

BJCHI BJC HEAVY INDUSTRIES PCL.



GALVANIZING



GRATING



BUILT-UP BEAM



MSCI



BJC HEAVY INDUSTRIES PUBLIC COMPANY LIMITED

With the company's slogan as "New Force in Heavy Industries", BJCHI is fully committed in taking on that responsibility and to become one of the world-class integrated engineering, procurement, fabrication and modularization (SMP E&I) service provider.

Throughout the years since the establishment in 1994 - BJCHI have exceeded global expectation and performed with excellence to every client's need.

BJCHI value have grown exponentially and have been recognized as an experienced and reliable manufacturer in various fields including pre-cast concrete services, galvanizing, grating, built-up beams and in many other fields.

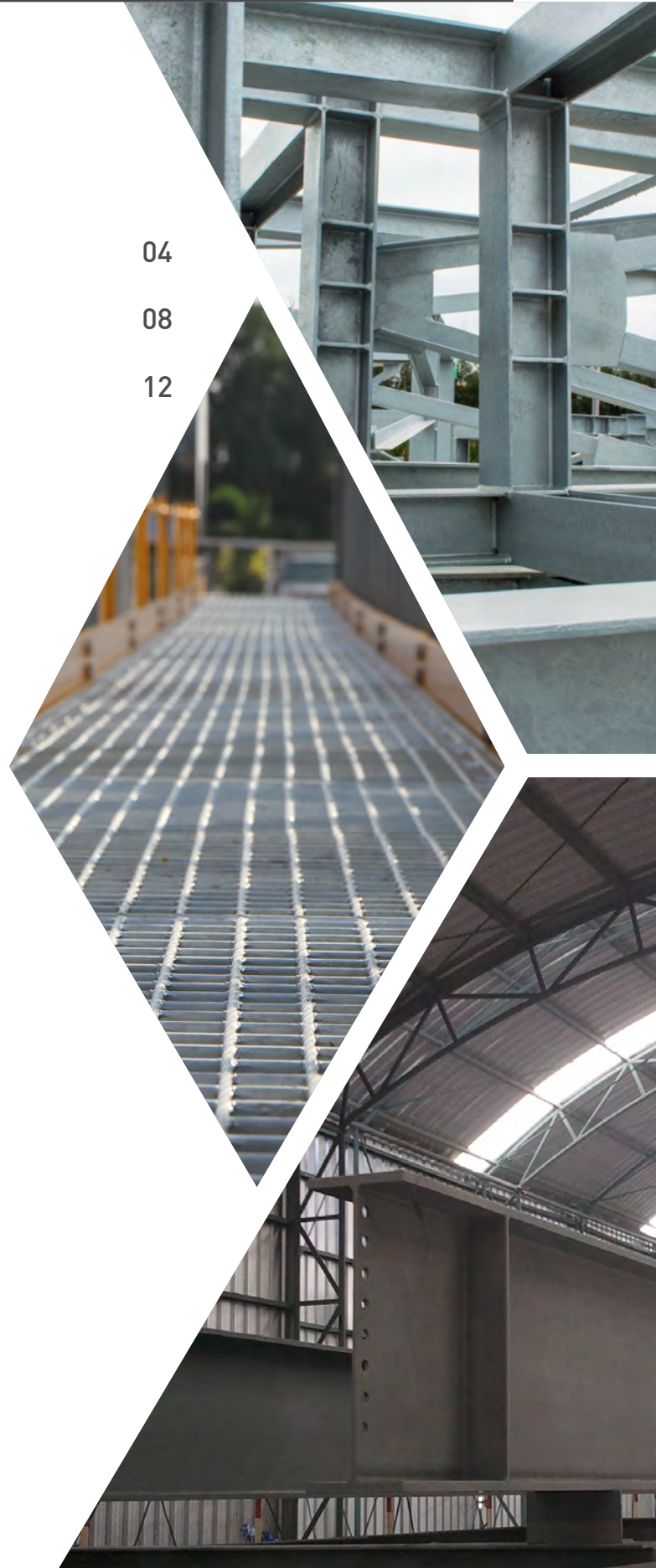


BRIEF COMPANY HISTORY

- 1994 - Established in Maphaphut, Rayong
- 2001 - Relocated to Nikompattana with expansion of capacity up to 550,000 sqm
- 2002 - Certified ISO 9001 (TUV NORD)
- 2011 - Certified ISO 14001 & OHSAS 18001 (TUV NORD)
- 2013 - Established Galvanizing Shop and Grating Shop
 - Included in the Top 100 Stock Exchange of Thailand and MSCI Global Small Capital Index
- 2014 - Commenced the FPSO Modules P75/P77
- 2015 - Commenced the FPSO Compression Modules Project (01B & 02B)
- 2016 - Delivered the FPSO Compression Modules (01B & 02B)
 - Commenced the FPSO Compression Modules Project (03B)
 - Received ESG100 certificate from Thaipat
- 2017 - Received Best IR award from SET
 - Delivered the FPSO Module P75/P77
 - Commenced SunSHIFT Solar Panel
- 2018 - Delivered the FPSO Compression Modules Project (03B)
 - Commenced the UPGN Comperj Module
 - Certified as a member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)
- 2019 - Executed Wellhead Skid (3 years contract)
 - Commenced the Covent and Sweeny Modules Project
 - Commenced the CRISP Module Project

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01

GALVANIZING SHOP

CAPACITY FACILITY AND ENVIRONMENTAL
GALVANIZING STANDARD
BENEFITS OF GALVANIZING
GALVANIZING PROCESS
MAJOR CLIENTS

GALVANIZING SHOP

BJCHI has built one of Thailand’s largest zinc galvanizing shop.

With the intention to accommodate the increasing galvanizing internal and external demands – BJCHI have successfully fulfilled those demands since the completion of the shop in 2013.

As safety for the employees and the surrounding environment is one of the many priorities of BJCHI – The Galvanizing Shop is in possession of an advanced air ventilation system for the employees and strict procedures for waste disposal to minimize the impact to the surroundings.



CAPACITY FACILITY AND ENVIRONMENTAL



Capacity

- Capacity:**
3,500 Tons / Month
- Kettle Size:**
13(L) x 2(W) x 2.7(H) Meters
- Automatic Winch System:**
6 unit with control room
- Overhead cranes:**
2 cranes of 10 Metric Tons
2 Cranes of 6 Metric Tons
1 Crane of 3 Metric Tons



Facility

- Facility Size:**
28,000 Square Meters
- Factory Size:**
3,500 Square Meters
- Stockyard Size:**
24,500 Square Meters



Environmental

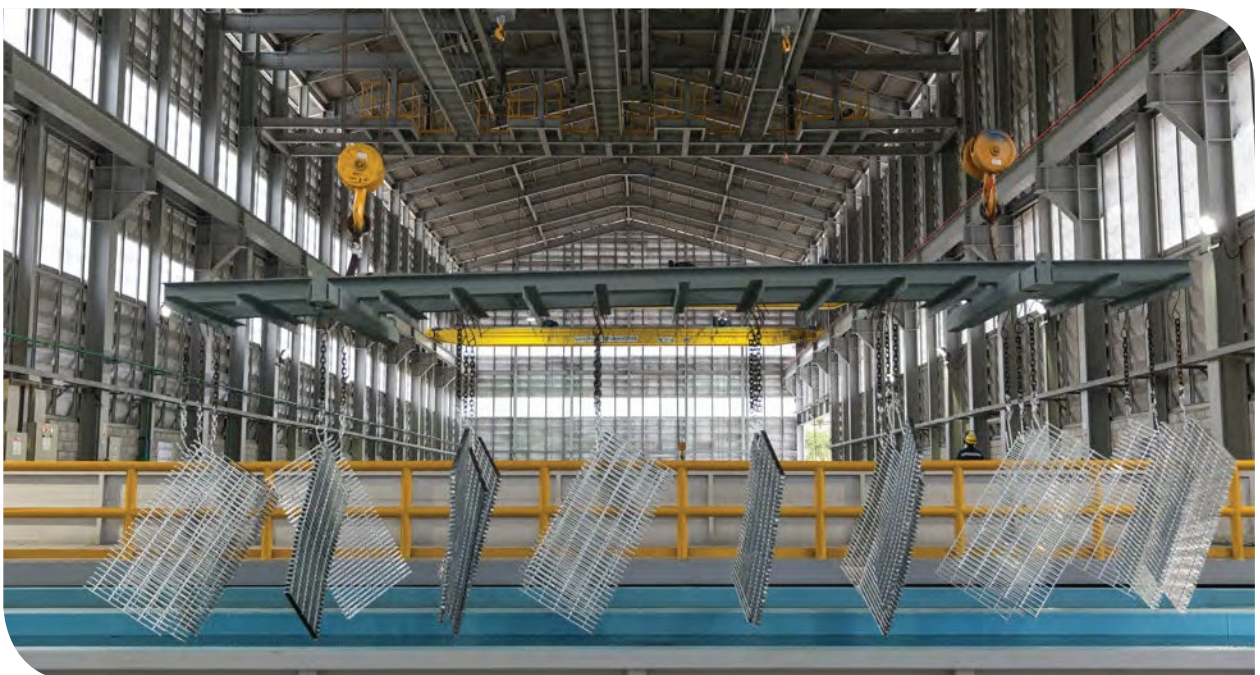
- Bag filter system:**
Fume zinc
- Wet scrubber:**
3 Sets of fume scrubbers
- Waste storage tank:**
240 cubic meters

GALVANIZING STANDARD

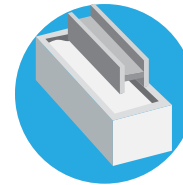
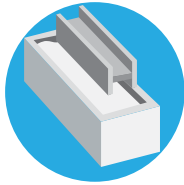
- ① **ASTM A123 (2017)**
Standard specification for zinc coating on iron and steel products
- ② **BS EN ISO 1461:2009**
Standard specifications for coating on fabricated iron and steel products
- ③ **AS/NZS 4680:2006**
Standard specifications for coating on fabricated ferrous articles
- ④ **JIS H 8641:2007**
Standard specification for hot dip galvanized coatings

BENEFITS OF GALVANIZING

The use of galvanizing provides numerous benefits to steel products including lower maintenance cost and the reliability for longer service.



GALVANIZING PROCESS

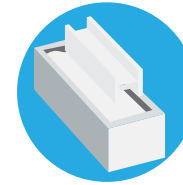
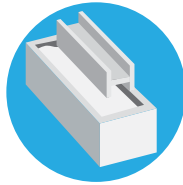
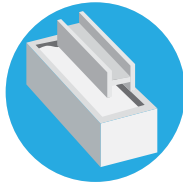


SURFACE PREPARATION

Surface preparation is the most important step in the application of coating. Failures in surface preparation will be apparent when the steel is withdrawn from the molten zinc.

CAUSTIC CLEANING

A hot alkali solution is used to remove organic contaminants such as dirt, paint markings, grease and oil from the metal surface.



PICKLING

Scale and rust are removed from the steel surface by pickling in a dilute solution of 18% by volume hydrochloric acid.

FLUXING

Fluxing inhibits oxidation and aids in the process of the liquid zinc wetting and adhering to the steel.

GALVANIZING

Fabricated items are immersed in the galvanizing bath until they reach the bath temperature. The zinc metal reacts with the iron on the steel surface to form a zinc/iron intermetallic alloy.



MAJOR CLIENTS





GRATING SHOP

02

GRATING SHOP

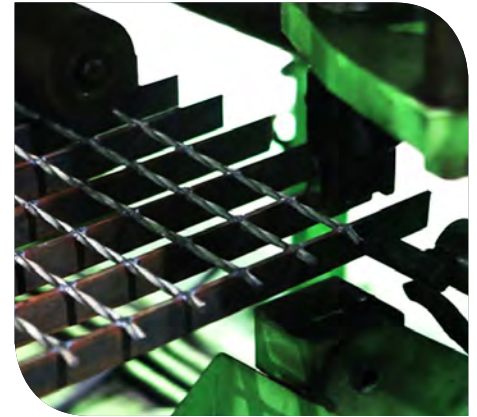
MATERIAL TYPE / GRADE
STEEL GRATING PATTERNS
SURFACE TYPES
TYPE OF STAIR TREADS
TREATMENT AND COLORS

GRATING SHOP

BJCHI has built one of Thailand's most reliable grating factory with possession of a full line of forge welding and accessory equipment.

With the intention to accommodate the increasing in grating demands – BJCHI annual capacity of 5,000 tons can ensure the client's demand whether they are company's internal or external demands.

Continued Investments have increased automation and capabilities to fabricate a wider range of specification.

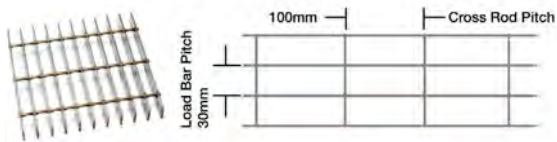


MATERIAL TYPE / GRADE

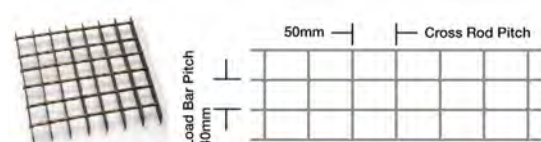
- ① Mild Steel**
Material grades ASTM A36 and Grade 250 or equivalent
- ② Stainless Steel**
ASTM A240-304, 316



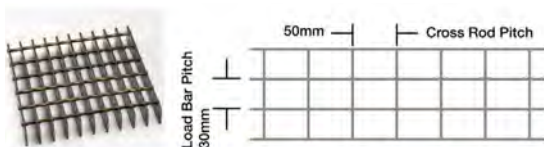
STEEL GRATING PATTERNS



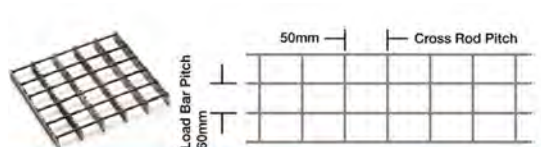
PATTERN A.



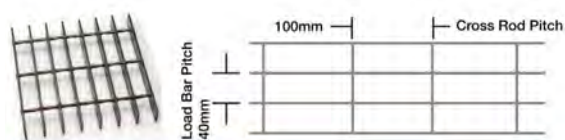
PATTERN D.



PATTERN B.



PATTERN E.



PATTERN C.

SURFACE TYPES



Plain Surface



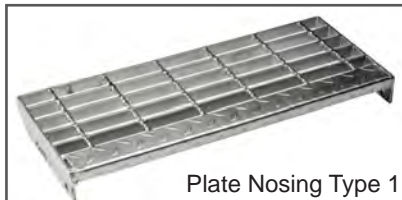
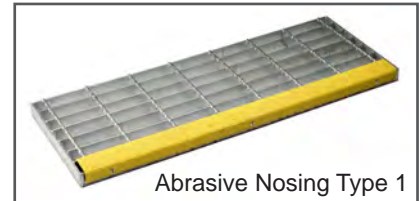
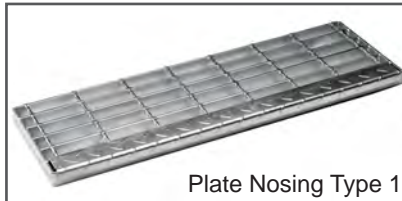
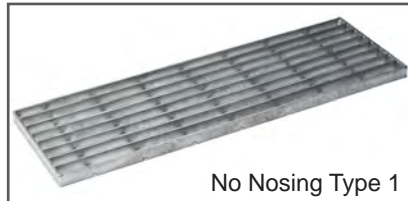
Serrated Surface

Recommended Max. Span (mm)

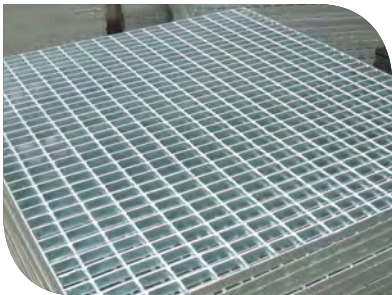
Bearing Bar Size	25 x 5	32 x 5	40 x 5
A & B Pattern	900	1300	1600
C & D Pattern	750	1200	1500
E Pattern	500	800	-

TYPE OF STAIR TREADS

BJCHI can manufacture any length and width from any type of stair tread gratings to meet your specifications. Floor plate nosing and yellow abrasive nosing for extra grip can also be manufactured.



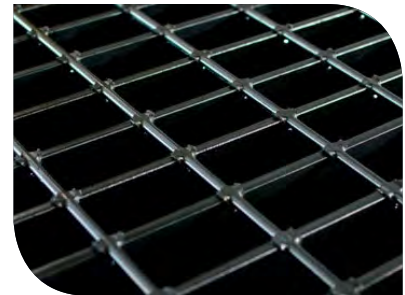
TREATMENT AND COLORS



Galvanized



Painted



Black (Untreated)





03

BUILT-UP BEAM SHOP

H-BEAM STANDARDS

MACHINERIES

H-BEAM PRODUCTION PROCESS

BUILT-UP BEAM SHOP

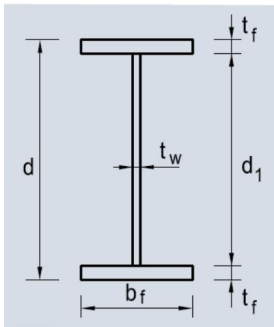
BJCHI completed its built-up beam shop in 2014 with the intentions of accommodating the high demands of beams.

The built-up beam production line has a capacity of 25,000 Tons per annum and possesses highly automated machine and equipment for plate cutting, T-Shape and H-Shape assembly.

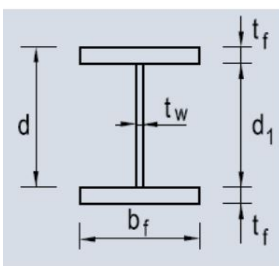


The current technical capabilities of the built-up beam shop enables BJCHI to fabricate nearly all beam specifications required by the clients.

DIMENSIONS



Welded Beams									
Designation	kg/m	Depth of Section mm	Flange		Web thickness mm	Dep Between flanges mm	Weld size mm	Design Capacity Joint	
			Width	Thickness				300 PLUS	400 Grade
			mm	mm				mm	mm
1200WB	455	1200	500	40	16	1120	8	5.50	6.14
	423	1192	500	36	16	1120	8	5.50	6.14
	392	1184	500	32	16	1120	8	5.50	6.14
	342	1184	400	32	16	1120	8	5.50	6.14
	317	1176	400	28	16	1120	8	5.50	6.14
	278	1170	350	25	16	1120	8	5.50	6.14
1000WB	249	1170	275	25	16	1120	8	5.50	6.14
	322	1024	400	32	16	960	8	5.50	6.14
	296	1016	400	28	16	960	8	5.50	6.14
900WB	258	1010	350	25	16	960	8	5.50	6.14
	215	1000	300	20	16	960	8	5.50	6.14
	282	924	400	32	12	860	6	4.13	4.61
800WB	257	916	400	28	12	860	6	4.13	4.61
	218	910	350	25	12	860	6	4.13	4.61
	175	900	300	20	12	860	6	4.13	4.61
700WB	192	816	300	28	10	760	6	3.44	3.84
	168	810	275	25	10	760	6	3.44	3.84
	146	800	275	20	10	760	6	3.44	3.84
700WB	122	792	250	16	10	760	6	3.44	3.84
	173	716	275	28	10	660	6	3.44	3.84
	150	710	250	25	10	660	6	3.44	3.84
700WB	130	700	250	20	10	660	6	3.44	3.84
	115	692	250	16	10	660	6	3.44	3.84



Welded Columns									
Designation	kg/m	Depth of Section mm	Flange		Web thickness mm	Dep Between flanges mm	Weld size mm	Design Capacity Joint	
			Width	Thickness				300 PLUS	400 Grade
			mm	mm				mm	mm
500WC	440	480	500	40	40	400	8	5.50	6.14
	414	480	500	40	32	400	8	5.50	6.14
	383	472	500	36	32	400	8	5.50	6.14
	340	514	500	32	25	450	8	5.50	6.14
	290	506	500	28	20	450	8	5.50	6.14
	267	500	500	25	20	450	8	5.50	6.14
400WC	228	490	500	20	20	450	8	5.50	6.14
	361	430	400	40	40	350	8	5.50	6.14
	328	430	400	40	28	350	8	5.50	6.14
	303	422	400	36	28	350	8	5.50	6.14
	270	414	400	32	25	350	8	5.50	6.14
	212	400	400	25	20	350	8	5.5	6.14
300WC	181	390	400	20	20	350	8	5.5	6.14
	144	382	400	16	16	350	8	5.5	6.14
	280	355	350	40	28	275	8	5.50	6.14
	258	347	350	36	28	275	8	5.50	6.14
	230	339	350	32	25	275	8	5.50	6.14
300WC	197	331	350	28	20	275	8	5.50	6.14

MACHINERIES



Rounding Machine



Assembly Machine



Centering Machine



Turning Machine / Lifting Machine



Mobile Turning Machine



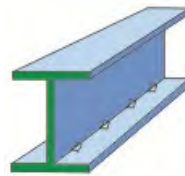
Straightener

H-BEAM PRODUCTION PROCESS



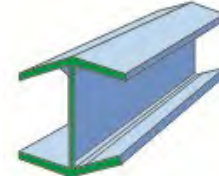
Plate cutting

Cutting the steel plates in order to weld the 3 pieces together to become an H shape.



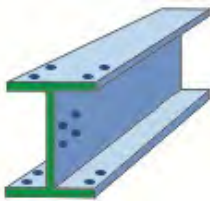
H-beam Assemble

Assembling and welding the 3 plates to become an H shape.



H-Beam Welding

Turning the pre-welded H-beam to weld it all round.



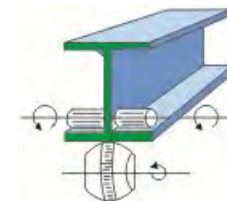
Hole Drilling

Drilling the holes into the H-beam.



Edge Processing

Trimming off the excess edges of the H-beam.



Straightening

Straightening the beam in order to ensure that the material is according to the requirement.





ADDRESS

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