YL DUCTILE IRON

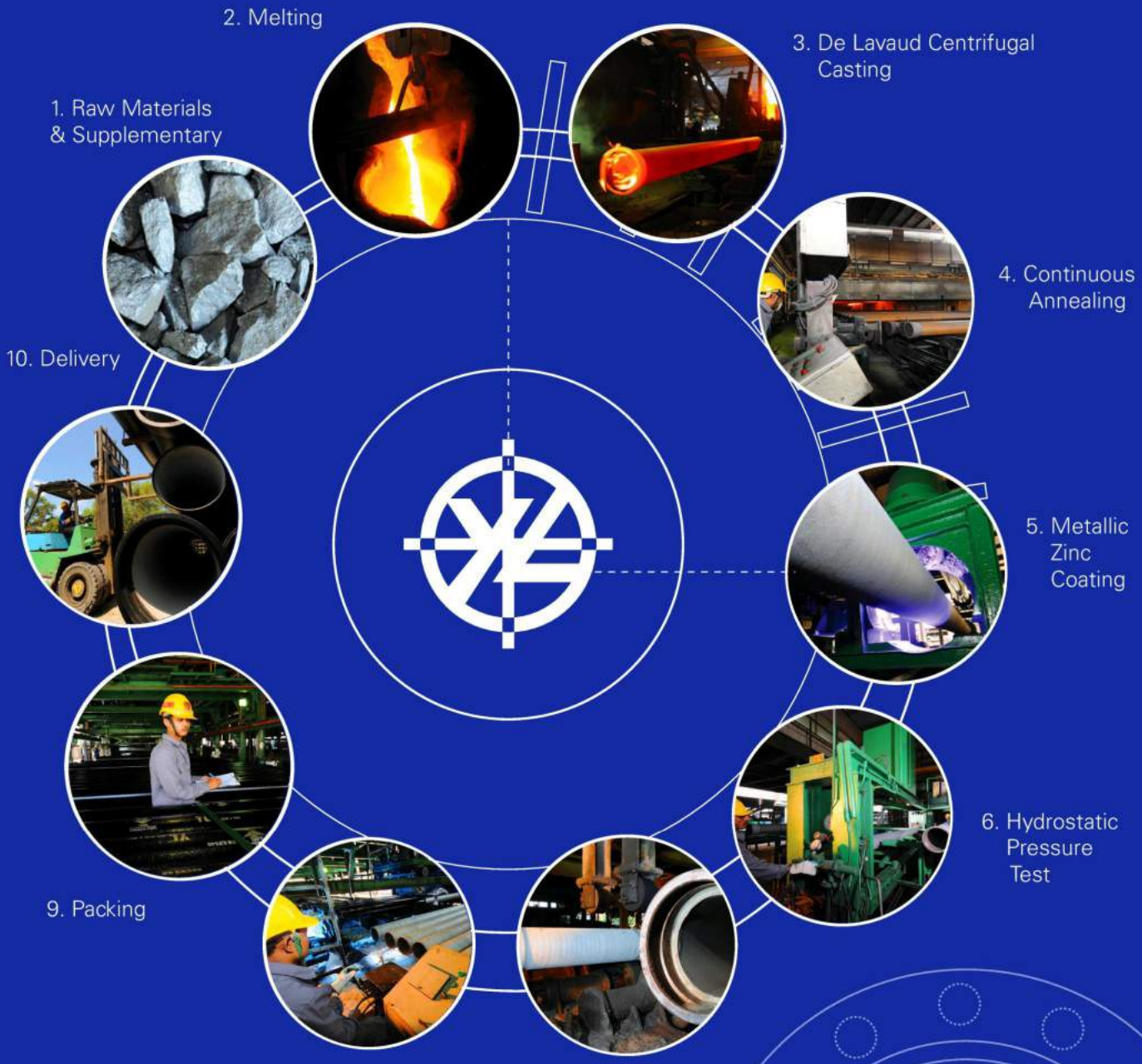
PIPES & FITTINGS

BS EN 545:2010 BS EN 598:2007+A1:2009
MS 1919:2013 MS ISO 9001:2008

YEW LEAN FOUNDRY & CO SDN BHD

Diversification & Expansion

Yew Lean Foundry & Co Sdn Bhd (YEW LEAN) is a leading manufacturer for ductile iron pipes in Malaysia. Other products manufactured include ductile iron fittings, jointing accessories and others which use ductile iron as base material. Yew Lean is a wholly-owned subsidiary of YLI Holdings Berhad, a pre-eminent group listed on the Main Market of the Bursa Malaysia Securities Berhad with diversified interests in providing products and services to the water industry towards nation building. For over 40 years, Yew Lean has been in the casting business. Today, its main production facility with annual production capacity of 100,000 metric tonnes, is located in Prai Industrial Estate, Prai, Penang. The production of ductile iron pipes commenced in 1993, marking a major milestone of our achievements and making Yew Lean the first and leading manufacturer of ductile iron pipes in Malaysia and the ASEAN region. Ductile iron pipes manufactured by Yew Lean, carry an established brand name "YL", are manufactured using the centrifugal casting method to ensure consistency in dimensions and compactness in its microstructure. All YL pipes are under stringent quality control to achieve a minimum tensile strength of 420 N/mm2 and minimum elongation of 10%. The manufactured sizes are in popular range up to 2000mm in diameter in standard length of 6 meters. Yew Lean works in partnership with waterworks industry in Malaysia, as well as the country's sewerage department. Yew Lean's products have been applied in several key potable water networks and sewerage projects in the region. Yew Lean's researches have culminated in the development of corrosion protection alternatives for adaptation to wide range of site conditions. This constitutes the ductile iron pipes an even better-engineered product offer for potable and sewerage applications. YL ductile iron pipes and fittings are manufactured in compliance with BS EN 545:2010 and MS1919:2013 with the MS ISO 9001:2008 Quality Management System certification from Standards Industrial Research Institute of Malaysia (SIRIM). Other product standard, BS EN 598:2007+A1:2009 intended for use in sewerage applications has been certified by TUV SUD PSB Singapore and IKRAM QA Malaysia.



Realising Consistency & Precision

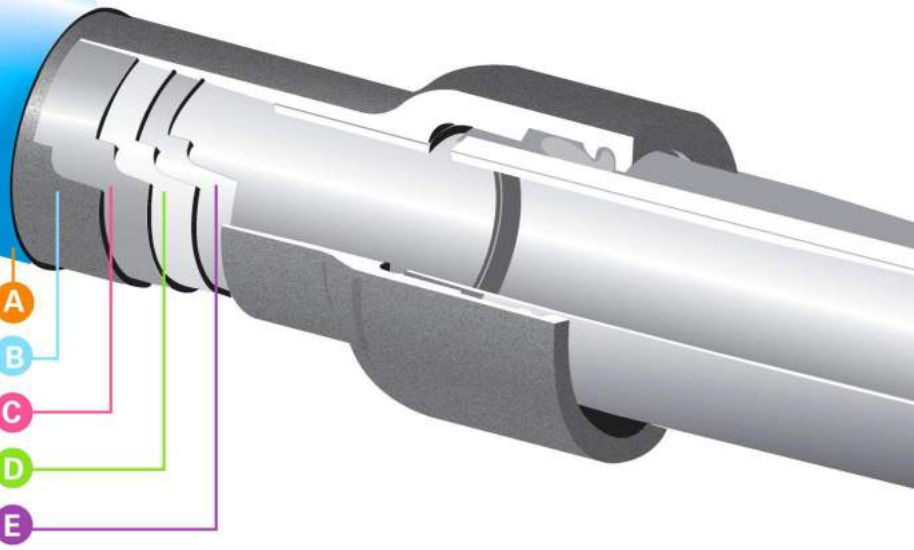
Our Vision

To be a pre-eminent group
in providing products and services to the water industry
thus contributing effectively towards nation building

Our Mission

By constantly enhancing our capabilities
in manufacturing and services, we intend to be the leading player
in the rapidly growing water and sewerage sectors within the
Asia region.

Superior Design



A PolyEthylene Sleeving (Unbonded Film) - optional

to supplement basic pipe coatings in cases of highly corrosive soil.

B Bitumen Paint (External Coating)

as the finishing coat.

C Metallic Zinc Coating

that form a stable protective layer of insoluble zinc salts. It has the self-healing characteristics of any damage and therefore, increases the life span of the pipe.

▲ With zinc coating

▲ Without zinc coating

Special Coating
High Performance Passive Coating
that completely isolating the ductile iron material from extreme corrosive external environment.

▲ Co-extruded PolyEthylene Coating

▲ Fusion-bonded Epoxy or spray-applied PolyUrethane Coating

D Ductile Iron (Spheroidal Graphite Iron)

which has relatively good wall thickness, and therefore can withstand high internal pressure of up to 50 bar. Ductile iron is also superbly strong against external load and with good bending strength. In ductile iron, the carbon is present in the form of small spheres, thus eliminating the risk of crack propagation and resulting in higher strength. This is done by adding magnesium into molten iron. Therefore, the continuity of the iron matrix is maintained, providing excellent ductility, flexibility and impact resistance.

◀ In "Ductile Iron", the graphite is in spheroidal form and hence, the risk of cracking is eliminated.

◀ In "Cast Iron", the carbon is present in flaky form making the material brittle and susceptible to cracks.

E Cement Mortar Lining

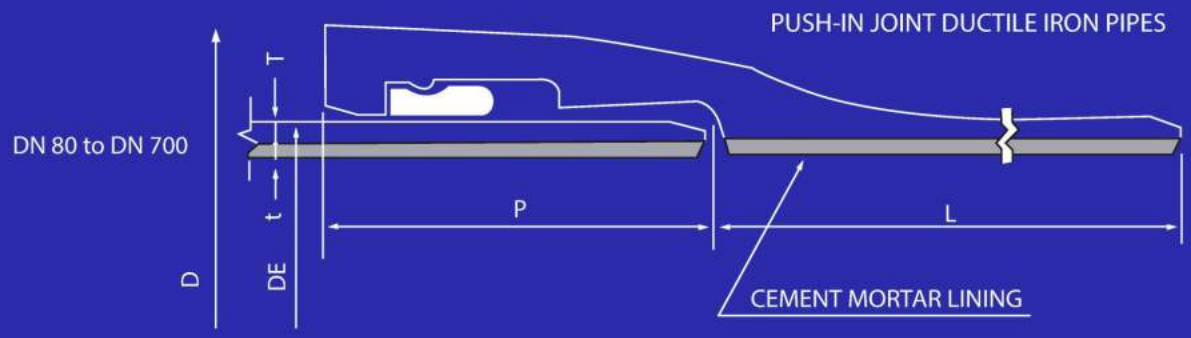
by advanced centrifugal application that gives high mortar compaction, good compressive adhesion and silk-smooth surface flow.

Linings available:

- Ordinary Portland Cement (OPC)
- Sulphate Resisting Cement (SRC)
- High Alumina Cement (HAC)

▶ Superb quality Epoxy Seal Coat or PolyUrethane Lining are available upon request.

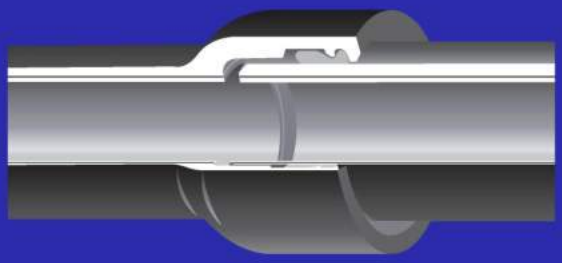
TECHNICAL SPECIFICATIONS



DIMENSIONS FOR ALL PIPES (All dimensions in millimetres)

Nominal Diameter DN	DE Nominal Outer Diameter	D Outer Diameter of Socket +,- 5mm	P Depth of Socket +,- 5mm	T Minimum Wall Thickness (Barrel)						t Thickness of Cement Mortar Lining	L Laying Length +70, -30 mm
				C25	C30	C40	C50	C64	C100		
80	98	140	85			3.0	3.5	4.0	4.7	4.0	6000
100	118	160	85			3.0	3.5	4.0	4.7	4.0	6000
150	170	215	90			3.0	3.5	4.0	5.9	4.0	6000
200	222	275	100			3.1	3.9	5.0		4.0	6000
250	274	325	105			3.9	4.8	6.1		4.0	6000
300	326	380	110			4.6	5.7			4.0	6000
350	378	445	110		4.7	5.3	6.6			5.0	6000
400	429	495	115		4.8	6.0	7.5			5.0	6000
450	480	550	120		5.1	6.8				5.0	6000
500	532	600	120		5.6	7.5				5.0	6000
600	635	710	120		6.7	8.9				5.0	6000
700	738	815	155	6.8	7.8	10.4				6.0	6000
DN 800 and above, larger diameter pipes are available upon request. Please consult YL sales representative for more details.											

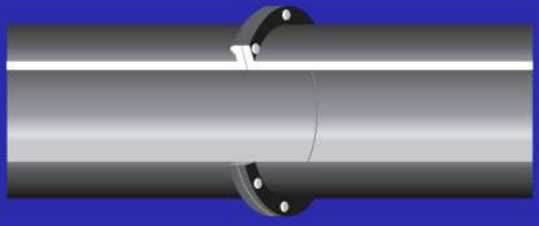
Pipe Joints



Push-In Joint / Socket-Spigot Joint

The push-in-joint, also known as socket-spigot joint, provides leak-tightness even at pipe busting pressures and allows deflection in any direction up to 5 degrees.

The push-in method also allows easy and speedy jointing even in restricted space, or during adverse weather conditions as it does not required special tools or equipments other than a rubber gasket. For normal soil condition, no special bedding required and can be backfilled by excavated soil. This reduces the pipe laying cost and time while increasing efficiency.



Flanged Joint / Mechanical Joint

YL flanged joint or mechanical joint offers an excellent mechanical system. All flanges are screwed-on or weld-on with precision workmanship that offers leak-tightness. A flanged joint allows pipe sections to be installed or dismantled in line.