

posco TCS



From steel supplier to solution partner

◆ Solution?

Developing products that increase value for customer and offering them with application technologies and commercial supports



Downstream Business

Closure

- Lightweight Part Design (Formability, Crashworthiness etc.)
- Material Proposal (Weight reduction, Cost down, multi-material etc.)
- Forming Technology (CAE simulation support, Part mold tryout support etc.)
- Welding & Joining (Spot welding optimization, Arc welding range etc.)
- Painting & Corrosion (Corrosion performance, Optimization of phosphating etc.)
- Property Analysis (Corrosion test, Dent analysis etc.)
- Teardown Analysis (Benchmarking Parts : structure, material etc.)

Financial Support

Body In White

- Lightweight Part Design (Formability, Crashworthiness etc.)
- Material Proposal (Weight reduction, Cost down, multi-material BW etc.)
- Forming Technology (CAE simulation support, Part mold tryout support etc.)
- New Forming Technology (Hydroforming, TWB, multi-direction roll forming)
- Welding & Joining (Spot welding optimization, Arc welding range etc.)
- Dynamic Performance (Dynamic Material DB, Crash Test & Simulation etc.)
- Property Analysis (Corrosion test, Hydrogen analysis etc.)
- Teardown Analysis (Benchmarking Parts : structure, material etc.)

Cheaper Logistics Cost

Chassis

- Lightweight Part Design (Formability etc.)
- Material Proposal (Weight reduction, Cost down etc.)
- Forming Technology (CAE simulation support, Part mold tryout support etc.)
- New Forming Technology (Hydroforming, TWB, multi-direction roll forming)
- Welding & Joining (Spot welding optimization, Arc welding range etc.)
- Fatigue & Durability (High temperature fatigue, Welding fatigue etc.)
- Dynamic Performance (Dynamic Material DB, Crash Test & Simulation etc.)
- Corrosion (Muffler corrosion evaluation etc.)
- Wire Rod Product (Surface defect control, Optimization of heat treatment etc.)
- Drawing Technology (Preliminary assessment, Forming limit, Die technology etc.)

Prompt Delivery

Powertrain

- Material Proposal (Performance Improvement, Weight reduction, Cost down etc.)
- Structure Analysis (Rotor stress, Durability etc.)
- Performance Analysis (Electromagnetic analysis, Motor performance simulation, EV driving range analysis etc.)
- Wire Rod Product (Surface defect control, Optimization of heat treatment etc.)
- Drawing Technology (Preliminary assessment, Forming limit, Die technology etc.)
- Manufacturing Process (Welding, Annealing, Die condition, Bonding)

Product Properties

◆ Hot-dip galvanized steel product properties

The product can be used in various applications such as Automotive, Home appliances and Construction with molten zinc to the cold - rolled steel products.

Classification		POSCO-TCS
Date of Operation		2016.06
Capacity		450,000 Ton/Year
Available size	Thickness	0.3 - 2.3 mm
	Width	800 - 1,860 mm
	Weight	5 - 30 ton
Coating Weight	GA	60 - 120 g/m ²
	GI	60 - 275 g/m ²
Product Grade		CQ, DQ, DDQ, EDDQ, 340BH, 590DP
Post-treatment		Cr-Free (GI,GA), Phosphate (GA)
Inner Diameter		508 mm / 610 mm

◆ Product Application



Specifications

JIS Standard (JIS3302 : Hot-Dip Galvanized Steel and Coil)

◆ Yield Point, Tensile Strength, Elongation and Non-aging Property

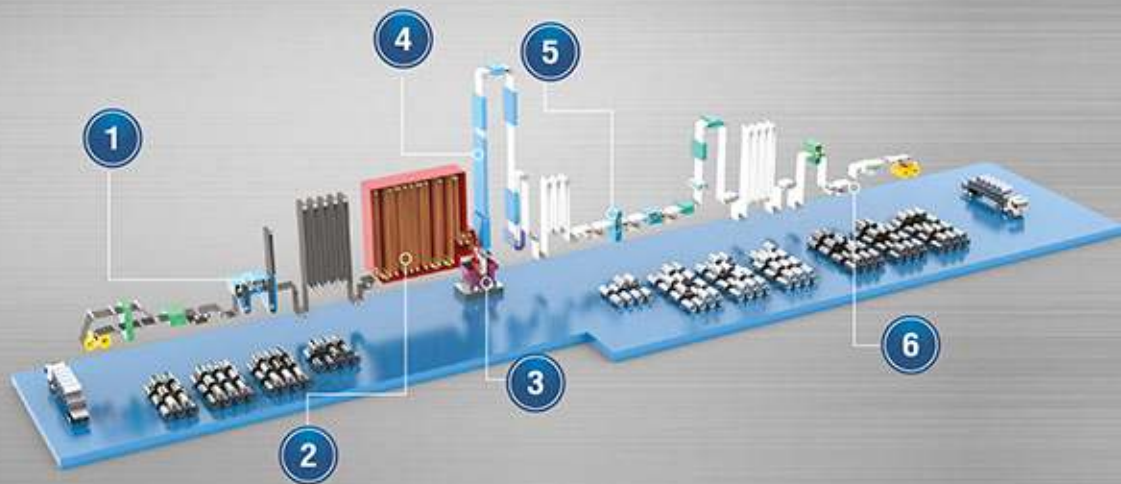
Classification	Yield Point min N/mm ²	Tensile Strength min N/mm ²	Elongation, min, %					Test Piece
			Thickness, mm					
			0.25 ≤ t < 0.40	0.40 ≤ t < 0.60	0.60 ≤ t < 1.00	1.00 ≤ t < 1.60	1.60 ≤ t ≤ 2.30	
SGCC	-	-	-	-	-	-	-	No.5 Direction
SGCD1	-	270	-	34	36	37	38	
SGCD2	-	270	-	36	38	39	40	
SGCD3	-	270	-	38	40	41	42	
SGC340	245	340	20	20	20	20	20	
SGC400	295	400	18	18	18	18	18	
SCG440	335	440	18	18	18	18	18	
SGC490	365	490	16	16	16	16	16	

◆ Coating Weight

Coating Weight Code	Average Value of Double-sided, Triple Spots Method	Average Value of Double-sided, Single Spot Method	JIS G 3302	POSCO - TCS
60	60	51	(Z06), F06	K060, S060
80	80	68	Z08, F08	K080, S080
100	100	85	Z10, F10	K100, S100
120	120	102	Z12, F12	K120, S120
180	180	153	Z18, (F18)	K180
200	200	170	Z20	K180
220	220	187	Z22	K220
250	250	213	Z25	K250
275	275	234	Z27	K275

Manufacturing Processes & Equipment

In order to deliver good quality products and meet customer's requirements, POSCO - TCS is equipped with the latest fully-automated computer controlled cutting edge facilities and technologies. These facilities guarantee products of the highest precision and quality for our customers.



1 Electrolytic Cleaning

Some rolling oil and other contaminants remain on the surface of cold-rolled steel sheets following processing. These are removed by passing the electrically charged sheet through an alkaline solution which induces an electro-chemical reaction.

2 Annealing

The material properties of pre-treated steel sheet can be altered and improved through recrystallization during the annealing process.

3 Hot-Dip Galvanizing

After passing through the annealing furnace, steel sheet is dipped into a zinc pot where molten Zn is coated onto the surface. The desired coating weight is achieved by removing excess zinc before solidification with high pressure air from an air knife.

4 Galvannealing

The surface of steel sheet can be coated with a zinc compound prior to reheating in an annealing process. Zn atoms diffuse into the Fe to create a Zn-Fe series alloy. This process is referred to as Galvannealing.

5 SPM & Chemical Treatment

In order to achieve a flat surface and elegant finish, the steel sheet is processed with a skin pass mill. In order to prevent the white rust, which often forms on the surface of activated zinc, and to improve corrosion resistance, the surface is coated with a Cr-free resin.

6 Inspection & Coiling

Located at the line's exit section are a side trimmer, inspection table and oil coating equipment. At this station all products are inspected and judged relative to material specifications required by the client.

POSCO TCS

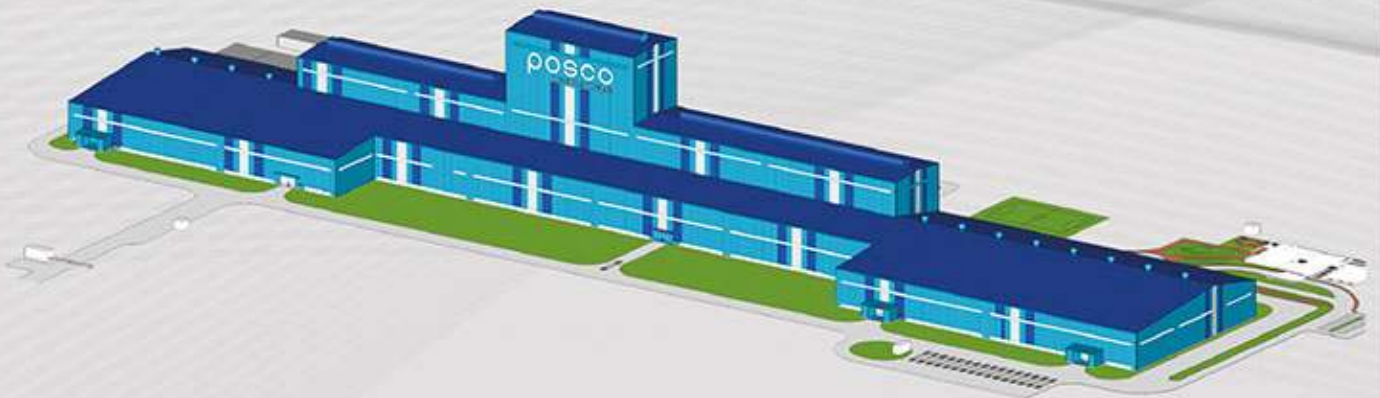
“Excellence in Quality that moves the hearts of customers”

POSCO TCS is a manufacturer of high quality galvanized steel sheet for automobile. Based on the accumulated technology and experience of POSCO Center in Korea, we believe POSCO TCS will make a great contribution to enhance the competitiveness of automobile industry in Thailand and to improve job creation. We have confidence in producing the best quality products and impressing customers through cutting - edge technology and experience based on the mission of Clean - One - New - Top with a production capacity of 450,000 tons per year. In addition, we expect to contribute economic growth in the long-term.

“One POSCO, One family”





POSCO TCS is a Thai company. Although POSCO in Korea have invested capital, the power and motivation to achieve our success is depends on the Thai employees. Therefore, the company is respecting local culture and values. The combination of Korean technology and Thai talent and technology makes POSCO TCS to produce a first-class product.

Thanks to POSCO and all suppliers and customers who have supported us in the production, completion and operation of POSCO TCS. We look forward to your continued support.



Quality Management System

The company manufactures galvanizing steel established to meet the requirement of the automotive industry customer, Home Appliances and construction. POSCO TCS aims to supply our products domestic and overseas. We will keep manufacturing standards for the improvement and development of quality and make an effort to satisfy our customers with efficient service technically and always monitor customer satisfaction.

	ISO9001 : 2015	Quality management standard
	ISO/TS16949 : 2009	Quality management standard for automotive
	TISI	The Certificated license of Thailand
	SIRIM	The Certificated license of Malaysia
	TCVN	The Certificated license of Vietnam
	SNI	The Certificated license of Indonesia

posco
TCS

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