

Industry Proven COLZINC ACF-II Alkaline Non-Cyanide Zinc Gives You Three Reasons to Convert



Widest current density
bright range

Best throwing
and covering power

Superior ductility

- 1 *Wide Current Density Bright Range,
Rack and Barrel Compatible*
- 2 *Excellent Throwing & Covering Power gets
into recesses without over-plating the edges*
- 3 *Superior Ductility Blister-free at
even 1 mil thickness*

*Wide Operating Window - Simple Bath Controls - Lower Maintenance
A proven upgrade worth converting to.*



**Consolidated
Metal Finishing
Private Limited**

104 (NP), Industrial Estate, Ambattur, Chennai - 600 098. T.N. India.
Phone: +91 44 2625 3976 / +91 86 8087 0614
Email: info@cmf-india.com | Web: www.cmf-india.com

In association with

COLUMBIA®



CHEMICAL

Simplifying Surface Finishing®

www.columbiachemical.com

FEATURES AND BENEFITS

CONSOL - COLZINC ACF-II

ALKALINE CYANIDE-FREE, ZINC PLATING PROCESS

Brought to India in association with Columbia Chemical Corpn., - U.S.A., World Leaders in Simplifying Surface Finishing

- Is an Environmental Friendly Alkaline Cyanide-Free Zinc Plating process that is designed to replace Cyanide Zinc Plating. It is a high efficiency bath suitable for both rack and barrel operations.
- Process enables to eliminate the use of the major pollutant 'Sodium Cyanide' and thereby not only saving the cost of the same, but also reducing the cost of waste treatment required to destroy cyanides.
- Process uses a concentrated, stable brightener system that produces brilliant Zinc deposits from an alkaline cyanide-free plating solution.
- Process produces extremely ductile deposits, even with thickness in excess of 1.25mil (31.75microns).
- Operates over a Wide Zinc metal range of 5.5 g/l ~ 24.5 g/l. Process is also capable of plating bright, decorative work at high temperatures up to 52° C.
- Process has excellent LCD distribution, the covering and throwing power is excellent and making process highly suitable for rack plating parts with deep recesses such as computer chassis, fittings, tubes, etc. Process is ideal for both low current density barrel plating and the wide range of current densities encountered with rack plating.
- Deposits readily accept conventional chromate post plate treatments that are normally used.

OPERATING PARAMETERS

		<u>Rack Plating</u>	<u>Barrel Plating</u>
Zinc Metal	Range:	6.5 ~ 18 g/l.	8.5 ~ 24.5 g/l.
	Optimum:	12 g/l.	15 g/l.
Caustic Soda	Range:	85 ~ 150 g/l.	90 ~ 150 g/l.
	Optimum:	120 g/l.	135 g/l.
Current Density	Range:	15 ~ 70 ASF	5 ~ 30 ASF
Operating Temperature	Range:	18° ~ 52° C.*	18° ~ 52° C.*
	Optimum:	28° C.	28° C.

Additives

For Initial Makeup

For Replenishment (KAH)

<i>Consol - Colzinc ACF II Brightener</i>	7 – 15 ml/lit	190 – 330 ml
<i>Consol - Colzinc ACF II Booster</i>	0.25 – 0.5 ml/lit	30 – 200 ml
<i>Consol - Colzinc ACF II Purifier</i>	1.0 ml/lit	10 – 20 ml
<i>Consol - Colzinc ACF II Conditioner</i>	0.5 – 1.0 ml/lit	On Need basis

CONSOL ACF Fume Suppressor is a very potent foaming agent for eliminating caustic spray and controlling fumes at the surface of the plating bath.

Solution Make-Up: *CONSOL ACF-II Make-Up Concentrate* is used for the Make Up of Rack and Barrel solutions. It contains all the purified basic chemicals required. Additions are made in the following order to a clean plating tank containing water (50% of its volume), with thorough mixing.

100 Litres Solution:	<i>Rack Plating</i>	<i>Barrel Plating</i>
CONSOL ACF-II Make-Up Concentrate:	20 ~ 25 liters	25 liters
CONSOL - Colzinc ACF-II Brightener:	1 liter	1.2 liters
CONSOL - Colzinc ACF Purifier:	100 ml	100 ml
CONSOL - Colzinc ACF Booster:	25 ~ 50 ml	100 ml
CONSOL - Colzinc ACF Conditioner:	100 ml	100 ml

Add water to top-up to final bath volume and stir. Start the filter and electrolyze the solution at 6 volts for 1 ~ 3 hours till the deposit is clear white from the bath. The solution is now ready for use.

Attention: This sheet is only meant to provide Features and Benefits of the process mentioned. For detailed Usage, Please refer the product Technical Data Sheet. For Safety, handling and Chemical information please refer the Safety Data Sheet. These can be provided through a *Consolidated Metal Finishing Pvt. Ltd.* representatives or requesting us for the same by email.