

## STANDARD HOT DEEP GALVANIZING SPECIFICATIONS

### PURPOSE:

This specification shows the standard execution of hot deep galvanizing of steel made by Galvan according to ASTM A123/A123M

### Process description:

#### 1. INCOMING

Black Material receiving & storage, it is followed by INSPECTION. If required (e.g. paint drops) material must be shot blasted.

#### 2. SURFACE PREPARATION

Black material is jigged and ready for chemical surface treatments.

##### Treatments:

- 2.1 Degreasing
- 2.2 Pickling: acid solution of HCL 15% not heated
- 2.3 All surfaces are inspected
- 2.4 Rinsing with clear water
- 2.5 Fluxing

#### 3. GALVANIZING

- 3.1 The steel, that will be galvanized, goes into a drier (which employ waste heat from the galvanizing furnace using heat exchanger) and reach approximately the temperature of 85°
- 3.2 Material is hot deep galvanized: bath temperature is close to 450°C
- 3.3 After galvanizing material is cooled
- 3.4 All material is inspected at this stage

#### 4. REPAIR

4.1 In case of repair it is done according to ASTM A123/A123M

#### 5. TESTS AND CONTROLS

- 5.1 Visual examination
- 5.2 Thickness measures
- 5.3 Acceptance criteria: according to ASTM A123/A123M

#### 6 OUTGOING

- 6.1 White material storage
- 6.2 Packaging
- 6.3 Delivering

**MINIMUM COATING THICKNESS REQUIRED BY ASTM A123/A123M**

Material Category	All Specimens Tested Steel Thickness Range (Measured), in. [mm]					
	<1/16 [<1.6]	≥1/16 to <1/8 [≥1.6 to <3.2]	≥1/8 to <3/16 [≥3.2 to 4.8]	≥3/16 to <1/4 [≥4.8 to <6.4]	≥1/4 to <5/8 [≥6.4 to <16.0]	≥5/8 [≥16.0]
Structural Shapes	45	65	75	75	100	100
Strip and Bar	45	65	75	75	75	100
Plate	45	65	75	75	75	100
Pipe and Tubing	45	45	75	75	75	75
Wire	35	50	60	65	80	80
Reinforcing Bar	...	...	...	...	100	100