Industrial Hot Dip Galvanizing Catalog
METELMEX
Since 1981 we have successfully provided services to different industries worldwide. By offering high quality products at competitive prices, we have gained prestige as one of the most important Mexican companies of its field on a national and international level.

Even though our main area of expertise is the fabrication of Steel Bar Grating, due to our client’s requirements and highly demanded standards by the market, we have grown our products range, thus, we are able to offer integrated projects with higher quality in shorter periods of time.

Hot Dip Galvanizing
This process is carried out through immersion of materials into a bath of molten zinc. Due to the fact that the pieces are totally immersed in the liquid metal, the surface is completely covered and protected from possible corrosive effects which could be caused by the atmosphere, water or surface.

Our Galvanizing service applies to different products of the industry, such as: industrial grating, pipes & tubing, angles, beams, channels, railings, among many others.

¿WHY SHOULD YOU HOT DIP GALVANIZE?
• Zero maintenance
  Galvanized coatings does not need maintenance.
• Affordable
  Galvanizing price is very reasonable.
• Absolutely reliable
  Hot dip galvanizing is a simple process, controlled, and perfectly specified by ASTM & NMX standards.
• Compatible with other finishes
  You can paint over it and it also looks fine with stainless steel and aluminum.
Hot Dip Galvanizing is a process that aims to provide protection against corrosion by coating steel structures with zinc layers. This process, used as a coating in industrial, civil, and commercial projects is the highest protection against corrosion for any steel product.

**CORROSION RESISTANCE FOR GALVANIZED COATINGS**

<table>
<thead>
<tr>
<th>Coating thickness</th>
<th>Average number of years duration before appears an oxidation of 5% over the steel surface</th>
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<tbody>
<tr>
<td>Mils of inches</td>
<td>Rural</td>
</tr>
<tr>
<td>1.5 to 3.0</td>
<td>269 to 557</td>
</tr>
<tr>
<td>3.1 to 4.7</td>
<td>558 to 884</td>
</tr>
<tr>
<td>4.8 to 7.8</td>
<td>885 to 1400</td>
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Zinc layers are normally specified due to its resistance against corrosion, and not for its appearance.

Our process line is specially designed to meet the needs of any client that requires zinc coating or galvanization. ASTM A385 is a standard practice used to guarantee the highest quality of zinc layers after hot dip galvanizing.

Specific elements in steel composition, such as carbon greater than 0.25%, phosphorus greater than 0.040%, manganese greater than 1.3%, silicon between 0.04% and 0.15%, or above 0.22% can trigger non desired growth of zinc layers.

**Galvanizing capacity** | 24,000 tons per year
---|---
**Galvanizing kettle dimensions** | 5' width x 42' length x 10' depth (feet)
**Tons per immersion** | Up to 5

Support columns emerging from zinc kettle
GALVANIZING PROCESS

Consists in immersing elements in a bath of molten metal composed mainly by zinc. Due to the fact that the pieces are totally immersed in the liquid metal, the surface is completely covered and protected from the corrosive effects caused by the environment.

This process is affordable and attractive for the construction industry, since it is an alternative to the use of long lasting, resistant and affordable structures.

CERTIFICATIONS AND STANDARDS

In order to achieve our clients required quality, we keep up to date with international and national (ASTM and NMX) standards and certifications led by the associations to which we belong, such as AMEGAC and LAPEM. This ensures long life to our galvanized products.

ISO 9001. International standard that applies to quality management systems (QMS) and focuses on the elements of quality management to ensure an effective system that allows companies to manage and improve the quality of their products and services.

ASTM A123. Standard specification for zinc coatings (hot dip galvanizing) on iron and steel products.

NMX H 004. Mexican standard for zinc coatings (hot dip galvanizing) on iron and steel products.

ISO 1461. International standard (hot dip galvanizing) on iron and steel products.

ASTM A385. Standard practice to provide high quality zinc layers (hot dip galvanizing).

ASTM A780. Standard practice for repairing damaged areas that lack of a hot dip galvanize coating.
ZINC PAINT

The high performance compounds of zinc in aerosol and its liquid form (Prime Zinc and Super Zinc) protect steel from corrosion through galvanic action.

INSTANT PROTECTION:
The first generation barrier of zinc dries rapidly, protecting the metal against corrosion. Oxygen in the air reacts with the resin, forming a tough long lasting coating.

LONG-TERM PROTECTION:
The second generation of zinc is formed in the outer layers of the surface as a reaction of its contact with moisture and air. This forms zinc oxide, which acts as an insoluble coating that protects the metal on the long term.

PROTECTION AGAINST SCRATCHES:
When zinc and steel are in direct contact and are separated by a scratch while at the same time being in contact with humidity, zinc turns into anode and steel into cathode, forcing the zinc to sacrifice for the steel, making more zinc oxide layers.

PRESENTATIONS

Cold galvanizing compound spray
14 oz.

Cold galvanizing compound can
1 gal.