

# BROCHURE

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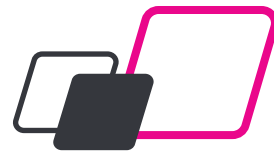
[www.rashmigroup.com](http://www.rashmigroup.com)

Ductile Iron Pipes  
and Fittings with  
**RASHMI-LOCK**  
Restrained Jointing  
**SYSTEM**

DN100 - DN600

[www.rashmigroup.com](http://www.rashmigroup.com)

# RASHMI - LOCK Restrained Joint Ductile Iron Pipeline System



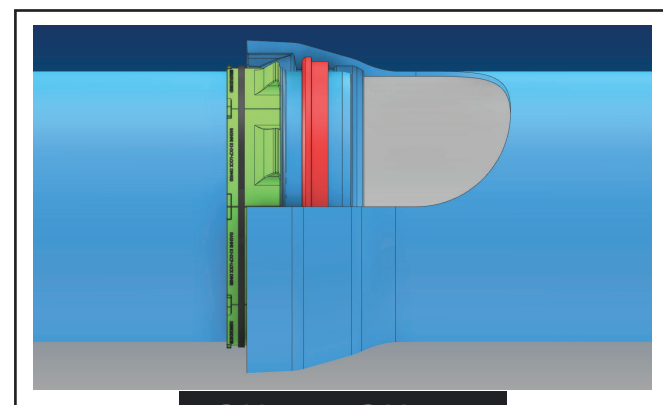
RASHMI-LOCK Jointing system is a restrained semi flexible push-in-jointing of Ductile Iron Pipes. It is a Self-Restrained, semi-flexible jointing system of socket and spigot pipe. The joint can be deflected up to the designed value as per function of size range. Water or other fluids passing through the pipe line exert internal pressure on the walls of the pipe barrel and the same force is being transferred to the other pipe.

RASHMI-LOCK Jointing system helps in transferring the thrust forces generated to next pipe through weld bead made on spigot of each pipe via lock segments. The Complete Jointing Assembly make joint self-restraining thus eliminating the

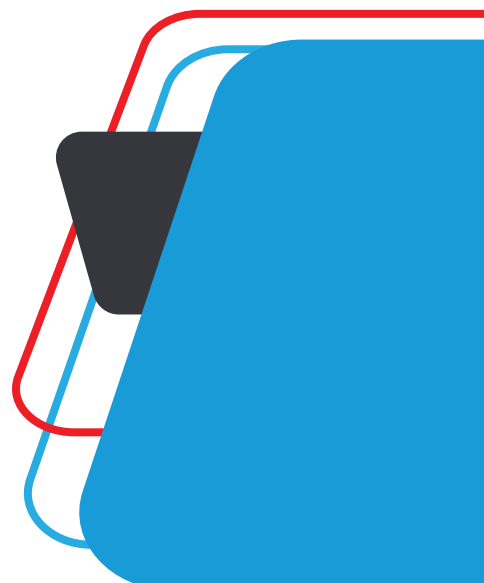
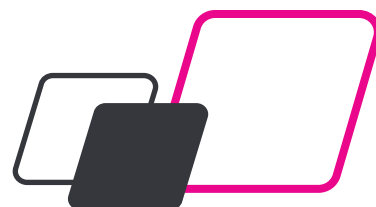
need of thrust blocks and facilitate trenchless laying of ductile iron pipe lines. Ductile iron pipes with RASHMI-LOCK Jointing system are quick to assemble and

well suited to be used in seismic zones, fault crossings, liquefaction zones, connections to structures, floating pipe lines, Hydro Power plants, laying on steep slopes, firefighting water mains and mine dewatering pipelines without thrust blocks or external restraining requirement. EN545/ISO 2531/ISO10804-1 with suitable range of fittings.

RASHMI-LOCK Jointing system is available in size range from DN100-DN600 as per



DN 100 - DN 600



## TECHNICAL DATA

### RASHMI -LOCK Ductile Iron Pipe - Technical Specifications

**Table 1: RASHMI-LOCK Ductile Iron Pipe - Technical Specifications**

Product Name	RASHMI -LOCK suitable for restrained semi flexible Push-on-Jointing
Size Range	DN 100mm to DN 600mm
Standard Length	5.5 m or customized length *
Internal Linings	<ul style="list-style-type: none"> <li>• Sulphate resisting cement</li> <li>• Blast furnace slag cement</li> <li>• Ordinary Portland cement</li> <li>• High Alumina cement</li> <li>• Poly urethane coating: Under development.</li> <li>• Seal coat : Under progress</li> </ul>
Outside Coatings	<ul style="list-style-type: none"> <li>• Zinc or Zinc-Aluminium deposition of 130g/m<sup>2</sup> / 200g/m<sup>2</sup> / 400g/m<sup>2</sup> with finishing layer of Blue or Red Epoxy, Bitumen</li> </ul>
Coating of Joint Area	Blue or Red Epoxy / Bituminous coating
Conforming Specifications	Design : ISO 10803 Product : ISO 2531; BS EN 545 Joint : ISO 10804 Rubber Gasket : ISO 4633, BS EN 681-1

\*Options available only with prior arrangement





# RASHMI -LOCK SYSTEM Pipe Dimensions

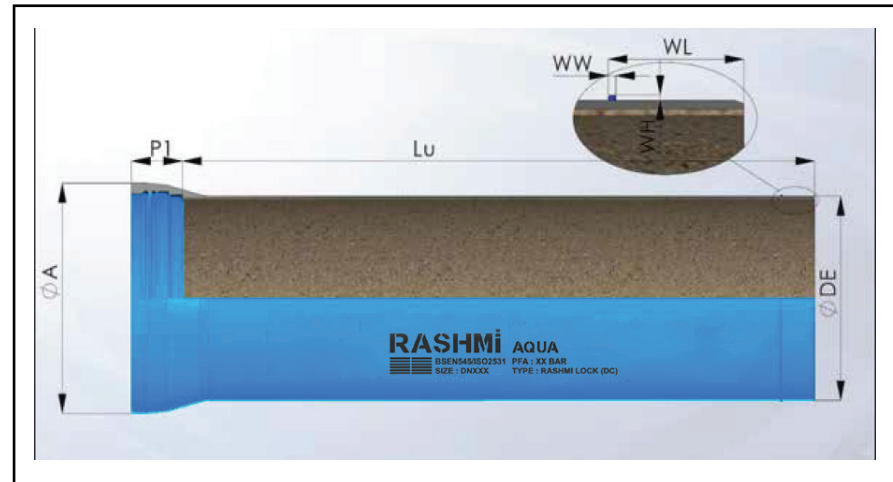
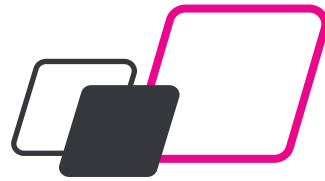
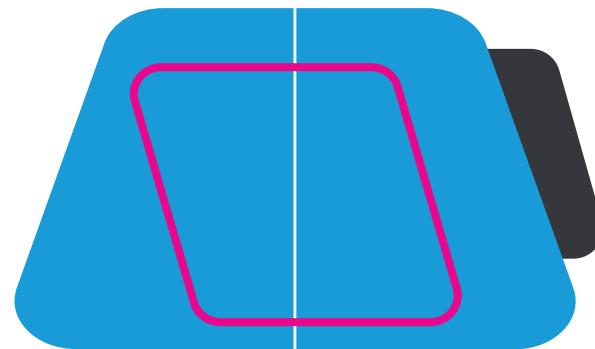
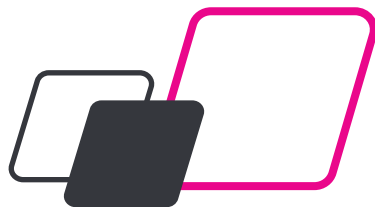


Table 2: RASHMI -LOCK Pipe Dimensions

Size	Dimensions (mm)			P1	WL
	DN	DE	Water / Sewerage		
		A	A		
100	180	170	170	123	85
150	170	246	246	130	85
200	220	290	290	142	95
250	274	354	354	163	100
300	326	410	410	174	105
350	378	460	460	171	110
400	429	540	**	183	117
500	532	670	**	200	117
600	635	786	**	216	128

\*\*deailles can be arranged on request



# RASHMI -LOCK SYSTEM Allowable Pressure

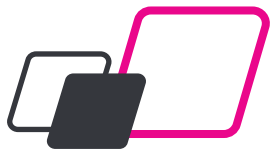
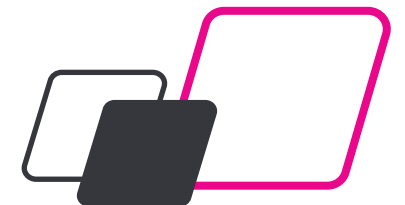
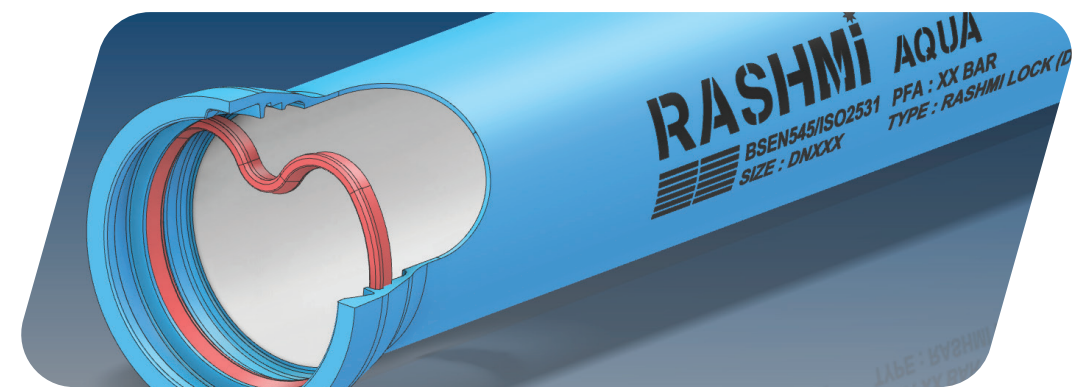


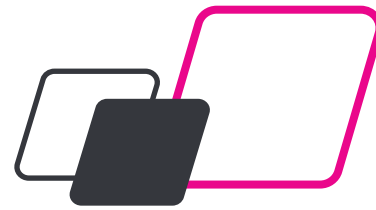
Table 3 : RASHMI LOCK allowable Pressure

Size	PFA *(Allowable operating Pressure), bar		Allowable angular deflection	No. of locks
	Water / Sewerage	High Pressure application		
			{0}	(KN)
100	40	100	5	5
150	40	100	5	5
200	40	64	4	8
250	40	64	4	8
300	40	45	4	8
350	30	38	3	8
400	30	35	3	8
500	30	35	3	9
600	35	*	2	10



# ADVANTAGES

## RASHMI-LOCK Ductile Iron Pipe



### Advantages include:

- Provides a robust pipe system with simple locking mechanism from DN 100 to DN 600 respectively.
- It can withstand pressure surges and possible unforeseen influences over an enduring lifetime.
- The simple locking system saves a great deal of installation time.
- Polyurethane coating and lining (wherever provided) provides extraordinary high C-value, more adhesive strength, more elasticity, higher mechanical strength and high abrasive resistance.
- The deflection in the jointing system provides flexibility during operation.
- It can be used in regions with elevated earthquake or earth settlement risks.
- The very high angular deflections make these joints suitable even for the laying in complicated and demanding intersections.
- Advantage of laying without anchorage or thrust blocks in conventional open trenches.

### AREAS OF APPLICATION

#### RASHMI -LOCK Restrained Joint Piping System

- Trenchless laying of Ductile Iron pipe lines
- Laying of Ductile iron pipe lines without thrust blocks – for water Application.
- For higher pressure applications.
- Laying of Pipe lines on steep slopes
- Hydro-power applications
- Mining applications such as dewatering and temporary water distributions
- Bridge pipelines
- Laying by Horizontal Directional Drilling -Trenchless Application
- Snow making pipelines
- Firefighting Mains
- District Cooling/Heating Pipelines
- Floating Pipelines in water
- The pipes are designed to sustain high pressure ranging from 100 bar to 16 bar in sizes

