

GROUP



INGEMETAL S.A.S
Soluciones Metalmeccanicas



WHO WE ARE

We are a company dedicated to design, manufacture and marketing of metal poles for street lighting, for electrical distribution, reinforced polymeric fibers (GRP) poles for electrical distribution and Street lighting, metal structures, and fittings for transmission lines and Electrical Distribution Towers, Door frames made of concrete and polymeric concrete; (GRP) for metal structures and fittings for transmission and distribution networks.



ISO 9001 : 2015
BUREAU VERITAS
Certification



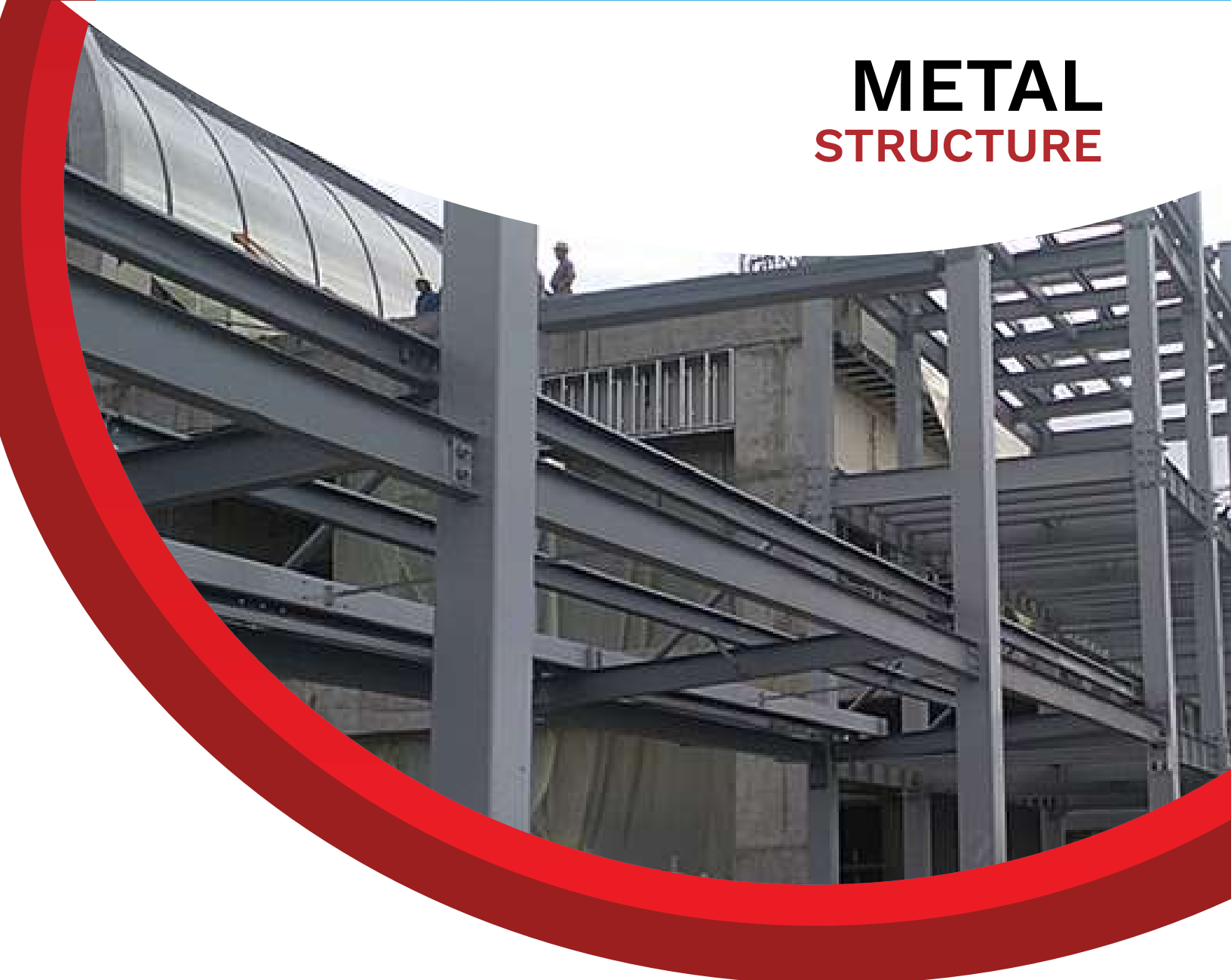
ISO 14001 : 2015
BUREAU VERITAS
Certification



ISO 45001 : 2018
BUREAU VERITAS
Certification



METAL STRUCTURE



We are a company with long experience in design services, structural calculations, production and assembly of metal structures. Implementing up to date innovations, with a highly trained human team and specialized to carry out our processes, both in the design stage as in the construction through methodologies based on Planning and scheduling which allows us to guarantee the supply of the Elements Needed to Comply with the construction times, specifications and requirements of the project.

Our company follows strict quality procedures, both national and international. Our staff is accredited under different qualifications for each of the works that we undertake. We offer to Our customers a high commitment to responsibility, Professionalism and compliance in the development of projects.



METAL POLES FOR STREET LIGHTING

INGEMETAL GROUP WF, is a Colombian company that manufactures steel poles focused on public lighting. We manufacture poles suited for street lighting public and private, Pedestrian and industrial paths, residential areas, parks, parking lots. With a Wide variety of designs in heights from 2 to 18 meters. The main function is to support the arm and luminaire; They are designed to the highest quality standards and durability, using resistant materials and manufactured with the highest quality standards. Made of ASTM A 500, ASTM A 572, ASTM A 36 steel, Galvanized with the best materials ready to withstand extreme weather conditions, atmospheric pollution UV radiation, humidity, etc.



Compliant Standards:

RETILAP | NTC 2076 | ASTM A153
| ASTM A123 | ET-204 ENEL
CODENSA | ET-207 ENEL
CODENSA | ET-212 ENEL
CODENSA | ET-220 ENEL
CODENSA



METAL ARMS

FOR LUMINAIRE INSTALLATION



Support arm for installation of street lighting luminaires on metal poles, fiberglass, concrete, wall mounted and facade applications, specially for LED luminaires.

Our wide range of outdoor lighting arms and Brackets by GROUP INGEMETAL WF offers stylish designs and easy to install products both for a traditional style, as well as modern applications.

These brackets are made of Steel ASTM A 500, galvanized with the best materials and ready to resist extreme weather conditions, air pollution, UV radiation, humidity, etc.



Compliance Standards:

RETILAP | NTC 2076 | ASTM A153 | ASTM A123 | RA5-207 EPM | RA5-204 EPM | RA5-106 EPM | AP-800-1 ENEL CODENSA | AP-806 ENEL CODENSA | AP-806-1 ENEL CODENSA | AP-800-2 ENEL CODENSA

HIGH MASTS FOR LARGE AREA LIGHTING

Section 300.1, Section 390.2. Metal Posts
Public Lighting). We are certified for High Mast
manufacturing
from 8m up to 45m in height. Our manufacturing
processes comply with
internationally recognized Standards such as
Standard Specifications for structural supports for
highway signs, luminaires and traffic signals
AMERICAN ASSOCIATION OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS AASHTO and others
standards such as ANSI/NAAM FP1001, GUIDE FOR
SPECIFICATIONS FOR DESIGN OF METAL
FLAGPOLES.

The poles offered by GROUP INGEMETAL WF
have the most rigorous quality control and
the highest standards in design and manufacturing.
They stand out for their adaptability in terms of
architectural language and are taken into account
those physical and environmental characteristics
of the sites in which they will be installed
such as salinity, pollution levels ,
humidity, among others.



Compliance Standards:

RETILAP | NTC 2076 | ASTM
A153 | ASTM A123 | ANZI Z359.1
| ET-211 ENEL CODENSA |
ET-214 ENEL CODENSA |
ET-222 ENEL CODENSA



LIGHTNING SHIELDING MASTS

SHIELDING masts are used in different sectors to avoid damage due to the electrical discharges caused by a storm. Metal masts are manufactured from coils or steel plates of different qualities, duly Certified. The sections that make up the mast are cut and then folded into sections Truncated-pyramidal or tubular, which are then welded longitudinally with automatic arc equipment submerged or MIG. Coupling systems by means of flanges or embedding system. All masts come with removable or fixed climbing ladder, life line certified according to ANSI Z359.1 -2007 standard. manufactured and installed considering and giving compliance with the guidelines of the Colombian Aeronautical Regulation RAC-14. We have Certification for lightning and shielding masts from 18m to 45m high. They have the availability to install spacers for reflectors and Aero beacons navigation according to FAA L-810 TYPE A and ICAO TYPE B.



Compliance Standards:

RETILAP | NTC 2076 | ASTM
A153 | ASTM A123 | ANZI Z359.1 |
RAC-14 | FAA L-810 TIPO A |
OACI TIPO BEL CODENSA |
ET-214 ENEL CODENSA |

METAL DISTRIBUTION POLES

Metal distribution poles are manufactured from steel coils or plates of different qualities, duly certified. The sections that make up the pole are cut and then folded to form truncated-pyramidal or tubular sections, which then are welded lengthwise with automatic submerged arc or MIG equipment. Coupling systems by means of flange or embedded system. They have a ladder for climbing, removable or fixed, certified lifeline according to ANZI Z359.1 -2007 standard. Manufactured and installed considering and complying with the guidelines of the Colombian Aeronautical Regulation RAC-14. We have the Certification for shielding and lightning masts from 18m to 45m high. They have the availability to install crossheads for Reflectors and beacons of Aero navigation according to FAA L-810 TYPE A and ICAO TYPE B.



Compliance Standards:

RETILAP | NTC 2076 | ASTM A153 |
ASTM A123 | ANZI Z359.1 | RAC-14
| FAA L-810 TIPO A | OACI TIPO
BEL CODENSA | ET-214 ENEL
CODENSA | ET-222 ENEL
CODENSA



TELECOMMUNICATIONS MONOPOLE

We design, manufacture and install monopoles self-supporting telecommunication systems, truncated-pyramidal polygonal sections, reaching heights up to 45m and with the highest standards of quality from a technical and aesthetic point of view.

From design to fabrication and installation

We consider all technical requirements established in international standards: TIA-EIA 222 Rev. (Structural Standards for Towers and Structures made of steel antennas).

The materials used for the manufacture of

Our telecommunication monopoles are:

ASTM A36, A572 or A1011 Grade Steel Plain Sheets 50 or similar. Angular profiles laminated in ASTM A572 Grade 50. Galvanized screws ASTM A394 Type 0, SAE Grade 5. Hot dip Galvanized treatment according to ASTM A123.

We have a highly qualified team of professionals qualified to perform the structural designs of telecommunications-based monopoles under international regulations and trained in CAD design with PLS-POLE software, standard for the structural calculation of the Superstructure from poles to elements of support in the foundation. The most rigorous load assumptions are considered with the necessary combination for wind loads, earthquake, own weight, live load and maintenance.



Compliance Standards:

NTC 2076 | ASTM A153 | ASTM A123 | TIA-EIA 222



ELECTRICAL TRANSMISSION TOWERS

We calculate, design and manufacture steel towers for Power Distribution Lines and supports for Electrical Substations

Steel towers are designed according to the requirements of height and load conditions that the customer needs, while complying with NSR 10, ASTM

A 123 ASTM A153, NTC-2076, and International Standards

That are applicable. A tower prototype of each new design is built, then subject to load tests on the competent test stations, specified by the customer for design verification purposes, so that the possible errors are corrected before mass production.

Inspections and tests are carried out during execution of the product in process ensuring the conformity of the customer's specifications and applicable standards.

All production procedures are carried out in accordance with ISO 9001 quality management system and UNE EN 1090 factory production control system.

Galvanized coating and welding processes are carried out in accordance with applicable standards (ISO, EN,

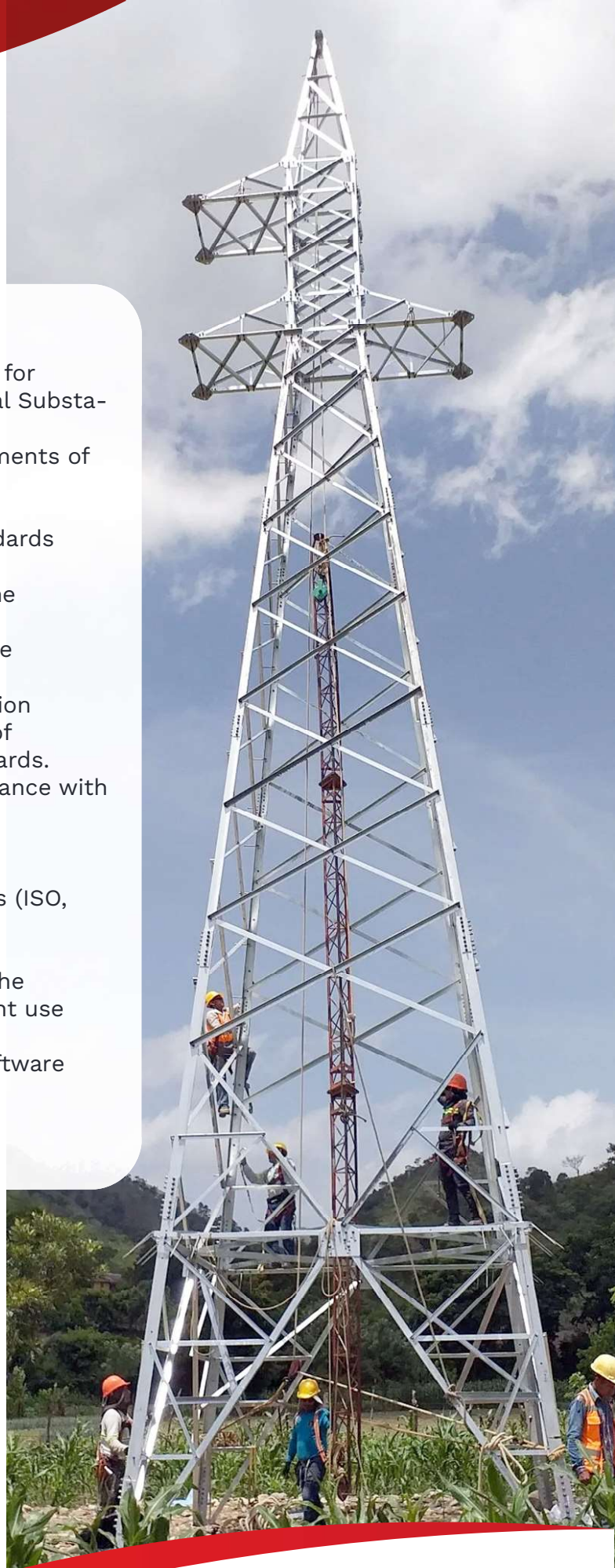
ASTM, CSA, etc.) according to customer's demand.

The production processes are carried out through the respective SAP software to ensure the most efficient use of labour, machinery and materials for better implementation of sustainability. These types of software guarantee a complete level of product traceability.



Compliance Standards:

NSR 10
NTC 2076
ASTM A153
ASTM A123
UNE EN 1090



TRANSMISSION

LINE FITTINGS

Manufactured products such as collars and crossarms are CERTIFIED according with the Guidelines of the 181294 resolution of the Ministry of Mines and Energy.

We manufacture and market our products complying with the Standard Colombian Techniques

All our product certifications can be found in the Information System of Certificates Conformity SISERCO.

Our Quality Management System ISO-9001/2015 CERTIFIED by BVQi, for galvanized fittings for electrical networks, metal structures and telecommunications COMPLIANCE



Compliance Standards:

RETIE
NTC 2076
ASTM A153
ASTM A123

FIBERGLASS POLES

FOR ELECTRICAL DISTRIBUTION AND PUBLIC LIGHTING

The GRP fiberglass-reinforced polyester poles are designed to suit customer needs from 3 meters to 32 meters and with load resistance from 250 kg/f to 3000 kg/f. They have an optimal surface finish and longer service life compared to other materials. We offer poles with choice of (multi section poles) or (monolithic poles), that represent significant logistic savings in Volume transportation. They have a low weight and ease of manipulation. Only two people are required for installation or to charge it. They are a reliable solution, especially for your installation in hard-to-reach or severe environmental conditions they have an electrical insulation level of 200k/Vm. They do not conduct electricity, they do not absorb water in the presence of moisture, and are not subject to deterioration by insects, birds, tropical areas or adverse environmental conditions with presence of salt. They are a safe alternative to be installed on roads and highways. Reduce the Fatalities in direct impact traffic incidents of vehicles or by occupants crushing impact.



Compliance Standards:

ASTM D4923-01 | ASTM G154 |
ASTM D149 | ASTM D635 |
ASTM D570 | ASTM D2303 |
ANSI C 136.20-2012 |
AMMA-615 | RETIE | RETILAP |
ET-223 ENEL CODENSA |
ET-205 ENEL CODENSA |
ET-TD-ME-04-02 EPM



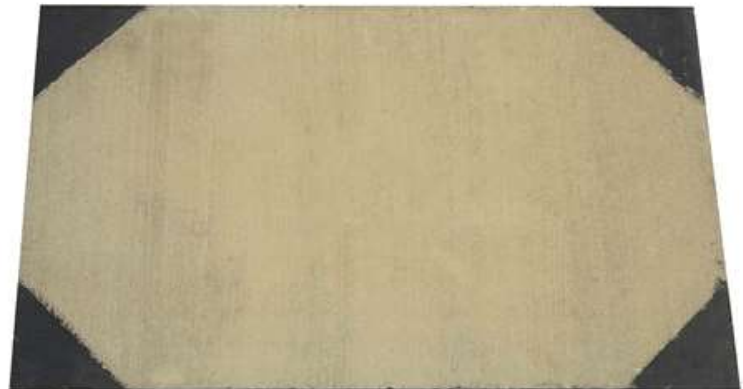
POLYMER CONCRETE LIDS AND GRATES

We manufacture COVERS, GRATES AND DRAINAGE CHANNELS made of polymer concrete. Made for a high-security, high-strength drainage system, Some models of this type of precast concrete integrate channel and grating in a single piece, while others may have different grating options in stainless steel, galvanized steel, cast iron or polypropylene. Polymer concrete drainage channels have been designed for the evacuation of rainwater and wastewater in any type of area.

The surface of polymer concrete allows water and dirt particles to drain off quickly and easy to clean. In addition, it has impermeability, high mechanical properties and good resistance to aggressive chemical agents.

Advantages of Polymer Concrete or Polymer Concrete

- Superior strength than traditional concrete
- Lower weight
- Savings in transport
- High chemical resistance to alkalis, salts and acids
- Zero maintenance
- High aesthetics
- Dielectric material
- Aseptic material
- Environmentally friendly. Does not contain cement



Compliance Standards:

NP-024 de la EAAB - tapas, arotapas y arobases para pozos de inspección.

ingemetalwf.com

GROUP



INGEMETAL S.A.S
Soluciones Metalmecánicas



**BUREAU
VERITAS**

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



METAL POLES FOR STREET LIGHTING
METAL DISTRIBUTION POLES
TRANSMISSION LINE FITTINGS

CONTACT US

groupingemetal@ingemetalwf.com



Address

Vrd El Corzo km 22 + 160 P. Industrial San Valentin
Bdg. 1 y 2 Facatativá, Cmarca. - Colombia



Cell phone

+57 3184277897

