

TECHNICAL SPECIFICATIONS & PRODUCT CHARACTERISTICS :

• SPECIFICATIONS :

- Pipes & Fittings :
 - ♦ As per ISO 6594 ♦ As per IS 15905-2011
- Stainless Steel Coupling with Rubber Gasket :
 - ♦ ASTM 1277 / IS 15905

• USES :

Neco Cast Iron Hubless Pipes & Fittings are used in Gravity Drainage System for following purposes :

- SOIL • WASTE • VENTILATION • RAIN WATER

• RANGE & NOMINAL SIZES :

Hubless Pipes & Fittings are manufactured and available in complete range as per product catalogue and in following nominal sizes, (pipe length : 3000 mm max.) :

- 50 mm • 75 mm • 100 mm • 150 mm • 200 mm • 250 mm • 300 mm

• MATERIAL :

Cast Iron used for manufacturing Hubless Pipes & Fittings conforms to : IS 210, ISO 185 & Grade FG 150 (min)

• MECHANICAL PROPERTIES :

1.	Specific Wt.	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.	Ring Crush Strength	300 N/mm ² (min)
6.	Compressive Strength (Cast Iron)	600 N/mm ²
7.	Modulus of Elasticity	10x10 ⁹ to 12x10 ⁹ N/mm ²
8.	Temperature Resistance	400 deg. c (without significant reduction in mechanical properties)

• HYDROSTATIC PRESSURE TEST :

0.07 Mpa

• COATING FOR PIPES & FITTING :

Inside : Epoxy Coating Outside : Epoxy Coating

• TOLERANCE :

• External Diameters :

Nominal Size	External Diameter	Tolerance On
DN	DE	DE
50	58	+2/-1
75	83	+2/-1
100	110	+2/-2
150	160	+2/-2
200	210	+2.5/-2.5
250	274	+2.5/-2.5
300	326	+2.5/-2.5

• Thickness :

Nominal Size	Thickness			
	Pipe		Fittings	
DN	Nom.	Min.	Nom.	Min.
50	3.5	3.0	4.2	3.0
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
200	5.0	4.0	6.0	4.0
250	5.5	4.5	7.0	4.5
300	6.0	5.0	8.0	5.0

• Lengths :

- ♦ Pipe : ± 20 mm ♦ Fittings : ± 5 mm

SOME PROJECT REFERENCES WHERE HUBLESS PIPES & FITTINGS HAVE BEEN USED



ITPL PROJECT,
Bangalore



AHUJA TOWERS
Mumbai



ITC NARMADA
Ahmedabad



COURTYARD MARIOTT
Bangalore



DIAMOND BOURSE
Surat



ATMOSPHERE
Kolkata



K RAHEJA
Viveria (Mumbai)



AIIMS, Nagpur

Company reserves a right to change the design of the specified models according to the latest technological changes without any prior notice. (Contents given in this catalogue are indicative and for guidelines only)

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Centrifugally Cast Hubless Pipes & Fittings



For Soil, Waste, Ventilation & Rainwater Purpose

• Innovation • Latest Technology • International Quality

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AVAIL THE 'HUBLESS' BENEFIT



AN ISO 9001-2015 COMPANY

INTRODUCTION :

The 'NECO' Group is India's largest Sanitary Castings Group. Starting off in 1976, the Group today has interests in Foundries, Steel, Engineering and Automobile Castings, Ceramics, Valves. Today, the Group turnover is in excess of Rs. 5500 Crore. It manufactures Castings for industries as diverse as Railway, Automobiles, Petroleum, Steel and Construction Industry. In a major backward integration exercise, it has set up a 1 Million MT per annum installed capacity Steel Plant Project in Siltara, near Raipur (C.G.). Due to global technological changes and advancement in Drainage System, NECO has introduced 'Hubless Pipes & Fittings' to Indian Market. Today, the Hubless Cast Iron Drainage System is world's only Lifelong Drainage System, Manufactured in India.

ADVANTAGES OF HUBLESS CAST IRON PIPES & FITTINGS :

- Durability & Performance :** Cast Iron's durability & performance exceeds expected life of the building.
- Versatility :** Hasselfree System, which can be used efficiently throughout, as per the requirement in adverse conditions also.
- Easy-Fast Jointing & Installation :** Since Pipes are available in longer lengths and Couplings are used for jointing, which results in speed and efficiency of work.
- Fire Resistant :** Does not contribute to the spreading of flames in case of fire.
- Resistance to Abrasion :** High resistance to Sand, Gravel, Glass particles, Garbage, disposal residue, Dish water discharge and Debris being carried, both at low and high velocity.
- Withstand Temperature Extreme :** Cast Iron has an ability to withstand temperature extreme in hot and cold conditions.
- Low Co-efficient of Expansion & Contraction :** Less expansion or contraction in any environment, so no scope for leakages and smell.
- Strength & Rigidity :** Cast Iron provides high beam strength due to its excellent engineering properties.
- Resistance to Noise Transmission :** High noise dampening properties, keeps noise level low when the System is in use.
- Resistance to Vibrations & Shocks :** It has an excellent properties of resisting vibrations and absorbing shocks.
- Compact System :** Hubless Couplings provide more compact arrangement. The great advantage of this System is that, it permits joints to be made in limited access areas.
- System Flexibility :** The Couplings permit sufficient flexibility under adverse conditions, also allow pipe movement, building away movement without breakage or joint leakage.
- Less Wastage :** Since Pipes & Fittings are Hubless, every inch of Pipe can be utilised by making Coupling Joints.
- Angular Deflection :** Coupling Joints allow deflection in piping upto 5 deg.
- Easy to Handle :** As compared to Hub Pipes these Pipes are very easy to handle.
- High Crushing Strength :** Does not break easily in case of high impact or in adverse situations.
- Hasselfree Installation :** Installation of Hubless Cast Iron Pipes & Fittings has no added complications like Fire collars, Cladding, Additional brackets, Sound insulation, Expansion joints, Thermal limiters ect. unlike U-PVC Pipes.
- Easy to Maintain :** Does not require frequent and costly maintenance.
- Flexi Reorientation :** This System allows reorientation of Drainage System in future, since Couplings, Pipes & Fittings can be taken out and be reused any time.
- Cost Effective :** Can often be the most cost effective option when total installed cost is calculated, expected maintenance required & a full risk assessment carried out, that is the consequential cost of failure in the system.

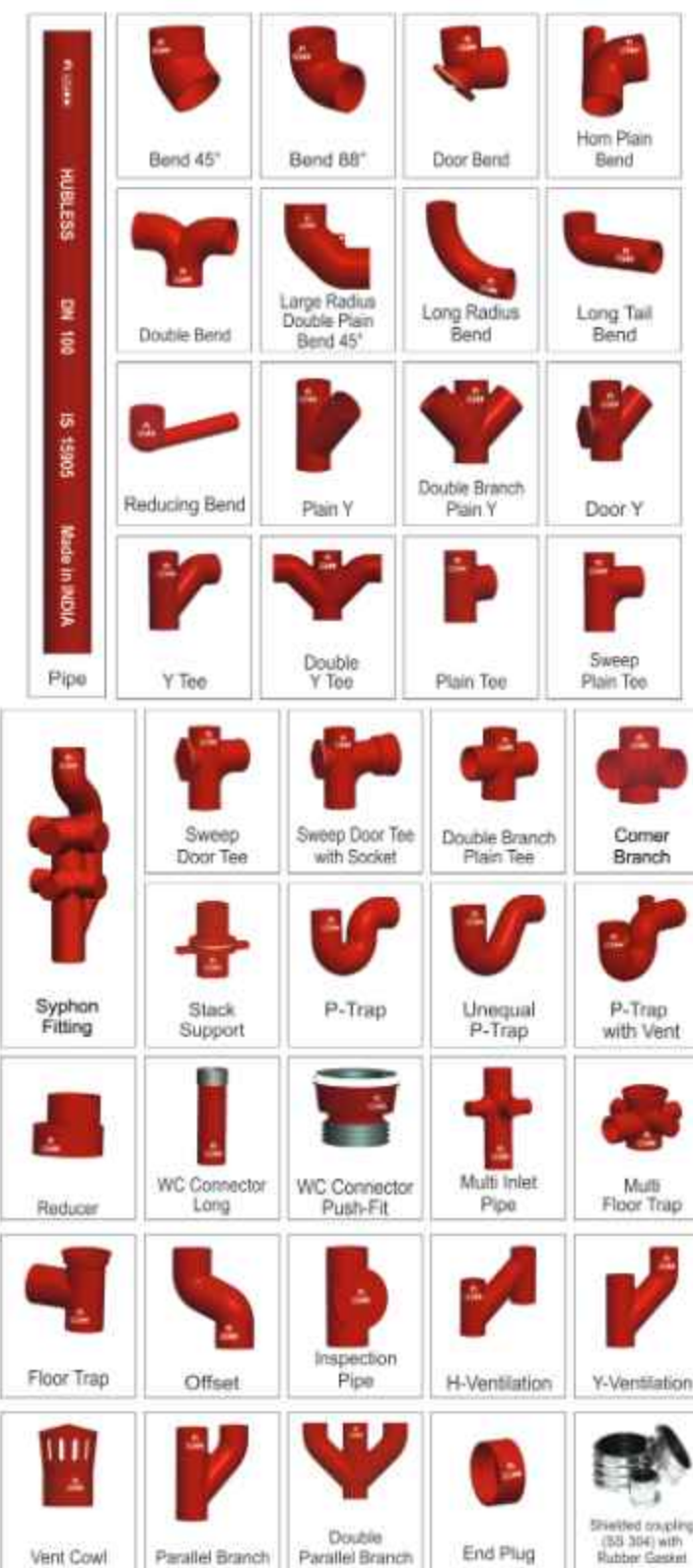
"NECO" MANUFACTURING SET-UP

IMPORTED MACHINE FROM : DÜKER GmbH & Co KGaA, Germany.

MANUFACTURING TECHNOLOGY : Permanent Hot Multimould Process.

MELTING FURNACE : Induction Furnace.

HUBLESS PRODUCT RANGE



INSTALLATION PROCEDURE



1. Place the gasket on one end of pipe or fitting & the stainless steel clamp & shield assembly on the other end of pipe or fitting.



2. Firmly seat the pipe or fitting ends against the integrally molded center stop inside the rubber gasket.



3. Slide the stainless steel shield & clamp assembly over the rubber gasket and tighten the bands. For larger diameters couplings which have four bands, the inner bands should be tightened first and then the outer bands.

4. In all cases, when tightening bands they should be tightened alternately to insure that the coupling shield is drawn up uniformly.

CUTTING OF HUBLESS PIPES :

For cutting Hubless Cast Iron Pipes, Cutting Machine is recommended (as shown in figure below), which saves time and cuts the pipe perpendicularly with straight edges.

Procedure :

- Mark the pipe surface from where the pipe has to be cut.
- Fix the pipe in machine vice.
- Now move the cutting wheel downwards till the pipe is cut.



Cutting Machine