

At EEC Galva, we ensure our customers receive a consistently high quality service and product through a well defined process and rigorous controls.

### **Receiving & preparing your Product**

When your job arrives at EEC Galva, it is weighed-in on our weighbridge and then inspected by experienced personnel for "its galvanizability" to ensure there are no constraints to deliver high quality galvanizing.

If we identify any problems that may hinder or prevent this high quality, we will inform the customer immediately, providing advice on how to solve the problem.

In some cases we will be able to rectify the problem after taking written approval from the customer.

As soon as the product passes the inspection, it is immediately placed onto the galvanization plan taking account the required delivery times of the customer.

The product is prepared for galvanization by loading it onto specially designed jigs to ensure the highest quality according to the customer's requirements.

### **Pre-Treatment of your Product**

A number of steps are carried out before galvanization to treat the surface of your product to ensure the optimum conditions for galvanization.

A controlled mix of chemicals and additives are used and monitored regularly to achieve this.

### **Degreasing**

An acidic solution removes dirt, oil, grease, shop oil, and soluble markings.

### Pickling

□

A dilute acidic solution of hydrochloric acid removes surface rust and mill scale to provide a chemically clean metallic surface.

### Fluxing

□

A liquid flux (made up of zinc ammonium chloride solution) removes oxides and prepares the product against oxidation prior to dipping into the bath of molten zinc.

### Drying

□

The product is dried thoroughly to around 110 degrees to ensure that surface of the product forms an even, consistent and layer of zinc, free of zinc splatters.

### Galvanizing

□

The products are immersed in a bath of molten zinc between 435-455 degrees C (815-850 degrees F).

During galvanizing, the zinc undergoes a metallurgical bond to the steel, creating a series of highly abrasion-resistant zinc-iron alloy layers, commonly topped by a layer of impact-resistant pure zinc. □

During galvanization, the dipping techniques and processing time of every product is carefully monitored and individualized.

### Finishing & Quality Assurance

After the products have been galvanized, excess zinc is removed by draining and vibrating, and minor cleaning and touch-ups are carried out according to ASTM A780-01(2006).

The galvanized product is water quenched to provide an aesthetically looking product.

Through our quality assurance process, the product is inspected to ensure correct appearance, surface texture, cleanliness and coating thickness.

### Dispatch

The customer is informed of the readiness of his product. The products are packed or stacked according to customer requirements.

And on receipt by the customer, the product is weighed-out, and the necessary documents including a galvanization certificate is issued in accordance to our ISO 9001 quality management system.