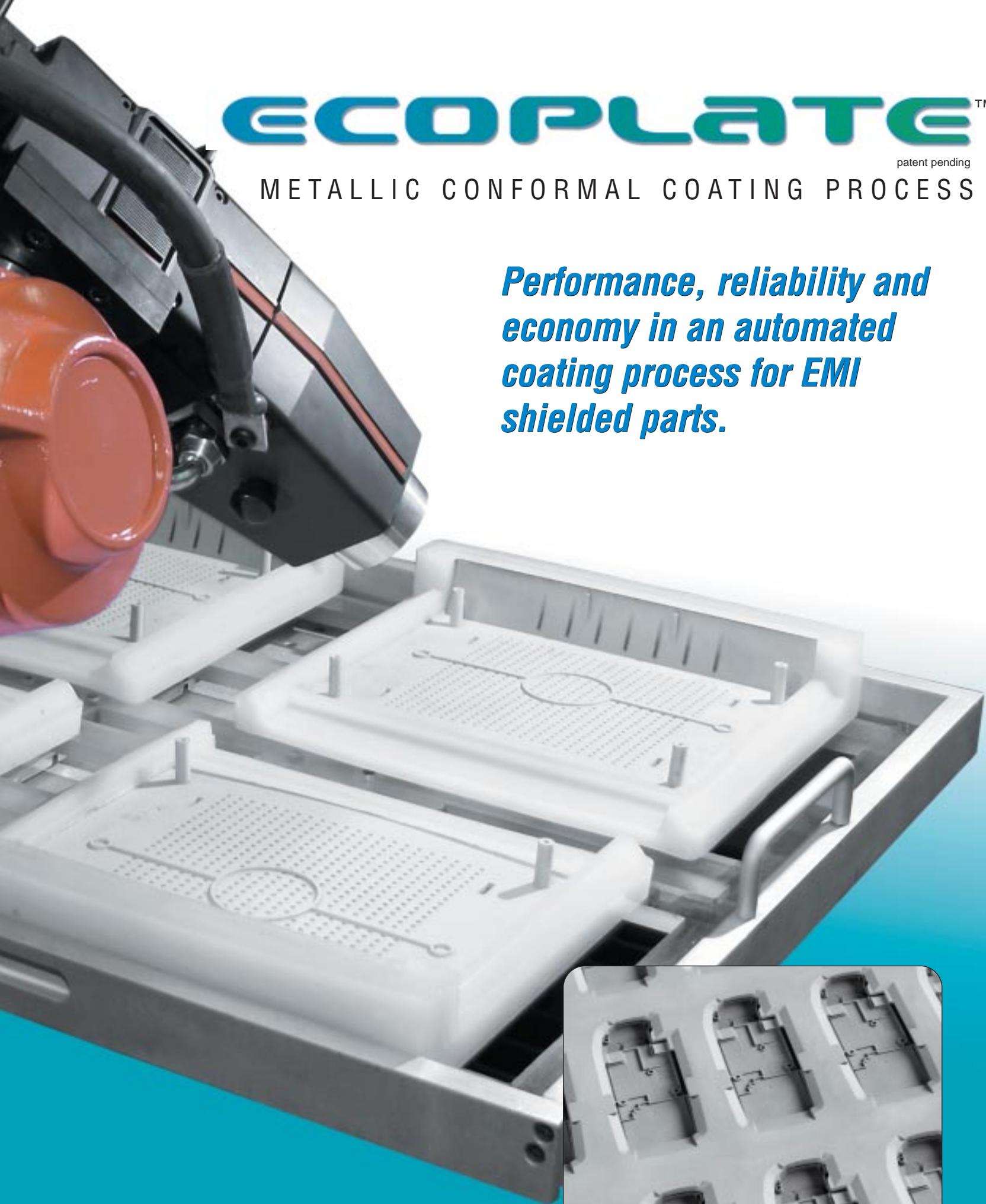


# ECOPLATE™

patent pending

METALLIC CONFORMAL COATING PROCESS

*Performance, reliability and economy in an automated coating process for EMI shielded parts.*



CHOMERICS

**Parker** Seals

**Chomerics introduces the latest innovation in coating technology for EMI shielding...**

# **ECOPLATE™** METALLIC CONFORMAL COATING PROCESS

patent pending

**When balancing high performance with pressures to lower cost, today's designers of electronic equipment have a new option.**

*Chomerics' ECOPLATE Process is an automated application and material solution for metallizing plastic electronic enclosures. It also replaces conversion coating on metallic enclosures. Its advantages are achievable with runs from 100 to 1,000,000+ parts.*

*ECOPLATE robotic technology produces a superior performance conformal coating without the drawbacks of traditional coating technologies. This 100% metal solution eliminates runs, edge pulls, corner puddles, and voids. Free of solvents and corrosives, this environmentally friendly and low-temperature process is ideal for thin-walled plastic injection molded parts.*

## **Controlled application elevates performance**

Automation and controlled process parameters ensure a uniform film build as thin as 12.5  $\mu\text{m}$  (0.0005 inch). In one pass, pure metal alloy is atomized and sprayed under specific particle size, temperature, and velocity conditions. The highly engineered laminar film has low porosity and oxidation, and requires no further curing or processing. Typical EMI shielding effectiveness is >75 dB at up to 10 GHz.

## **Excellent adhesion for long-term reliability**

The robotic application is a fast, three-step operation that eliminates the logistics and delays of multi-vendor part preparation and coating. Prior to the application of the ECOPLATE coating, the substrate's surface morphology is optimized with a low impact grit blast using a proprietary engineered medium. The prepared surface is clean and free of oxides or contaminants that could impair long-term performance.

## **More economical and environmentally sound**

Unlike traditional painting or electroless plating, the ECOPLATE process is free of solvents, harmful vapors, and corrosives. There are no solvent-bearing particulates or mask residues to wash off with chemicals. No costly wastewater or vapor treatment, no special shipping, storage or handling. With its environmentally sound, automated production, the ECOPLATE process is the new, lower-cost manufacturing solution for EMI shielded housings.

## **Compare results!**

25  $\mu\text{m}$  (0.001 inch) applications in cross-sectional view, 500X



*Metal flakes in paints leave substantial pockets of non-conductive polymer, compromising conductivity of the enclosure.*



*The ECOPLATE process applies a tenacious, pure metal film with <6% porosity, ensuring very high conductivity and reliability.*



*ECOPLATE automation suits virtually any electronic enclosure needing cost-effective, high-performance EMI shielding – laptops, handsets, PDAs, voice/data network equipment, automotive telematics, personal transportation, portable medical devices, game consoles, consumer electronics...and more.*

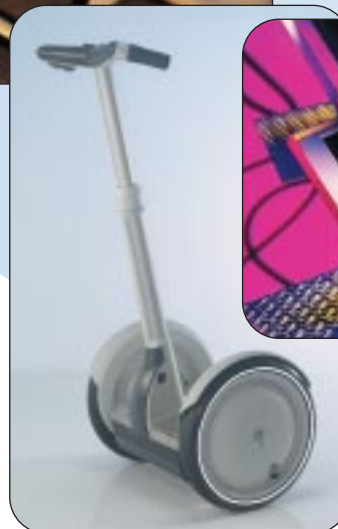


Photo courtesy of Segway LLC, Manchester, NH

**Explore the performance and economics of the ECOPLATE process for your product. Call our Applications Engineering team for a free consultation today.**

**CHOMERICS**  
Parker Seals

## Why Chomerics?

The ECOPLATE™ process is the latest innovation in Chomerics' proud history of partnership with the electronics packaging industry. As the world's leading provider of EMI shielding products, we've been helping manufacturers of electronics equipment around the globe meet their performance and compliance goals for more than four decades.

- Our Applications Engineering strength is without equal in the industry. You're just a call away from reliable advice on material selection and design that can make a real difference to the success of your products.
- Take advantage of Chomerics' experience in operating as lead vendor to manage the overall supply chain for shielded housings. The results are enhanced quality and accountability, along with streamlined production and scheduling.
- Our in-house EMC & Safety Test Services can ensure performance of your EMI solution and expedite the certification of your equipment to a full array of international standards. With immediate access to our advanced materials and expertise, problems are resolved on the spot.
- *Call us today to explore the benefits of the ECOPLATE process or other Chomerics products in your applications.*



**Chomerics is a division of the Seal Group of Parker Hannifin Corporation. Parker Seal is one of the world's largest and most experienced manufacturers of elastomer and other sealing and shielding devices.**

### Chomerics

**Div. of Parker Hannifin**  
77 Dragon Court  
Woburn, MA 01888-4014  
TEL: +(1) 781-935-4850  
FAX: +(1) 781-933-4318  
chomailbox@parker.com



### Parker Hannifin PLC Chomerics Europe

Parkway, Globe Park Estate  
Marlow, Bucks., SL7 1YL, UK  
TEL: +(44) 1628 404000  
FAX: +(44) 1628 404090  
chomerics\_europe@parker.com



### Parker Hannifin Asia Pacific Group

Chomerics Hong Kong  
8/F King Yip Plaza  
Kowloon, Hong Kong  
TEL: +(852) 2 428 8008  
FAX: +(852) 2 423 8253  
dbonnier@parker.com

### Parker Hannifin Ind. e Com.Ltda

Seals Division  
Via Anhanguera, KM 25,3-Perus  
05276-977-São Paulo-SP, Brazil  
TEL: +(55) 11 3917 1099  
FAX: +(55) 11 3917 0817  
fmantellato@parker.com

[www.chomerics.com](http://www.chomerics.com)

# CHOMERICS

**Leader in EMI shielding & thermal management technology**