Johnson Screens

A brand of
Aqseptence Group

Drop Pipes and JSL Core Connection

The geometrical characteristics (diameter, depth), pump pressure and water quality are the main factors in determining the choice of the drop pipe and the fitting type. These choices are important for the productivity, longevity and sustainability of a well.

Stainless Steel

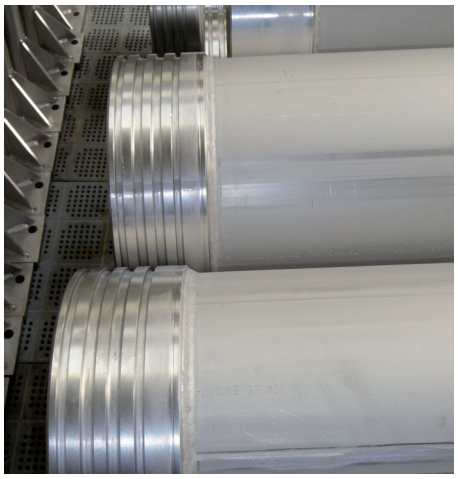
The use of stainless steels is an asset to guarantee the longevity of the riser column. It helps to secure long-lasting investment and reduce maintenance cost.

For drinking water, stainless steel has been widely used, particularly because of health regulation.

Johnson Screens® JSL Core drop pipes are manufactured from stainless steel grade AISI 304L or 316L.

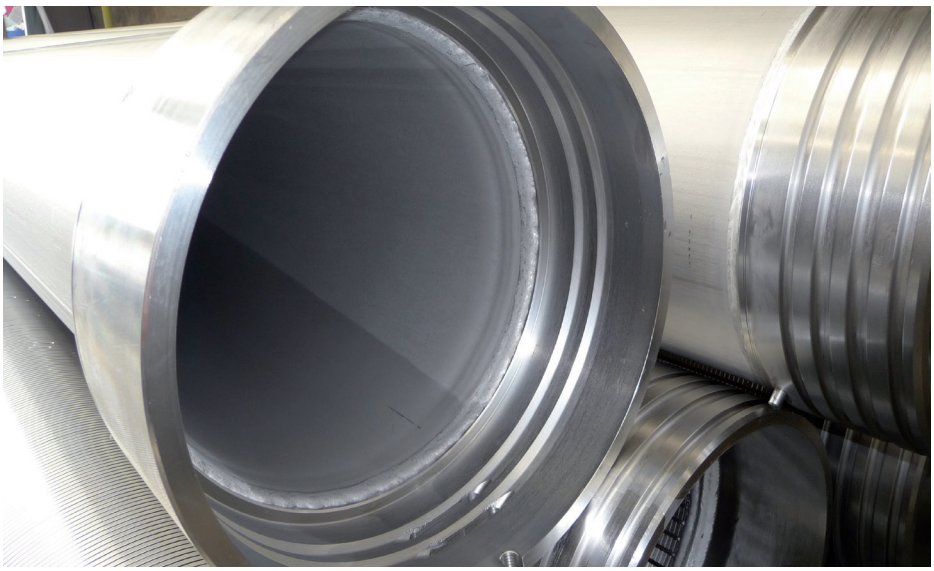
Other materials (duplex, super duplex, etc.) can be used for particular cases.

A surface treatment (pickling-passivation) can be done as a final operation to produce a uniform metal oxides protective layer that provides maximum anti-corrosion protection.



JSL Core Connection Features

- Stainless steel
- Compact quick connection
- Easy assembly and disassembly
- Suitable for large-diameter risers



The Importance of the Fitting

Each fitting has its advantages and specificities. The conventional flange fittings are cumbersome and take a long time to install.

Threaded fittings require special precautions to ensure tightness and prevent galling.

Johnson Spring Lock (JSL) is an economical solution combining compactness, a water tight seal and ease of assembly.

Fitting Design

- Four grooves machined around the male end
- Two O-rings to ensure the water tightness
- Two slots on the female end used to insert a flexible rod, intended to withstand traction forces, into each intermediate groove
- Twisting forces on pump start-up and shutdown are neutralized by a pin on a male end which engages into a notch on the female end

Installation

- No special tools are needed to assemble or disassemble a riser with JSL fittings
- Once the O-ring are set, the male end is inserted into the female end after alignment of the anti-rotation pin and notch
- When the end is fully seated, a stainless steel flexible rods is inserted into the slot. Once the rods reappear on the other side of the slot, the connection is complete.

Performance

Sealing

The tests performed on the fittings show that the sealing class is 80 bars (see table on page 3).

Traction

Our fittings are seamless, machined in heavy wall pipes or centrifugal stainless-steel cast. Pull tests show tensile strength values greater than those of most required applications.

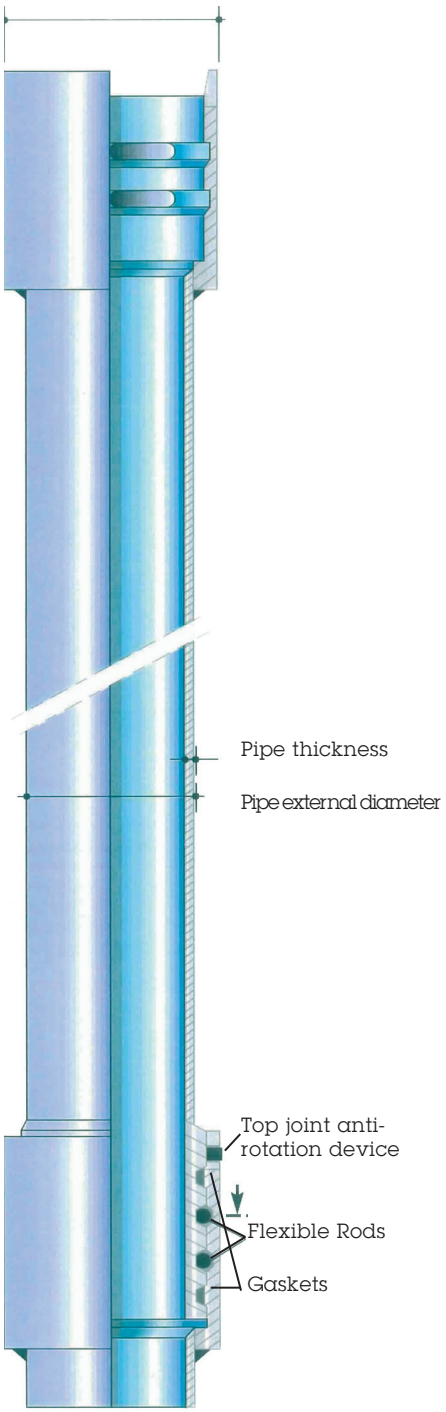
Our Services

We can assist you to design your riser system:

- Calculations on the mechanical resistance (collapse, burst and tensile resistance)
- Advice on the material selection
- Additional services, including pickling-passivation
- Supply of handling and installation accessories (collars, lifting heads, centralizers, etc.)
- Design of the well head according to your needs

Dimensional Features

DN	Pipe Ext. Diam. mm (in)	Connection Ext. Diam mm (in)	Max. Tensile[1] SF2:1 304, 304L, 316L kg (lb)	Pressure Rating[2] bar (psi)
50 (2PS)	60.3 (2.38)	89 (3.5)	9,150 (20,150)	80 (1,160)
65 (2.5PS)[3]	76.1 (2.87)[3]	105 (4.13)	9,900 (21,800)	80 (1,160)
80 (3PS)	88.9 (3.5)	118 (4.65)	14,750 (32,500)	80 (1,160)
100 (4PS)	114.3 (4.5)	143 (5.63)	17,550 (38,650)	80 (1,160)
125 (5PS)[3]	139.7 (5.56)[3]	168 (6.61)	18,300 (40,300)	80 (1,160)
150 (6PS)	168.3 (6.63)	197 (7.76)	25,200 (55,550)	80 (1,160)
175 (7"5/8)	193.7 (7.63)	222.5 (8.76)	27,500 (60,600)	80 (1,160)
200 (8PS)	219.1 (8.63)	248 (9.76)	27,500 (60,600)	80 (1,160)
250 (10PS)	273.1 (10.75)	302 (111.89)	37,200 (82,000)	80 (1,160)



1. Maximum tensile of the JSL connection itself. When welded to pipes the global tensile of the product might be different. Please consult JOHNSON SCREENS for further information.
2. Pressure tested without leak at minimum 120 bar (1750 psi).
3. Designed for ISO tubes DN65 (76.1 mm) and DN125 (139.7 mm). Adaptable for 2.5PS tubes (73.03 mm) and 5PS tubes (141.3 mm).

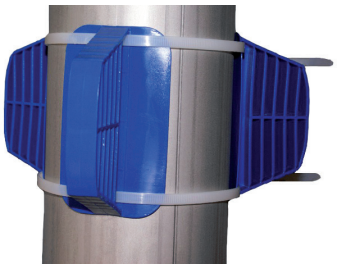
Dimensional Features

The standard useful lengths of riser pipes are 6.1m or 3.1m.

Joints for pump and well head connections are customized according to the pump's and well head end fitting type (gas thread, flange, etc.).

Accessories

Here are some examples of additional equipment typically used in combination with our columns :

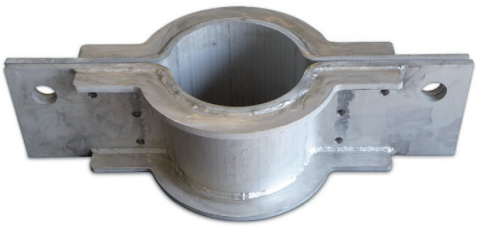


1. Centralizer

2. Lifting Heads (CE-Approved)

3. Centralizer

4. Well Heads



5. Suspension Collars

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