

FINIDIP 728.2

BLACK PASSIVATION FOR ZINC/NICKEL 12-15%

Destinataires						IT
Page	Date	Création	Révisé par	Approbation	Index	Observations
	08/2004				2	Modification of the specific density
1 de 5	04/2004	G. SCHIAVON	L.MOUI	D.ODILLE	1	

1 - INTRODUCTION

FINIDIP 728.2 is a liquid, trivalent chromium based process, free from hexavalent chromium, designed to give a bright black finish to electroplated zinc-nickel surfaces.

The FINIDIP 728.2 process may be applied by barrel application.

2 – MAKE-UP

1. Fill the tank approximately three-quarters full with mains water
2. add the required amounts of FINIDIP 728.2, and mix
3. make up the operating level
4. Start working (do not add sodium hydroxide in the bath)

For 1.000 L	
FINIDIP 728.2	80 L

3 – OPERATING CONDITIONS

3.1 Parameters

Parameters	Optimum	Range
FINIDIP 728.2 ($d = 1,26 \pm 0,03$)	80 mL/L	70 – 90 mL/L
pH	1,6	1,5 – 2,0
Temperature	25°C	22 – 30°C
Immersion time	90 seconds	70 – 120 seconds
Minimum thickness of Zn/Ni	8 μ m	
Agitation	Mechanical agitation	

• Agitation

Air agitation must be moderate and above all uniform. As an alternative, mechanical agitation with the help of a centrifugal pump may be used. Immersion times will perforce be longer if the agitation is insufficient or absent.

For Rack application, adapt the rotation speed of the basket or of the barrel in order to reduce shocks of the passivation layer

3.2 Top Coat

Our Top Coat FOM ZINTHIUM 302 (black) and FINIGARD (series 100 or 400 depending on requirements) can be applied on top of the passivation layer. The post-treatment rinse should be clean and free from hexavalent chromium.

4 – SOLUTION MAINTENANCE AND CONTROL

4.1 Frequently check the pH, at least every 4 hours of operation.

pH corrections must be made with :

- nitric acid in order to decrease the pH.
- Sodium hydroxide (30 % solution) in order to increase the pH.

4.2 Consumption for 100 m² of treated surface

1,5 to 2 L of FINIDIP 728.2

These are average consumption values that will vary depending on the drag-out on the treated pieces.

4.3 Pollutions

- Iron jusqu'à 1 g/L
- Zinc jusqu'à 10 g/L

5 – OPERATING SEQUENCE

After Zinc/Nickel 12-15% :

➔ 1 step

Nitric acid at 0.2%

Rinse

Passivation FINIDIP 728.2

Rinse

Drying

➔ 2 Steps

nitric acid at 0.2%

Rinse

Passivation FINIDIP 728.2

Rinse

Cold drying (2 to 5 min max for 250 rds/min for a basket of 60 cm diameter)

FINIGARD 105 (85 % - 25 °C – 30 seconds)

or FOM ZINTHIUM 302 (80 to 100% - 30 seconds – 25°C)

Drying (10 min – 80°C– 250 rds/min)

6 – EQUIPEMENT

The tanks should preferably be made from or lined with a suitable plastic material (PVC, PPH), resistant to strong acids.

It may be necessary to heat the solution. Where this is the case, use thermostatically controlled immersion heaters sheathed in graphite or Teflon.

Even mixing of the solution when used by rack application requires air agitation. The tube bank should be made of PVC and fitted with a throughput control valve.

7 - HEALTH & SAFETY

The supplied concentrates and the working bath are acidic solutions containing fluoride.

Handling precautions must be taken (wear gloves, safety glasses / goggles and boots).

The User should pay strict attention to the advice given on labels and health & safety sheets.

8 - EFFLUENT TREATMENT

FINIDIP 728.2 does not contain hexavalent chromium and can normally be discharged following neutralisation.

9 - TRANSPORT OF SAMPLES FOR ANALYSIS

Users are reminded that it is forbidden to send dangerous or dirty articles by post.

10 - SHELF-LIFE

2 years from date of manufacture

The instructions here contained are the result of careful verification and were prepared for guidance purposes.

They represent, at the present time, the best of our information and they refer to the normal use of the products.

As the correct use of the product is not under our direct control, we can guarantee the product quality only until delivery. Therefore, the information above should not be considered as an explicit or implicit warranty of the results deriving from the use of the said products.