

Jubail Metal Galvanizing Company Ltd



Your Partner in Hot Dip Galvanizing and Additional Services

**Highest Environmental level
in the Eastern Province**

We offer you:

- Reliability
- High Quality Products
- Commitment
- Good pricing



Additional Service:

- Sand blasting
- Painting & Powder Coating
- Assembling & Storage
- Transportation
- Packaging
- 24 hour delivery service
- Cleaning
- Drilling

Certified:

ISO 9001
ISO 14001
ISO 45001

ARAMCO Vendor no:

Under Approval



About us

The idea of starting a Hot Dip Galvanizing plant in the Kingdom of Saudi Arabia was initiated in 2007 in Manama city, Bahrain where the Dutch company CIC International met the Saudi investors.

Saudi Industrial Development Fund participated in funding the project by loaning 50% of the cost of the project.

The first construction activities were initiated in 2010 and building construction ended in 2013. In February 2015 a Kuwaiti Investor bought the majority of the shares (52%). After this transfer of the shares the activities increased rapidly. Construction, installation of equipment, commissioning and start-up succeeded each other.

As a result, in January 2019 Jubail Metal Galvanizing Co Ltd opened its facility in Jubail Industrial City, Location Support Industries, sector 3 Road 118.

The brand new environmental friendly plant, unique in the Kingdom built by the Dutch company CIC International is in production. The capacity of the plant is 120 tons/shift/day with bath dimension of 12,5 m Length x 1,8 m Width x 3,2 m Depth. The annual capacity is 80-100.000 tons/year.

Jubail Metal Galvanizing Co Ltd will cover the region of Saudi Arabia and the neighboring countries with complete set of services in order to unburden the customers.

The plant is designed and equipped to adapt to the futures stringent legislation and the highest ecological levels of the Royal Commission. Ready for the future with sustainable technology !!



Vision

Jubail Metal Galvanizing Co's Ltd vision is driven through "Innovation by Continuous Development" to build and expand "Greenfield" galvanizing facilities in Saudi Arabia and the GCC areas. Aware of the environmental situation in the world, the need for environmental improvement, recycling and offering sustainable technology JMG is a strong advocate towards the promotion of environmental awareness among the operating industries in the Kingdom and GCC countries.

Our Organization is persistent in its quest to exploring technical advancement in the fields of new galvanizing technologies and yet pro-active to environmental, ecological, ergonomically and productivity factors.

Our mission

Jubail Metal Galvanizing Co's Ltd mission is to be the best, the biggest and the most reliable service provider on the market in the field of metal surface treatment.

Our Strategy

Offering customers 24 hours service with high quality products and unburden the customer.



ISO Certification

Jubail Metal Galvanizing Co Ltd is the first galvanizing company in the Kingdom of Saudi Arabia that has a certified Integrated Management System (IMS). Our organization was approved by Intertek company for:

- ISO 9001
- ISO 14001
- ISO 45001

Jubail Metal Galvanizing Co Ltd is committed to achieve and maintain excellence in Quality, Health, Safety and Environment.

We have a “Zero-emission systems” to convert the process waste into useful chemicals for re-use or in raw material which can be used for other applications.

We strive to achieve our QHSE objectives, through leadership commitment, effective implementation of integrated QHSE management system and maintaining compliance to our policies and visions.

Product range

Jubail Metal Galvanizing Co Ltd has a complete product range covering everything that is required for Hot Dip Galvanizing and Metal Surface Treatment like:

- Sand blasting
- Painting & Powder Coating
- Assembling & Storage
- Transportation
- Packaging
- 24 hour delivery service
- Cleaning
- Drilling
- Metal Fabrication



Production data

Bath dimensions:	12,5m long 1,8 m wide 3,2 m deep
Capacity per 3 shift:	100.000 tons/year
Lifting capacity:	Heavy duty cranes



Quality & Laboratory

The Jubail Metal Galvanizing Co Ltd plant is under strict Quality Control including a well-equipped laboratory under female employed Dutch Supervision having more than 20 years of experience in the galvanizing industry and corrosion prevention.

Our laboratory has an analytical and metallurgical character. This is unique in the Kingdom of Saudi Arabia. It will be used for our own quality checks but is also available for external analysis and research.

The laboratory is equipped with all the required analytical apparatus like:

- conductivity meter
- pH meter
- spectrophotometer
- etc.

The metallurgical aspect of our laboratory includes:

- Metallographic microscopy
- Making sleeve for metallographic investigation
- (accelerated) salt spray tests
- Coating thickness measurements
- Stroke solidity
- Coating adherence test
- Taber Abrasion test
- Hardness
- Surface Roughness Ra, Rc, Rt

Secondly, a complete pilot line is available for testing and other coating systems like (Zinc) - Aluminum coatings.



Training & education

Jubail Metal Galvanizing Co Ltd is sharing its knowledge with its customers by organizing seminars and trainings on frequent basis in our own training center.

The training includes the important issues for good quality galvanizing which is not recognized by architect, designers, constructors and steel fabricators. A number of important subjects are mentioned below:

- Influence of bad welding on galvanized steel
- Dimensions of the structure
- How to construct steel and make it ready for galvanizing?
- Influence of the steel composition on process and appearance of hot dip galvanized steel
- Etc.



Hot Dip Galvanizing

• History

The protection of steel from corrosion by hot dip galvanizing is already a very old process. In the 1800s the first process was developed by the French man Malouin. Today it is the best and cheapest way of protecting steel from corrosion. It is used in many applications.

In 1742, French chemist Paul Jacques Malouin described a method of coating iron by dipping it in molten zinc in a presentation to the French Royal Academy. In 1772, Luigi Galvani (Italy), for whom galvanizing was named, discovered the electrochemical process that takes place between metals during an experiment with frog legs.

• Corrosion resistance

Hot Dip Galvanizing is famous for its excellent corrosion resistance and its cathodic protection. Since zinc is a less noble element than steel/iron it will be sacrificed in order to prevent the steel from corrosion: this is what they call cathodic protection.

When the Hot Dip Galvanized layer is damaged the surrounding zinc will act as an cathodic layer in order to protect the steel.

The corrosion resistance of hot dip galvanized material depend on the environment and is classified in 4 regimes, namely:

- Rural environment
- Urban environment
- Industrial environment
- Marine environment



• The Hot Dip galvanizing process

Hot-Dip Galvanized steel is used in thousands of applications throughout the world and yet it has been effectively used for more than several decades. The value of Hot Dip Galvanizing stems from the relative corrosion resistance of zinc, which, under most service conditions, is considerably better than iron and steel. In addition to forming a physical barrier against corrosion, zinc, applied as a Hot Dip Galvanized coating, cathodically protects exposed steel. Galvanizing process is favored because of its low cost and the ease of its applications.

The Jubail Metal Galvanizing Co Ltd plant facility aside from its technical and mechanical characteristics, is engineered to reduce consumption of chemicals and minimize waste production which correspond with a higher quality of the final product.

• Green Plant Technology

“Zero-emission system” is developed in order to convert the process waste into useful chemicals for re-use or in raw material which can be used for other applications. It shall adapt new technologies that will significantly reduce energy and zinc consumptions of the galvanizing process.





Characteristics of the plant

- State of the Art technology according to West European Standards
- Highly efficient
- Exclusive Environmental friendly
- Unique in GCC
- According to ASTM A123/ BS and ISO 1461

Unique selling point

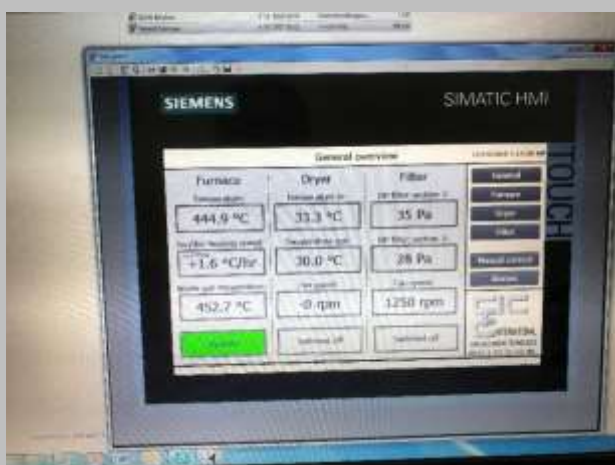
- High quality
- Commitment
- Reliability
- Special process to handle government/navy/shipment abroad
- Customer access to our planning
- Short and quick delivery times
- Meeting customers demand
- 24/7 service
- One stop shop for corrosion protection
- Good pricing : quality ratio
- High level of knowledge
- Unique skilled & trained labor/crew
- High Environmental production level



- We are YOUR PARTNER in corrosion protection
- Use SHG (special high grade) zinc 99,995%, no additives
- Saudisation more than 30%

JMG quality level consists out of:

- Acceptable coating thickness
- No pickles
- No ashes or remains of ashes
- Good appearance
- Good adherence
- No black spots
- Smooth surface
- No droplets
- Good delivery time
- No transportation damage
- No deformed products



Important for High Quality Hot Dip Galvanizing

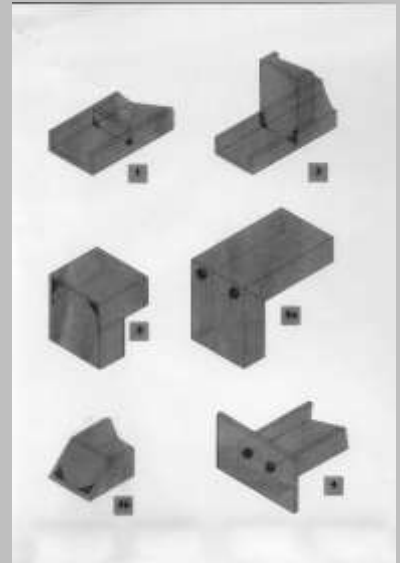
Holes

Making holes only whenever is required after consulting the customer. In order to obtain the best quality for hot dip galvanizing holes are important, especially for tubes.

Holes need to be present for several reasons:

- For jiggling the material.
- For de-aeration of the material.
- For draining the material.
- For prevention of explosion during galvanizing.
- For releasing of the ashes during galvanizing.

When holing is not carried properly it will lead to reduction in quality with black spots and ash remains.



Welding

Welding of steel parts has a big influence on the quality of galvanized material. The welds:

- Should be completely close because chemicals will come out after galvanizing and dissolve the zinc layer.
- Oil and fat should be removed because they will burn into the steel and cause black spots.
- Welding spatters must be avoided.
- Welds and the surrounding areas should be cleaned afterwards by grinding.
- Proper non-reactive electrode should be used to avoid thick welds.



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Steel composition

The percentages of elements in the steel, which cause an outgrown zinc-layer, has influence on the formation of the alloy layer of Zinc (Zn) and Iron (Fe) as shown in the mentioned microscopic photographs. The outer appearance of the layer varies from bright and shining till dark and gray like a spider web structure:

- Si between 0,05-0,12%w/w, or higher than 0,25%w/w
- P > 0,045%w/w.
- Si + 2,5 x P > 0,09, when Si < 0,03%w/w.
- Si + 2,5 x P > 0,2%w/w ('French-standard').
- Si ± 0,02%w/w and an Al-percentage ≥ 0,045%w/w.

This effect can partly be suppressed by using alloy-elements in the zinc bath.





Contact details:

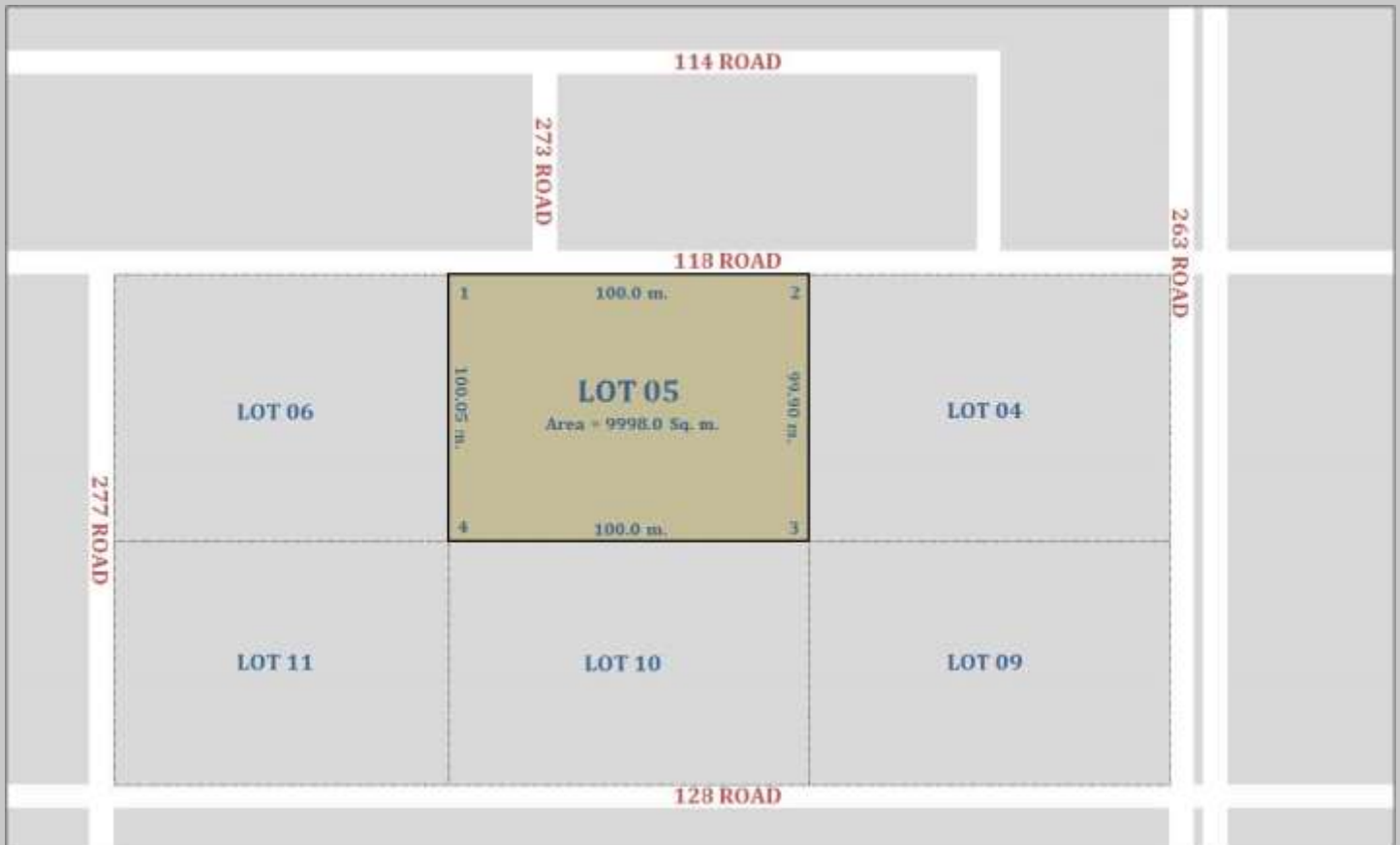
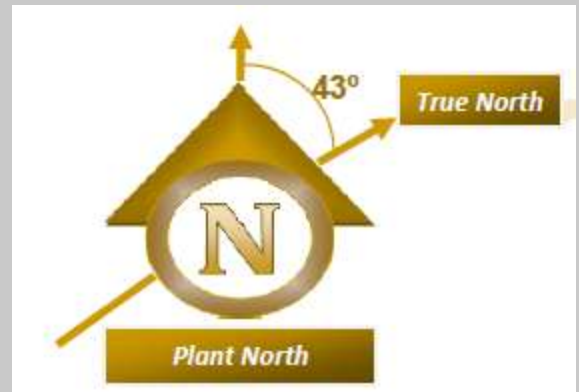
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Integrated Management system

ISO 9001

ISO 14001

ISO 45001

ARAMCO under approval

CR, VAT, Zakat, GOSI certificate

RC vendor no RCJ 14420