

EPOXY Washers: eliminate assembly welding issues

Product Announcement from Argent International, Inc.



Argent's Epoxy Washer System uses a thermosetting epoxy film to permanently adhere metal washers to automotive hinge assemblies. Our thermosetting washers provide a number of process benefits; they simplify assembly, eliminate potential quality issues from welding operations, and don't require any special skills to install.

Primarily used for 'doors-off' assembly processes, Argent's Epoxy Washer System maintains door-to-frame alignment for trouble-free door re-attachment later in the assembly process. Our Epoxy Washers are supplied conveniently on re-useable trays. Argent's Epoxy Washer System is currently and/or has been in production at Daimler-Chrysler, General Motors, Ford, Mazda and other OEMs. U.S. Patent/s: 6,669,428 & 7,143,895.

Primary Applications for Epoxy Washers:

- Fasten washers or locating-plates to: doors, hinges, or frames - without welding
- Conveniently reinstall doors after 'off-line trim' and other 'doors-off' operations
- Install washers to dirty or oily metal surfaces
- E-coat compatibility
- Full cure in paint-cycle ovens
- High torque strength

How the Argent Epoxy Washer System Works: Manufacturing processes outlined are for illustrative purposes; our versatile system allows for many possible uses.

1. Door aligned to body Operator loads door to tooling fixture. Door swings down to body and aligns with door-hinges (pre-attached to body). Operator installs temporary bolts and Epoxy Washers; after cure, Washers will adhere to door-hinges, preserving bolt location in slotted holes and overall door alignment. Door is left on body. Vehicle is sent through E-coat and paint cycles. 'Washer' adhesive system cures.

2. Door removed for 'trim-out' Operator removes door and recycles temporary bolts. With the door removed, vehicle and door assembly can continue concurrently without impediment from each other. Door assembly continues off-line with trim. Vehicle assembly continues with 'doors-off.'

3. Door re-attached During final assembly, operator re-attaches door and installs bolts through pre-located holes created by Epoxy Washers; no realignment is needed