

the product

Dark Trivalent Chromium Process for Decorative Applications

TRILYTE® Dusk

TRILYTE® Dusk is an environmentally friendly trivalent chromium plating process that is used to deposit a dark decorative chromium layer over bright or satin nickel deposits. For automotive applications, a noble nickel strike layer in place of the microporous between the bright-nickel and TRILYTE Dusk is recommended to achieve optimum CASS performance.

The TRILYTE Dusk deposit is consistent over normal current density ranges and is UV stable. The process is tolerant to current interruptions, provides more uniform metal distribution and reduces or eliminates high current density burning as compared to conventional hexavalent systems.

The TRILYTE Dusk Difference...

- Dark, lustrous coating is ideally suited for a diversity of decorative automotive (door handles, grill, exterior molding) and household (lighting, cabinet hardware, furniture, appliance, sanitary fixtures) applications where fashion finishes are critical to product differentiation.
- "Warm" color produced provides a distinctive finish for interior applications.
- Passes 80 hours of CASS (in conjunction with multilayer nickel systems), meeting most OEM exterior specifications.
- Color reproduction and parts matching is consistently achieved due to the processes' stable chemistry and easy operation that results in highest yields and quality.
- Solution is extremely stable over time, even when operated infrequently, thus resulting in fewer expensive treatments, additive adjustments and solution replacements.
- Process uses graphite anodes avoiding the high start-up and maintenance costs associated with the use of MOX (iridium alloy) anodes.
- Meets local environmental standards at a decreased cost due to reduced water and air treatment requirements, along with the associated monitoring time.



Left: TRILYTE Dusk over bright nickel.

Right: TRILYTE Dusk over PEALRBRITE® satin nickel

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TRILYTE[®] Dusk

TRILYTE Dusk Features and Benefits

FEATURE	BENEFIT
<ul style="list-style-type: none"> Lustrous, dark finish 	<ul style="list-style-type: none"> Allows end-users to differentiate product Meets design demand for a "warm" finish"
<ul style="list-style-type: none"> Low concentration, trivalent chromium-based system 	<ul style="list-style-type: none"> Eliminates exposure to hexavalent chrome Reduces waste water treatment costs Eliminates exposure to hazardous metals (selenium, thallium, nickel) common in other blackening products
<ul style="list-style-type: none"> Hard, scratch resistant coating 	<ul style="list-style-type: none"> No top coat required after plating as with nickel, tin and cobalt-based systems.
<ul style="list-style-type: none"> Stable deposit color 	<ul style="list-style-type: none"> Uniform color on complex part geometries Easy color match over time
<ul style="list-style-type: none"> Stable process chemistry 	<ul style="list-style-type: none"> No dumping and remaking as with tin-based systems Reduces operating costs
<ul style="list-style-type: none"> Passes 80 hour CASS when used in conjunction with multilayer nickel systems 	<ul style="list-style-type: none"> End-user can expand their position with OEMs

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AMERICAS Enthone Inc. • 350 Frontage Road, West Haven, CT 06516 • Tel: 203-934-8611 • Fax: 203-799-1513
ASIA Cookson Electronics Ltd. - Enthone • 1/F, Block A, 21 Tung Yuen Street, Yau Tong Bay, Kowloon, Hong Kong • Tel: 852-2499-7299 • Fax: 852-2415-2225
EUROPE Enthone GmbH • Elisabeth-Selbert-Straße 4, 40764 Langenfeld, Germany • Tel: 49-2173-8490-0 • Fax: 49-2173-8490-200

www.cooksonelectronics.com

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