-mechanical press tool are then fitted on the press-fitting where a single button operates the press tool and the joint is crimped.
- 4. The crimped joint is checked using the gauge.



### **PRESS TOOLS**

Our electro-mechanical pressing tool consists of an electro-mechanical unit and a set of 5 jaws. While there is a choice of making the pipe connections in different size ranges, we extend it to a range of 3 electro-mechanical press tools:

- 1. Mains operated electro-mechanical pressing units
- 2. Self-monitoring sensor system
- 3. Manual pressing unit



### **EASY INSTALLATION PROCESS**

A set of pressing jaws for the pipe size is fitted into the pressing unit. The automatic action of all pressing units always ensures the required maximum force is applied on the jaws or collars reliably.



A set of measuring gauges and pressing jaws enables pressing of any size fittings.

**Disclaimer :** The brand of tools may change as per company discretion.

## **OUR KEY CLIENTELE**























Cancer Hospital, Lucknow



AMRITA HOSPITALS

Dr. Bhim Rao Ambedkar Hospital, New Delhi

IAS Flats by ERA Infra, New Dellhi



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Disclaimer : The technical data are not binding and not expressly warranted characteristics of the goods. These are subject to change. Place consult our general conditions of supply. Additional information is available upon request. It is the designer's responsibility to select product suitable for the intended service and o ensure that pressure ratngs and performance data is not exceeded. Always read and understand the installation instructions.