

CONNECTING  
THE NATION  
WITH THE  
BEST



**LY STEEL PIPE  
INDUSTRIES SDN BHD**  
(238492-A)

The Makers of High Quality Steel Pipes



**LY STEEL PIPE  
INDUSTRIES SDN BHD**  
(238492-A)

**QUALITY  
ASSURED**

**SERVICE  
GUARANTEED**

# CONTENT:

▶ ABOUT US	1-2
▶ QUALITY POLICY AND OBJECTIVES	3-4
▶ PIPES DIMENSIONS AND SPECIFICATIONS	9-10
▶ MSCL BEND AND TEES	11-12
▶ JOINT DETAILS	13
▶ PRODUCTION FLOW CHART	15-16



# ABOUT US



**LY STEEL PIPE  
INDUSTRIES SDN. BHD.**

(CO. NO: 238492-A)



HOW LONG DOES IT TAKE TO GET GOOD SERVICE?  
**IMMEDIATELY!**

Passion and commitment to be the best in developing quality products for Malaysia. LY Steel Pipe Industries Sdn Bhd (LYSPI) is a fully committed manufacturer of Mild Steel Concrete Lining Pipes and Specials in Malaysia. Built on the unrivalled reputation of providing the best in Quality Products with an excellent workforce of committed and dedicated professionals and workers, we've streamlined our disciplines in propelling our products to the forefront of excellence with a corporate credo of providing -"Quality Assured, Service Guaranteed". It has deemed fruitful as our customers enjoyed the benefits of our company's vision and commitment, hitting an all-time high of 95% customer satisfaction. We won't just stop here but will continue to break borders to develop products of superior quality. Assurance granted.

With a humble beginning in 1992, the company has come a long way. LYSPI grew impressively, moving on from their first operation premise to an "all new" production factory targeting to be one of the leading steel pipes manufacturer in Malaysia.

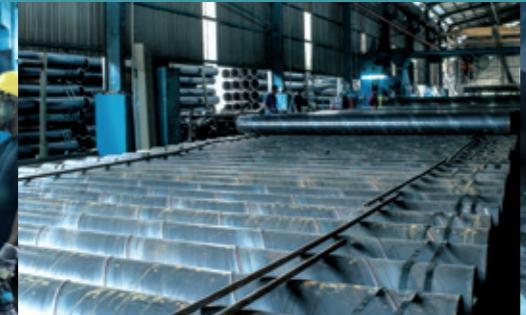
Recognizing that progress is imperative to success, LYSPI is constantly improving its operations and seeking out new opportunities for growth. LYSPI was certified with ISO 9001 : 2015 by BM TRADA and committed to fulfilling the needs and expectation of our customers through continual improvement utilizing our corporate "5 Excellence Pathway" (Excellent Management System, Excellent Products, Excellent Workforce, Excellent Infrastructure and Excellent Marketing). Product excellence has been and will always be our utmost priority at all times, with a new production line in a two acre land with the latest state-of-the-art cutting edge technology, and an increment of 40% production capacity to meet growing demand will be realized. That's your assurance of success.



# QUALITY POLICY AND OBJECTIVES

As a fast-growing manufacturer in the Mild Steel Concrete Lining pipes industry, LY Steel Pipe Industries Sdn Bhd is committed to fulfilling the needs and expectations of our customers as well as legal and other applicable requirements through continual improvement utilizing

- ▶ **Excellent Management System**
  - To maintain and review the management system of LY Steel Pipe Industries through Certification Program (ISO 9001:2015)
  - Do not exceed 6 NCR during pre-assessment
  - Do not exceed 3 EQA NCR yearly
- ▶ **Excellent Product**
  - To manufacture Quality Products with full conformance with the SPAN TS 21827: PART 1:2013 or as our customer's requirement
  - Do not exceed 4 NCR (base on Customer Complaint, Process CAR and Supplier CAR) on monthly base
- ▶ **Excellent Workforce**
  - To achieve at least 80% of trainings planned annually
- ▶ **Excellent Infrastructure**
  - To minimize process interruption by reducing breakdowns of machinery by 10% per annum
  - To ensure smoothness of production process and create conducive working environment by minimizing possibility of accident. Do not exceed one minor and zero major accident per quarter
- ▶ **Excellent Marketing**
  - To actively seeks ways to develop and implement strategic marketing activities and gaining turnover at least maintain as previous year



Connecting Malaysia's water piping infrastructure to the next decade

Committed to produce the nation's top quality steel pipes

Constant top services that's second to none

# ASSURANCE OF TOP QUALITY PRODUCTS

As a certified company with ISO 9001:2015 by BM TRADA , we've a responsibility and commitment to uphold this industry standard. We believe quality is key to everything that we do. From sourcing of materials, manufacturing processes, quality control to customer service, no effort is spared in ensuring products of the highest quality are rolled out of our plant.

Our quality steel pipes are produced according to SPAN TS 21827: PART 1:2013 standards, and are certified by Ikram Quality & Certification Institute.

LY Steel Pipe Industries Sdn Bhd places quality control at the heart of its operation. We believe in delivering the best products at the most competitive prices. That's why most of our raw materials are made in Malaysia and manufactured in accordance to requirement up to data specification.

Our plant manufacture pipes from 100mm to 600mm ND and specials in sizes ranging from 100mm to 2,700mm ND in diameter, catering to a wide range of customers from JBA to township developers to hardware companies. Therefore, stringent control in the areas of inventory management, on-time delivery of products and other logistics are of utmost importance.

The most critical path is in the manufacturing process. At every step of the process, our QC engineers perform rigorous tests and thorough inspections. These include ultrasonic thickness testing, concrete test cube for strength, bitumen 'pin-hole' detection and more. No stone is unturned in our manufacturing process in order to produce the products of stringent quality that can only carry the brandname of LY Steel Pipe Industries Sdn Bhd. Assurance has its price.

OUR QUALITY IS OF THE HIGHEST STRINGENT MEASURES  
ASSURED BY **ISO 9001:2015**





# PRODUCTS THAT HAS PARTNERED MALAYSIA'S GROWTH

WE ENABLE INTEGRATED CUSTOMER MANAGEMENT TO PROVIDE THE HIGHEST QUALITY CONTROL THAT BUILDS STRONGER AND PROFITABLE CUSTOMER RELATIONSHIPS.

THIS PROPELS US TO WHERE WE ARE TODAY.

PIPE RELOCATION AT ROAD UPGRADING PROJECT



PIPE SPECIALS FOR MAIN TRANSMISSION LINE



HOUSING DEVELOPMENT



PIPE LINE S-BEND



SERVICE RESERVOIR



WATER TREATMENT



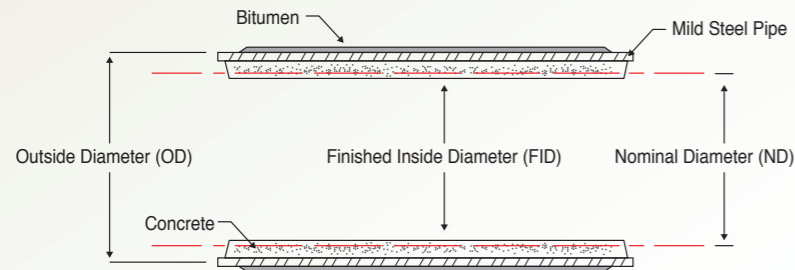
# MSCL Pipe Specification

JKR Standard

Table 1



Nominal Diameter (mm)	Outside Diameter (mm)	Minimum Nominal Thickness (mm)	Minimum Thickness of Concrete (mm)	Finished Internal Diameter (mm)	Total Pipe Weight MSCL (kg/m)
100	121.9	4.1	10	93.7	20.17
150	177.3	4.1	10	149.1	30.05
200	232.2	4.1	10	204.0	41.20
250	286.0	4.1	10	257.8	51.11
300	345.4	5.8	10	313.8	75.91
350	399.3	5.8	13	361.7	97.60
400	453.1	5.8	13	415.5	111.13
450	507.0	5.8	13	469.4	124.68
500	560.3	5.8	13	522.7	138.09
600	667.0	6.5	13	628.0	176.10
650	692.0	7.4	13	651.2	197.72
700	754.0	7.4	19	701.2	243.75
750	804.0	7.4	19	751.2	260.28
800	854.0	7.4	19	801.2	276.80
900	954.0	7.4	19	901.2	309.85
1000	1054.0	8.0	19	1000.0	358.12
1100	1157.0	9.5	25	1088.0	478.78
1150	1219.0	9.5	25	1150.0	504.94
1200	1270.0	10.0	25	1200.0	541.71
1300	1372.0	11.0	25	1300.0	618.99
1400	1472.0	11.0	25	1400.0	664.88
1500	1576.0	13.0	25	1500.0	788.51
1600	1676.0	13.0	25	1600.0	839.33
1700	1776.0	13.0	25	1700.0	890.15
1800	1876.0	13.0	25	1800.0	940.97
1900	1976.0	13.0	25	1900.0	991.79
2000	2088.0	14.0	30	2000.0	1165.37
2100	2189.0	14.5	30	2100.0	1248.97
2200	2290.0	15.0	30	2200.0	1307.36



Sectional Drawing for Mild Steel Concrete Lining

# MSCL Pipe Specification

BS 534 / SPAN TS 21827 : PART 1 : 2013

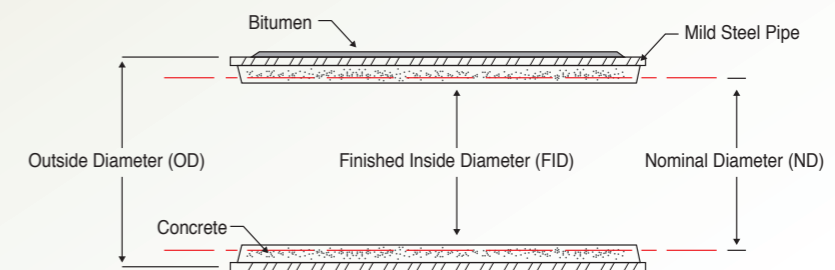
Table 2



Nominal Diameter (mm)	Outside Diameter (mm)	Minimum Nominal Thickness (mm)		Minimum Thickness of Concrete (mm)	Thickness of Bitumen Enamel Wrapping (mm)	Steel Pipe Weight (kg/m)		Hydraulic Test Pressure (Steel 430) (bar)
		BS 534	SPAN TS			BS 534	SPAN TS	
100	114.3	3.6	3.6	6	3	9.8	9.8	70
150	168.3	3.6	3.6	6	3	14.6	14.6	70
200	219.1	4.0	4.0	10	3	21.2	21.2	70
250	273.0	4.0	4.0	10	3	26.5	26.5	56
300	323.9	4.0	4.0	10	3	31.6	31.6	48
350	355.6	4.5	4.5	13	3	39.0	39.0	49
400	406.4	4.5	4.5	13	3	44.6	44.6	43
450	457.0	5.0	5.0	13	3	55.7	55.7	42
500	508.0	5.0	5.0	13	3	62.0	62.0	38
600	610.0	6.3	6.3	13	3	93.8	93.8	40
650	660.0	6.3	6.3	19	3	102.0	101.6	37
700	711.0	6.3	6.3	19	3	109.5	109.5	34
750	762.0	6.3	6.3	19	3	117.0	117.4	32
800	813.0	7.1	7.1	19	3	141.1	141.1	34
850	864.0	7.1	7.1	19	3	150.0	150.0	32
900	914.0	7.1	8.0	19	3	159.0	178.7	34
1000	1016.0	7.1	8.0	19	3	177.0	198.9	30
1200	1219.0	8.0	10.0	19	3	239.0	298.1	32
1400	1422.0	8.8	10.0	25	3	307.0	348.2	27
1600	1626.0	10.0	11.0	25	3	399.0	438.1	26
1800	1829.0	11.0	12.5	25	3	493.0	559.9	26
2000	2032.0	12.5	14.2	25	3	623.0	706.6	27
2200	2235.0	14.2	16.0	25	3	778.0	875.5	28
2300	2337.0	–	16.0	25	3	–	915.8	26
2400	2438.0	–	16.0	25	3	–	955.6	25
2500	2540.0	–	17.5	25	3	–	1088.6	27
2600	2642.0	–	17.5	25	3	–	1132.6	26
2700	2743.0	–	17.5	25	3	–	1176.2	25

Remarks :

\* Minimum thickness of bitumen enamel wrapping are 3mm or in accordance to customers specifications.



Sectional Drawing for Mild Steel Concrete Lining

# Pipes Specials & Fittings



# Pipes Specials & Fittings



## A) Bends

Table 3

PIPE N.D. (MM)	PIPE O.D. (MM)	Type							
		Not more than 30°	Over 30° to 45°		Over 45° to 60°		Over 60° to 90°		
		L1 (MM)	R (MM)	L2 (MM)	R (MM)	L2 (MM)	R (MM)	L3 (MM)	
100	114.3	175	150	200	150	250	150	300	
150	168.3	225	225	300	225	300	225	400	
200	219.1	300	300	350	300	400	300	500	
250	273	375	375	450	375	500	375	650	
300	323.9	375	450	450	450	500	450	700	
350	355.6	450	525	550	525	600	525	800	
400	406.4	450	600	600	600	600	600	850	
450	457	450	675	600	450	600	450	850	
500	508	450	750	600	500	600	500	850	
550	559	450	825	650	550	600	550	850	
600	610	550	900	750	600	750	600	1000	
650	660	550	975	750	650	750	650	1000	
700	711	550	1050	800	700	750	700	1100	
750	762	600	1125	850	750	850	750	1100	
800	813	600	1200	850	800	850	800	1200	
850	864	600	1275	850	850	850	850	1200	
900	914	600	1350	900	900	900	900	1300	
1000	1016	750	1500	1100	1000	1100	1000	1500	
1200	1219	850	1800	1200	1200	1200	1200	1700	
1400	1422	850	2100	1300	1400	1300	1400	1900	
1600	1626	900	2400	1400	1600	1400	1600	2100	
1800	1829	900	2700	1500	1800	1500	1800	2200	
2000	2032	1000	3000	1600	2000	1600	2000	2500	
2200	2235	1000	3300	1700	2200	1700	2200	2600	

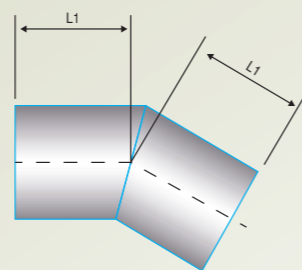


Figure 1 : Gusseted bend type 1 not more than 30°

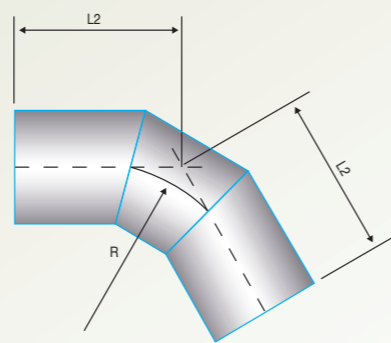


Figure 2 : Gusseted bend type 2 over 30° up to 60°

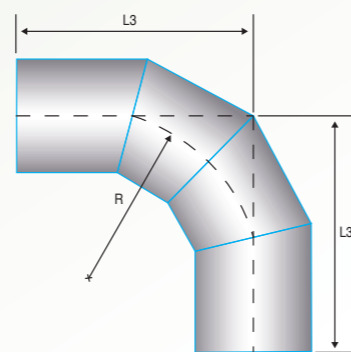


Figure 3 : Gusseted bend type 3 over 60° up to 90°

## B) Tees

Table 4

Nominal Diameter (MM)	Barrel		Branch		
	Outside Diameter A (MM)	C (MM)	Outside Diameter B (MM)	0.5 times OD of barrel 'A' plus	
				D (MM)	F (MM)
100	114.3	270	114.3	200	130
150	168.3	290	168.3	200	140
200	219.1	370	219.1	250	150
250	273	410	273	250	160
300	323.9	450	323.9	250	180
350	355.6	530	355.6	300	200
400	406.4	600	406.4	300	230
450 to 700	457 to 711	1.5 times OD of branch 'B' but with a min. of 0.5 times OD of barrel 'A'	457 to 711	300	300
750 to 900	762 to 914		762 to 914	380	300
1000 to 2200	1016 to 2235		1016 to 2220	380	380

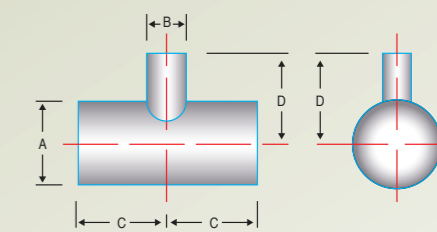


Figure 4 : Plain End Tee for Slip-on Type Coupling and Butt Welded Joint

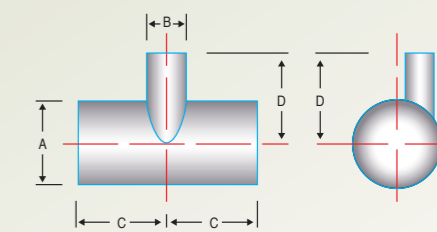


Figure 5 : Plain End Level-Inverted Tee

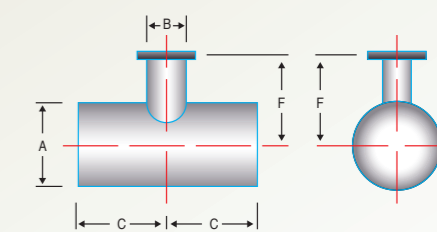


Figure 6 : Tee with Flanged Branch

## C) Taper

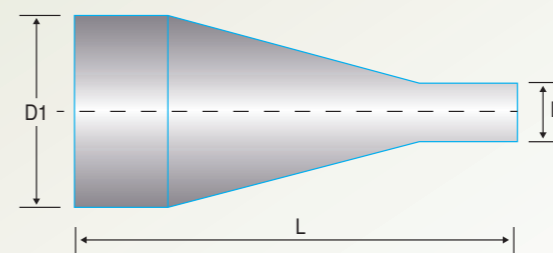


Figure 7 : Concentric Taper

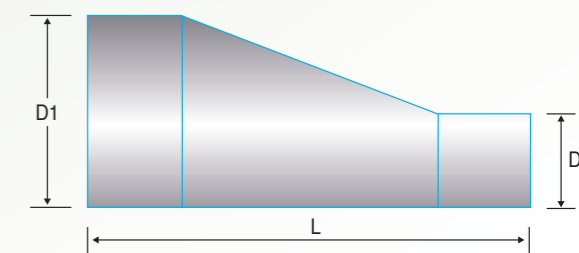
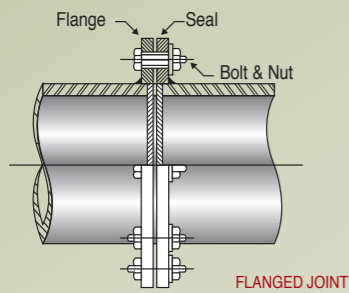


Figure 8 : Eccentric or Flat Taper

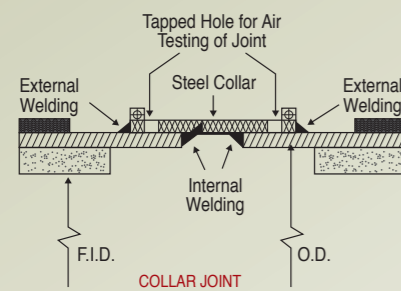


# Joint Details



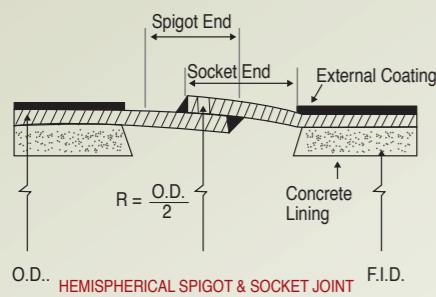
## FLANGED JOINT

The dimension confirms with BS 4504 PN 16 flanges or others as specified by customer. This type of joint is suitable for permanent or temporary installation.



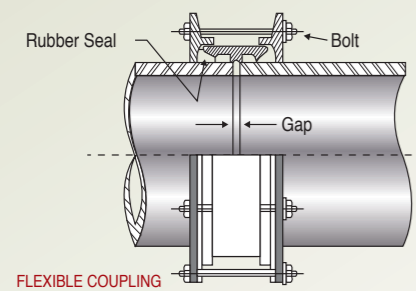
## COLLAR JOINT

This type of joint is for permanent installation of plain ended pipe/fitting, with or without internal welding (depending on pipe size).



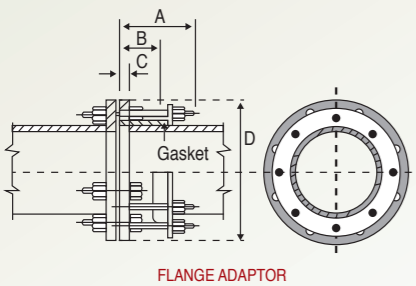
## HEMISPHERICAL SPIGOT & SOCKET JOINT

This is the most popular and economical joint for long distance pipeline installation. It is also designed to take an angular deflection of up to 2° from axial to accommodate changes of pipe gradients.



## FLEXIBLE COUPLING

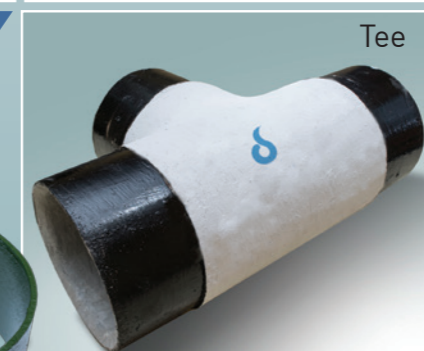
This coupling is suitable for difficult terrain and when future dismantling is required. It is also capable of accommodating 3° to 6° deflection.



## FLANGE ADAPTOR

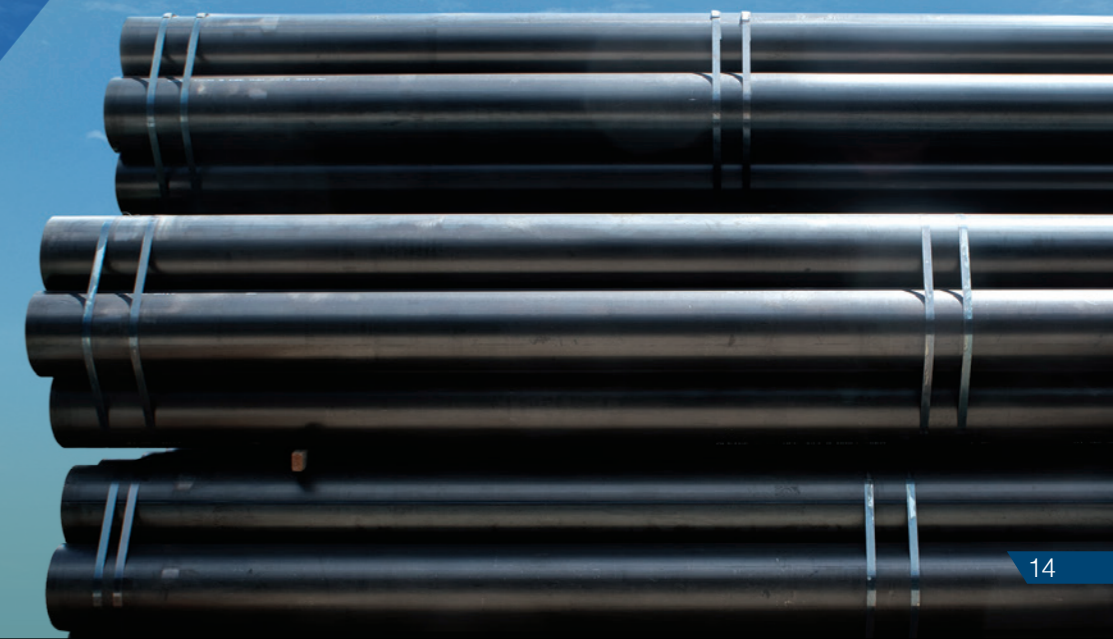
Most suitable for joining a plain ended pipe to a flanged pipe/fitting special such as valve, pump etc for easy dismantling for repairs and maintenance.

# Our Products

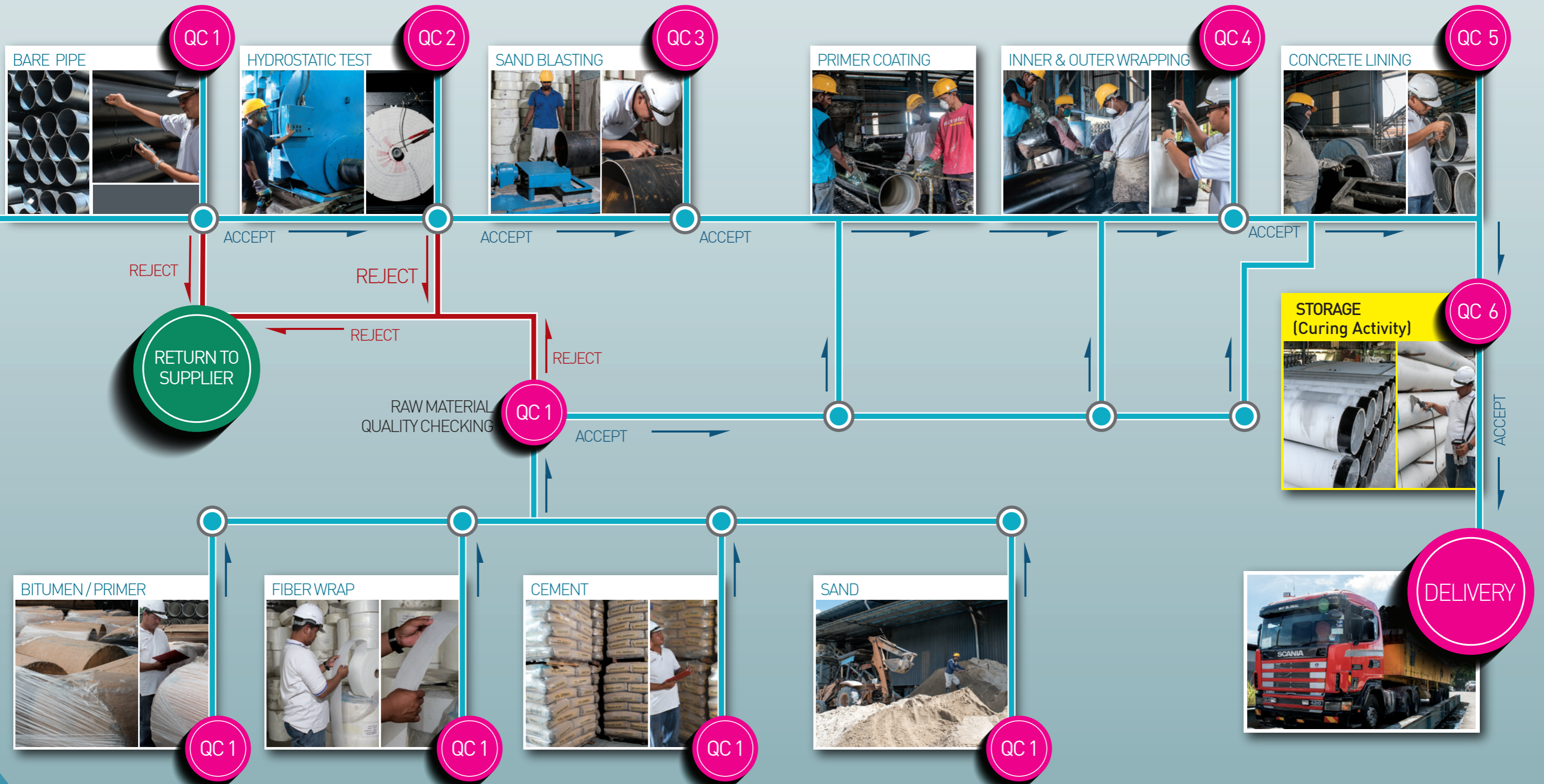


## SPECIALS:

- Short Pipe, Bend, Tee, Taper and Collar
- Range from 100mm to 2700mm ND



# PRODUCTION PROCESS & QUALITY CONTROL FLOW CHART





ISO 9001:2015 Certified



**LY STEEL PIPE  
INDUSTRIES SDN BHD**  
(238492-A)

**SALES OFFICE / FACTORY**

Lot 9134, Jalan Titanium,  
Kawasan Perindustrian Batu 22,  
Jalan Kuala Selangor, 45620 Ijok,  
Selangor Darul Ehsan. Malaysia

Tel: +603-6038 1899 (Hunting Line)

Fax: +603-6038 2122

Email   
sales@lyspi.com.my

[www.lyspi.com.my](http://www.lyspi.com.my)

The way to **LYSPI**  
Sales Office & Factory

