



PT. SINAR CEMARAMAS ABADI

- VERCOPPER (ACID / CYANIDECOPPER)
- VERNICKEL
- VERCHROME
- VERZINC ACID / CYANIDE ZINC
- CLEANER (ELEKTRO / SOAK)
- PHOSPHATING
- CHROMATING
- ELECTROLESS NICKEL

FOR HIGHTECT ELECTROPLATING :

- ELECTROLESS NICKEL PLATING FOR ALUMINIUM AND ZINC DIE CAST, MAGNESIUM
- GOLD PLATING
- PTFE FORELECTROLESS NICKEL
- HARDCHROM
- SAND CAST ALUMINIUM ALLOYS PLATING
- MAGOXID - COAT FOR PROTECTING MAGNESIUM SUBSTRATES

- KEPLA - COATING FOR ALUMINIUM AND TITANIUM ALLOYS
- ELECTROLESS NICKEL PLATING WITH INTEGRATED SILICON CARBIDE PARTICLES (SIC)
- GLISS - COAT

- A CLEAN SOLID FILM LUBRICATION FOR A MAINTENANCE FREE PERMANENT LUBRICATION OF ALL KIND OF FRICTION PAIRINGS
- SEPA - COAT (ANTI ADHESIVE COATING AND ACTIVATOR) FOR THE REMOVAL OF PART FROM MOULDS

HR 18

Trivalent Blue Chromate Passivation with High Corrosion Resistance

1. DESCRIPTION

The HR 018 is a new trivalent blue chromate process that produces glossy blue colour finish on zinc plated surfaces. The coating so obtained provides corrosion resistance without the presence of hexavalent chrome.

The HR 018 is supplied in easy to use liquid concentrates.

2. SOLUTION MAKE – UP

	Range	Optimum
HR 018 (density = 1.17 g/ml)	30 – 50 ml/l	40 ml/l
pH	1.7 – 2.2	1.9
Temperature	20 – 30 oC	20 oC

The higher the concentration and the temperature of the solution, the lower will be the immersion time.

3. PROCEDURE FOR A MAKE UP OF 100 LITRES

Take 50 L DI water in the process tank. Add 4 L HR 018 and adjust the volume to 100 litres. Mix well. Adjust the pH with diluted nitric acid (or increase with a 10 % solution of sodium bicarbonate) and temperature of the operating bath to specified values. Now the bath is ready for operation.

Head Office :

Kompleks Pergudangan Meiko Abadi B 17-19, Ds. Wedi, Kec. Gedangan – Sidoarjo, East Java, Indonesia
Telp. (031) 8014717, 8014718, 8015320; Fax. (031) 8014534, E-mail : sca_sda@yahoo.co.id

Branch Office :

Jl. Agung Niaga VI Blok G 6 No. 46, Sunter Agung Podomoro – Jakarta, Indonesia
Telp. (021) 6400876, 6400877; Fax. (021) 6400833, E-mail : scajkt@live.com



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4. SAFETY CONSIDERATION

Protective gear such as face shields and gloves should be worn during bath make up and operation. Chemicals shall not be stored below 10 °C.

5. OPERATING CONDITIONS

- Temperature: 25 – 35 °C (optimum 20 °C)
- Time: 15 – 60 sec. (Optimum 30 sec.)
- pH – Value: 1.8 – 2.2 (optimum 1.9). Frequent control is recommended.
pH ≤ 1.7: decrease of the corrosion protection
pH ≥ 2.3: yellowish appearance, decrease of the corrosion protection
- Agitation: Air or parts movement
Do not use lead as weight for air blowing tuber!
- Fume extraction: Recommended
- Equipment: Mild steel tank with polypropylene lining
- Heating: Not required or Teflon tube heaters
- Pre dip activation: This improve the HR 018 bath life as well as the adhesion and corrosion resistance. The tank make up is 0.3 – 1.0 % nitric acid. Frequent tank changes are necessary for uniform production quality.
- Hints: HR 018 is sensitive to heavy metal impurities.
The HR 018 service life is only limited due to the iron concentration. The critical concentration is between 250 and 500 mg/l. when loading with uncoated parts (tubes) we recommend the addition of an inhibitor.

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6. EFFLUENT CONTROL

The HR 018 chromate conversion coating solution is acidic and contains trivalent chromium salts. Spent solution has to be treated and discharged according to local waste water laws.

7. GUARANTEE

The technical information and recommendations in the operating instruction are based on practical testing and are reliable, but are given without warranty or guarantee. The use of our products might vary according to local conditions and materials processed. We reserve the right to change or amend the operating instruction based on technological advances.

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