



# AFROFIX

The African Co. for Trading & Engineering - Since 1981





Eng. Mourad Kelada

## The African company for Trading & Engineering (AFROFIX)

The African company for Trading & Engineering is the first manufacturer in Egypt specialized in producing electro-mechanical support systems and parts for industrial, commercial and utility installations. We produce complete pipe support systems, beam clamps, brackets, no-hub coupling clamps, complete mechanical cladding fixation systems, concrete inserts and steel framing system.

Our products were used by many of the Egyptian main contractors like Orascom Construction Industries OCI, the Arab Contrac Tors, Contrack and others in several projects in Egypt, Middle East & Africa, under the supervision of many of the well known engineering consultants' houses like Dar a- Handasah, Dr.Shaker office, ECG and others.

Eng.Mourad Kelada ,Chairman of The African company for Trading & Engineering AFROFIX ,received his bachelor's degree in Civil Engineer from Ain Shams University in 1962; worked in many multinational organizations, till 1982 when he founded the African Company for Trading & Engineering. As a pioneer one, he identified the Egyptian market need for the electro-mechanical support systems, so he started his business in such unique propitious niche. He was the first in Egypt to introduce the idea of using universal plastic plugs to mount pipe clamps to walls, and the first to produce the strut channels used in steel framing system in the Egyptian market. Due to his efforts, in 1990, the African company became one of three companies in Egypt that produced cable trays.

## Our mission in the African Company

Is to provide our customers with the highest standards of quality products and services. So we continually develop our products range, to comply with the international Standards like the Manufacturers Standardization Society MSS ,the Deutsches Institut für Normung 'DIN' and others to meet our customers' expectations for durable and standardized products. As expert in the electro-mechanical support field for more than 30 years, we don't only supply but we consult with the main engineering houses regarding suitable materials and technical design choice that will meet their needs .

## Our vision as an Egyptian Company is:

- To positively affect the Egyptian economy by offering to the local market products were once imported.
- Seeking exporting opportunities to The Middle East ,African & European markets.
- Working on our employees' development to help them shape the future direction of their careers.

## Some of the projects where our products were used are:

**Egypt:** Nile City Towers, Cairo festival project, many buildings in the Smart village and in the Cairo Contact Centers Park.

- **Hospitals:** Egyptian Liver Research Institute And Hospital, Abou El Reech Hospital for children, National Heart Institute and South Sinai Hospital.
- **Airports:** Cairo International Airport Tower, Marsa Alam International Airport and Luxor International Airport.
- **Governmental projects:** Egyptian National Library (Dar el kotob), Dar el Tahrir building and Cairo Metro (underground tunnels)
- **Electrical power stations in:** Talkha, Assuit, Damanhour, Balouza and Mostorod.

- The American and the British embassies in Cairo.
- **Industrial plants:** Eastern Company Industrial Complex, Ideal Standard Plant, P&G Plant and Bristol Myers Squibb Plant.

- **Hotels:** Ramada Renaissance Hotel, Fairmont Hotel Nile city and renovation of Sheraton El Gezira.

**Sudan:** Badia Bank.

**Algeria:** DJEZZY Mobile Network and Hama water treatment plant.

**Iraq:** Pazan Electrical Power Station.

**Nigeria:** P&G Plant.

Nile City Towers - Cairo



Cairo International Airport Tower



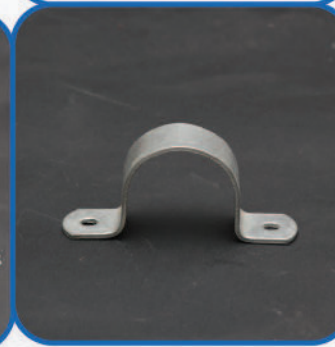
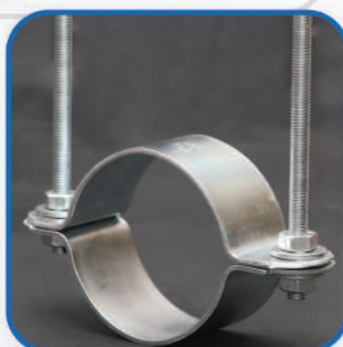
Luxor Airport



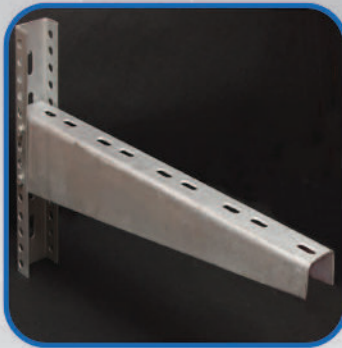
## Fire Fighting



## Plumbing



## HVAC



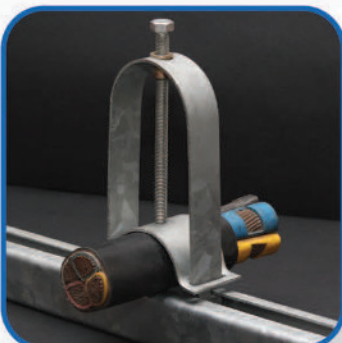
**Brackets**



**Beam Clamps**



**Threaded  
Accessories**



**SAM Strut System & Fittings**





Smart Village



Marassi



New Capital Power Plant

Massa Alamein



Pentagone



Sun City Mall

Sokhna  
ASPH hub



## MATERIALS

### Carbon Steel

Our products are fabricated from Carbon steel. Excellent strength characteristics and adaptability to cold forming provide a well engineered design. By cold forming the steel, mechanical properties are increased, adding to the structural integrity of the fabricated hanger.

### Stainless Steel

Upon request different types of Stainless Steel (AISI Type 304, Type 316 and others) can be used. Stainless steel's resistance to corrosion, low maintenance costs, high ambient temperatures, appearance and stable structural properties such as yield strength and high creep resistance make it an ideal material for many applications.

## FINISHES

All metal surfaces exposed to the environment are affected by corrosion. Depending on the physical properties of the metal and its proximity to other dissimilar metals, an electrochemical reaction may occur which causes an attack on the metal itself, resulting in corrosion. So the metal needs to be coated. Our products have anti-corrosion protection consisting of Zinc coatings. Protective Zinc coatings are available in three basic forms: Zinc plating, Pre-Galvanized sheets and Hot-Dip Galvanized after Fabrication. In all cases, the zinc protects the steel first as a sacrificial anode to repair bare areas on cut edges and gouges. When exposed to air and moisture, zinc forms a tough, adherent protective film consisting of a mixture of zinc oxides, hydroxides, and carbonates. The corrosion resistance of zinc is directly related to its thickness and the environment. For example a 5  $\mu\text{m}$  (0.2 mil) coating will last twice as long as a 2.5  $\mu\text{m}$  (0.1 mil) coating in the same environment.

### Zinc plating (ASTM B 633)

- An Electro-Plated process deposits a coating of zinc on the steel by electrolysis from a bath of zinc salts.
- This coating is pure zinc and adheres to the steel with a molecular bond.
- Products treated with Electro-plated zinc have a smooth and shiny surface finish.
- A maximum of 12.7  $\mu\text{m}$  (0.5 mils) of zinc can be applied by this method.
- This coating is recommended for in-door use in relatively dry areas.



### Pre-Galvanized Sheets (or Continuous Sheet Galvanizing)

- Pre-galvanized sheets are produced by continuously rolling the steel coils or sheets through molten zinc at the steel mills.
- Have a uniform coating across the width of the coils (or sheets).
- Coils are then slit to size for fabrication of different products.
- Cut edges and welded areas are not zinc coated; however, zinc near the uncoated metal becomes a sacrificial anode which protects the bare areas after a short period of time.
- Coating thicknesses range from 7  $\mu\text{m}$  (0.28 mils) to about 76  $\mu\text{m}$  (3.04 mils) per sheet side.
- Pre-galvanized steel is not generally recommended for use outdoors in industrial environments, but is suitable for extended exposure in dry or mildly corrosive atmospheres.



### Hot-Dip Galvanized After Fabrication (ASTM A 123)

- After a pipe hanger or fitting has been fabricated, it is completely immersed in a bath of molten zinc. A metallurgical bond is formed, resulting in a zinc coating that completely coats all surfaces, including edges.
- Hot-dip Galvanized after fabrication products are less smooth and less shiny than products coated with Electro-plated zinc, and may have minor roughness that does not interfere with the intended use of the product.
- Zinc coatings of this specification have a minimum thickness of 36  $\mu\text{m}$  (1.44 mils) to a maximum of 100  $\mu\text{m}$  (4 mils).
- For its high corrosive resistance, Hot-dip galvanized after fabrication is recommended for outdoor exposure.

