

The background of the slide is a photograph of a large industrial facility, likely a steel mill or manufacturing plant. In the foreground, several large, shiny, corrugated steel coils are stacked, their metallic surfaces reflecting light. The coils are arranged in a way that creates a strong sense of perspective, leading the eye towards the background. In the background, the interior of the factory is visible, with high ceilings, structural beams, and various pieces of industrial equipment. The lighting is bright, highlighting the metallic textures of the steel.

FIXON

**HGI & PE coated coil
for
Corrugated Steel Pipe**

FIXON

FIXON

- ▶ **Fixon Inc.**
- ▶ **Chairman:** Sungman Jung, PhD
- ▶ **Established:** September 1, 1994
- ▶ **Products:** Corrugated steel pipe / Corrugated steel plates
Polymer laminated steel coil / Machinery

▶ **No. of employees:** 53

▶ **Locations:**

Corporate Office: Supsaemgil 129, Gwangyang, Jeonnam, Korea

Seoul Office: Ace Tower, Simindearo 36, Anyang Gyunggi

Factory #1: Singeum 1-gil, Industry Complex, Gwangyang

Factory #2: 56-56 Simyogil, Namwon, Jeonbuk

CS Pipe

▶ Corrugated Steel Pipe



What is **Corrugated Steel Pipe**?

- ▶ **The Best solution** for drainage using high corrosion resistant Hot Galvanized Steel with enhanced strength from corrugation
- ▶ One integrated production line for the whole process of manufacturing pipes of **300~3,600mm diameter**
- ▶ **The larger diameter, the more economical** cost of CS Pipe

Hot Galvanized Steel (HGI) Coil Specifications

■ Standard

JIS G 3302 SGHC Z600 (equivalent to ASTM A929)

■ Mechanical Properties

	Value	Unit	Remark
Yield Strength	270 <	MPa	
Tensile Strength	205 <	MPa	
Elongation	30 <	%	
Galvanizing	600 <	g/m ²	Both sides

■ Size

Thickness: 1.6 ~ 3.5 mm

Width: 650 ~ 725 mm

Weight per coil package: 4,500 ~ 7,000 kg (upon client's request)

Hot Galvanized Steel (HGI) Coil Steel Mill Certificate

Supplier: POSCO

posco

Mill Test Certificate/검사증명서

Certificate No./증명서번호 : 171128-FL01KN-0010A4-0001

Date of Issue/발행일자 : Mar., 29, 2018

Post Treatment : CL (Chromate)
/후처리

Order No./계약번호 : 01S2972182

PO No./주문번호 : MSW01S2972182

Supplier /주문자 : HAN YANG STEEL IND.CO.,LTD.

Commodity /품명 : HOT ROLLED GI COIL

Customer /고객사 : SEUNGWON STEEL

Spec & Type : KS D 3506 SGHC
/규격

Size/치수	Product No./제품번호	Quantity/수량	Weight/중량 (kg)	Heat No./재강번호	Position	Tensile Test /인장시험			Coating Metal Bend Test	Coating Weight (g/m ²)		Division	Chemical Composition/화합성분				
						YP (MPa)	TS (%)	EL (%)		Zn Upper	Zn Lower		C (%)	Si (%)	Mn (%)	P (ppm)	S (ppm)
2.7x1360xC	CVY1432C	1	10,390	SQ52930	B	286	362	45	Good	339.0	343.0	L	0.0379	0.001	0.204	0.0089	0.0042
*** Sub Total (010) ***		1	10,390 (kg)			< Not Welded >											
*** Grade Total ***		1	10,390 (kg)														
*** Grand Total ***		1	10,390 (kg)														
=== Last Item ===																	

* Position - T : Top, M : Middle, B : Bottom
* Tensile Test Direction : Longitudinal, Gauge Length : 50mm(Rectangular),
YP Method : Upper Point
* Division - L : Ladle Analysis

We hereby certify that the material herein has been made in accordance with the order and above specification.

본 검사증명서 위 변조시 사문서 위조(형법 제231조)로 불이익을 당하실 수 있습니다.

Surveyor To :

Kim, Young-Ha



POSCO

Gwangyang Works, 20-26, Pokposarang-gil, Gwangyang-si, Jeollanam-do, 57807, Korea

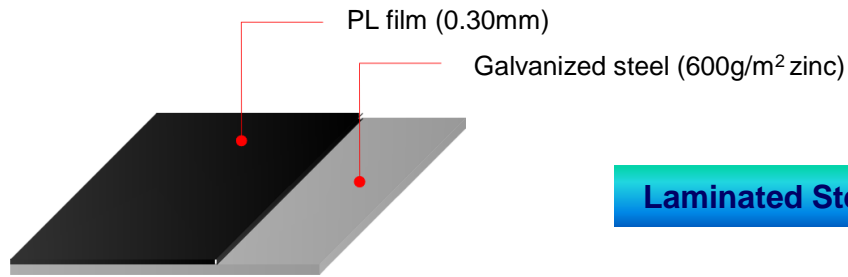
< PAGE : 1 >

Chief of material testing section

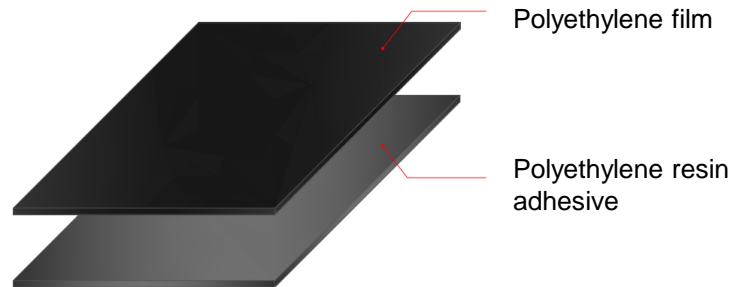
Kim, Young Ha

Polyethylene Laminated (PL) Steel Coil

Polyethylene Laminated (PL) Steel

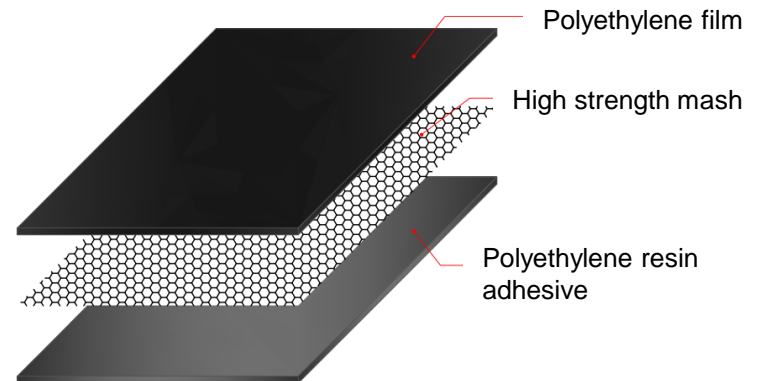
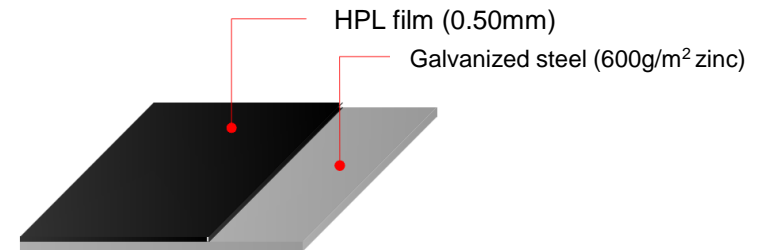


Laminated Steel



Film

High-strength PL (HPL) Steel



Polyethylene laminated Steel

▶ Test Comparison I

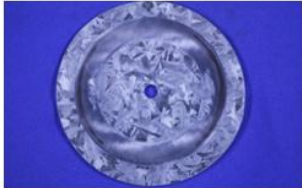
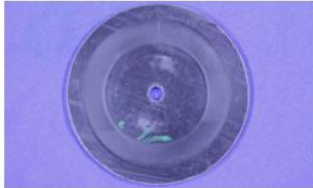

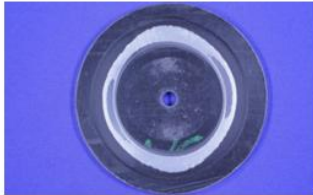

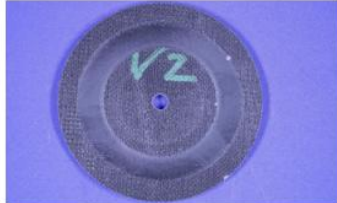
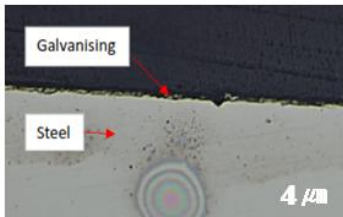
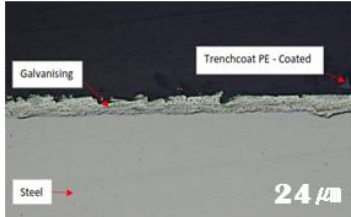
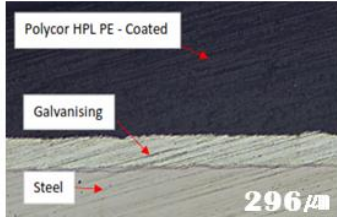
■ La Ratter Test

Fixon HPL	Fixon PL	Dow Trenchcoat
		
Number of Damaged Spots		
0	10	16

Polyethylene Laminated Steel

▶ Test Comparison II

■ Taber Abrasion Test

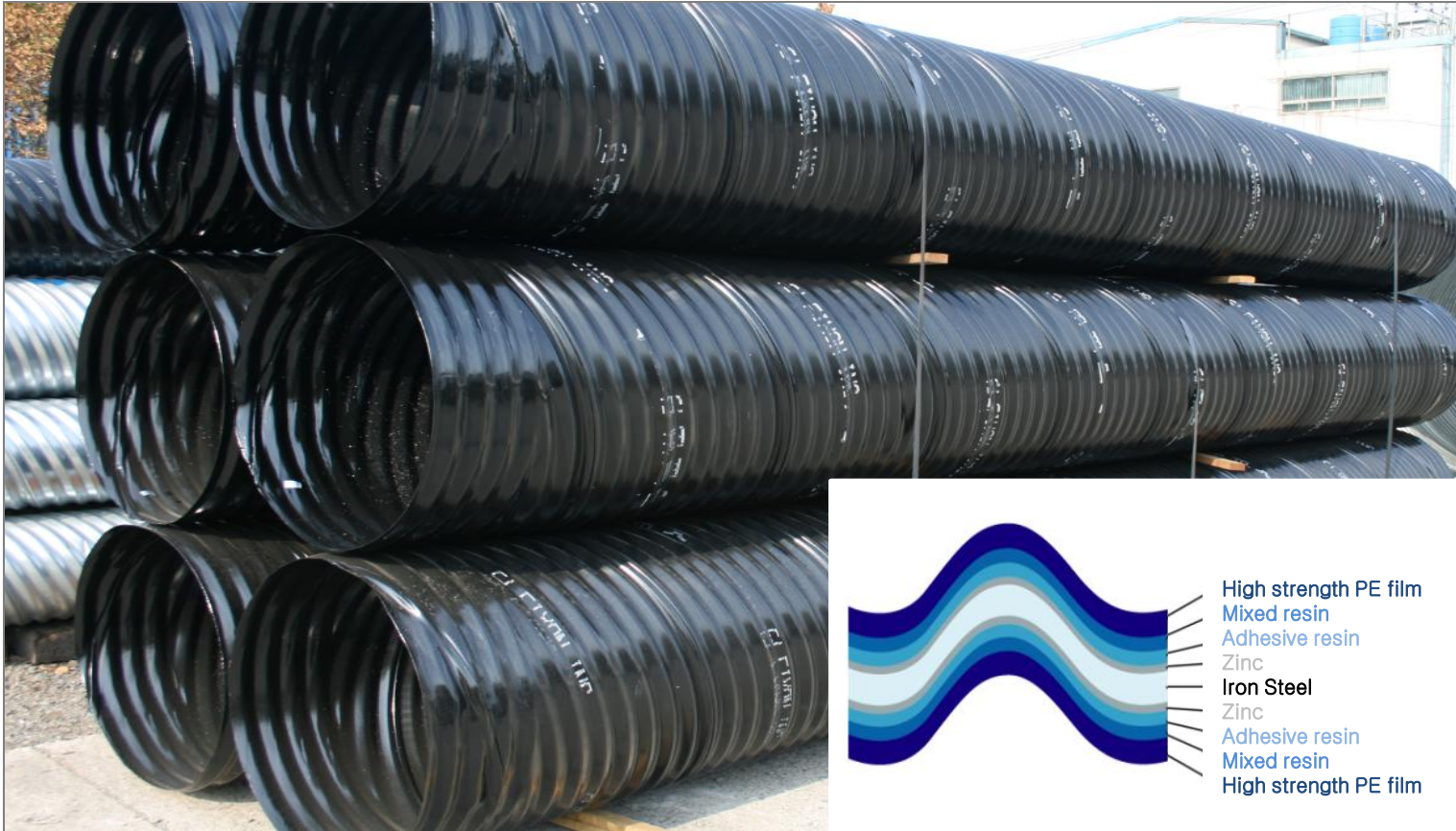
Specimen Cycle	HIG600	DOW Trenchcoat	FIXON HPL
8000			
40,000	✗		
80,000	✗	✗	
Results (Magnification:x100)			

Galvanized CS Pipe



- ▶ With 600g/M² zinc coating the service life is up to **75year: high corrosion resistance**
- ▶ CS Pipe is the most popular solution for **storm water drainage**

Polyethylene Laminated (PL) CS Pipe



► **Polyethylene film** coated CS Pipe for salty or contaminated land

High-strength PL (HPL) CS Pipe

○ 물리적 충격 시험

충격에너지 (J)	JPL	FPL	HPL
50 J			
TEST 결과	파괴손상	이상없음	이상없음
60 J	NG		
TEST 결과		파괴손상	이상없음
65 J	NG	NG	
TEST 결과			이상없음

- 시험 방법 : ASTM D3763 - 시험기관 : 전남 신소재 기술산업화 지원센터
 - HPL 파형강관은 65J에도 물리적 파복 손상 없음

- ▶ HPL CS Pipe is more than 2 times stronger than PL CS Pipe in shock-resistance with high strength mesh in the polyethylene film

Packaging & loading

- Water-proof export packaging with steel rim
- 4 rolls (20 ~ 25 MT) per 20ft container

Container loaded



Competitiveness

■ Quality

- POSCO's galvanized steel coil is world best
 - Consistent and stable zinc coating with no spangles
- Outstanding quality of Fixon's polymer laminated steel has been proved by various tests widely recognized in the industry

■ Price

- Lowest price for the same quality products

■ Delivery

- HGI: 5 to 6 weeks from order confirmed
- HPL/PL: 6 to 7 weeks from order confirmed / 150 MT per week
- Minimum order quantity: 20 MT each specification
- Lead time varies upon terms and conditions

Polyethylene Film and Laminating Machine

■ HPL/PL Film

- Lead-time: 3 weeks from order confirmed
- Minimum order quantity: 4,000 kg each specification

■ Laminating Machine

- Laminating Capacity
Steel thickness: 1.4mm ~ 3.5mm
Coil width: 400 ~ 750mm
Production (8 hours): 50Mt/Day
- Lead-time: 4 months from order confirmed
- Video reference: <https://youtu.be/SskEuRIDBF8>

Contact

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Thank you

FIXON