



HUBLESS CENTRIFUGALLY CAST IRON PIPES AND FITTINGS

For Soil, Waste, Ventilation & Rainwater Purposes



Bengal Iron Corporation

TECHNICAL SPECIFICATIONS & PRODUCT CHARACTERISTICS:

1. SPECIFICATIONS:

1) As per IS 15905

2. USES:

BIC Hubless Cast Iron Pipes & Fittings are used in drainage systems for the following purposes:

- a. Soil
- b. Waste
- c. Ventilation
- d. Rain Water

3. RANGE & NOMINAL SIZES:

BIC Hubless Cast Iron Pipes & Fittings are manufactured and available in the following nominal sizes (pipe length: max. 3000mm)

- a. 75mm
- b. 100mm
- c. 150mm

4. METAL GRADE:

FG150 as specified in IS 210.

5. MECHANICAL PROPERTIES:

1. Specific Mass	7.15 kg/dm ³
2. Tensile Strength	150 N/mm ²
3. Hardness	230 BHN max.
4. Co-efficient of Expansion	11x10 ⁻⁶ /deg. C
5. Crushing Strength	300 N/mm ² min.

6. HYDROSTATIC TEST PRESSURE:

0.07MPa

7. PAINT:

Black bitumen outside and inside.

8. TOLERANCE:

1. External Diameters:

Nominal Size	External Diameter	Tolerance On
DN	DE	DE
75	83	+2/-1
100	110	+2/-1
150	160	+2/-1

2. Thickness:

Nominal Size	Thickness			
	Pipe		Fittings	
DN	Nom.	Min.	Nom.	Min.
75	3.5	3.0	4.2	3.0
100	3.5	3.0	4.2	3.0
150	4.0	3.5	5.3	3.5

3) Lengths:

a) Pipe: ±20 mm b) Fittings: ±5 mm

4) Masses:

a) Pipe: -15% b) Fittings: -15%

HIGHLIGHTED BELOW ARE SOME ICONIC INDIAN INFRASTRUCTURE PROJECTS WHERE OTHER BIC PRODUCTS HAVE BEEN USED:



Rashtrapati Bhavan Estate, New Delhi



Taj Bengal, Kolkata

INTERNATIONAL PRESENCE



UNITED STATES



UNITED KINGDOM



CANADA



ITALY



SWITZERLAND

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CASTING A BETTER FUTURE

HUBLESS CENTRIFUGALLY CAST IRON PIPES AND FITTINGS

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HARNESS THE POWER OF HUBLESS



BENGAL IRON CORPORATION

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COMPANY INSIGHTS

Founded in 1965, BIC has grown to be an industry leader in the field of castings manufacturing, both in India and abroad contributing to a better, safer and cleaner future. The company is headquartered in Kolkata and is propelled by its continually improving manufacturing unit in Howrah. Guided by strong core values, the company's operations always keep its customers' requirements in mind.

With an in-house machine shop, laboratory, load testing machines, shot blasting equipment as well as pattern making capabilities BIC prides itself to be able to closely monitor processes from raw material procurement to finished goods quality checking. This enables the company to provide superior quality as well as manage high customizability.

ADVANTAGES OF BIC HUBLESS CAST IRON PIPES & FITTINGS:

- 1. Ease of installation:** Hubless pipes eliminate hazardous and time consuming traditional methods like lead caulking or dripseal joints need to be used. Our specially designed couplings enable quick and hassle free installation.
- 2. Flexible Reorientation:** The hubless system allows for reorientation of the drainage system in the future as couplings can simply be unscrewed, and pipes & fittings reused.
- 3. Angular Deflection:** Coupling joints allow deflection in hubless pipes up to 5 degrees.
- 4. Compact System:** Hubless couplings provide a more compact arrangement thus allowing joints to be made in areas with limited access.
- 5. Less Wastage:** The absence of a hub or spigot ensures that every inch of the pipe is used by making the coupling joints.
- 6. Strength & Durability:** Superior normalizing processes reduces brittleness and hence pipes are less prone to breakage or cracking.
- 7. Longevity:** Once installed, cast iron piping can last the entire lifetime of the building unlike PVC.
- 8. Quiet Operation:** Cast iron is a dense material that absorbs sound vibrations thus muffling the noise from rushing water, a very important consideration for hospitals, hotels, offices & residences.
- 9. Minimal expansion:** Cast iron has a very low co-efficient of expansion and thus there is no need to use expansion joints ensuring zero leakages and smells.
- 10. Fire resistant:** Cast iron is non-combustible and prevents the spread of fires.

HUBLESS PRODUCTS RANGE:



INSTALLATION PROCEDURE:



1. Push sealing on end of pipe



2. Reverse upper half of sealing



3. Next put pipe or fitting on central ring and defold sealing



4. Lay collar around sealing



5. Screw both ends firmly, ensuring that both plates are parallel

COUPLING FEATURES

The hubless pipe systems are connected by a mechanical metal coupling, which are equipped with an elastomer gasket ensuring flexible assembly with excellent water tightness. Their key features are as follows:

- Clamp: Stainless Steel
- Shield: Stainless Steel
- Gasket: EPDM Rubber

