



Value-Adding Release Systems for Aerospace Manufacture

a brand of
 **FREUDENBERG**

 **Chem
Trend**

Release Innovation™

We improve your operating efficiency



As a global leader in the technology of mould release agents, cleaners and sealers, Chem-Trend offers value-adding solutions that reduce cost and improve quality and productivity.

Markets served



Composites



Die Cast



Polyurethane



Rubber



Thermoplastics



Tire



Wood Composite



- Water-based and solvent-based systems
- Mould cleaners
- Mould preparation primers
- Mould sealers
- Mould release agents
 - Semi-permanents
- Surface tack enhancer

Mould cleaners:

- Water-based or solvent-based
- Essential for ensuring contaminant-free mould surface and subsequent bonding of semi-permanent release agents
- Quick and effective cleaning without damage to mould surface
- Can be used to clean parts

Primers & sealers:

- Water-based or solvent-based
- Help minimise buildup and keep moulds in production longer
- Extend the durability of the semi-permanent release agent

Extend the ROI on your moulds by:

- Restoring older or damaged tooling, without replacement or expensive refurbishment
- Minimising tool imperfections and helping retain vacuum integrity
- Defending tooling from damage and extending tool life

- Water-based or solvent-based
- Multiple releases
- Low buildup, less time spent cleaning moulds
- Low transfer to part, easier preparation for post-moulding painting or bonding
- Variable slip levels available depending on moulding parameters and process
- Suitable for use with all thermoset resins and pre-pregs
- Suitable for use with TP materials such as PEEK, PPS and PEI pre-pregs
- Suitable for use with infusion and RTM processes

- Water-based
- Applied to the mould surface, allows precision “stacking” of pre-pregs and peel-ply by creating a temporarily tacky surface
- Helps to facilitate wrinkle-free layout
- Easy control of placement with applicator bottle
- Prevents peel-ply from sliding on released mould surfaces
- Allows accurate pre-preg placement
- Highly visible on mould surface
- Saves time during lay-up process
- Doesn't interfere with the releasing surface of the mould
- Can be applied specifically where needed

- Mould and part cleaners to deliver fast and efficient surface preparation
- Primer and sealers to seal surface porosity and protect expensive mould tooling
- Semi-permanent release systems to ensure reliable release whatever the resin, process or part complexity
- Surface tackifier to aid accurate placement of dry pre-pregs

- Bulk materials for automated process spray application
- Wipes for greater control and safe hand application
- Application on metallic or polymeric moulds, hot or cold
- Surface tackifier to ensure proper fiber placement in complex shapes
- Zyvox[®] release system products have a proven track record within the aerospace industry with a variety of approvals from major OEMs

Application

- Application ease & speed
- Controlled application
- Safe handling

Mould productivity

- Increased time between mould cleaning cycles
- Less mould maintenance and repair

Customer Value

Labour time

- Multiple releases
- Suitable for automatic application
- Easy demoulding

Part quality

- Fewer surface defects
- Part surface finish control
- Minimal post-finishing



Industry Trends

Complex composites structures

VOC reduction

Increasing production & output demand

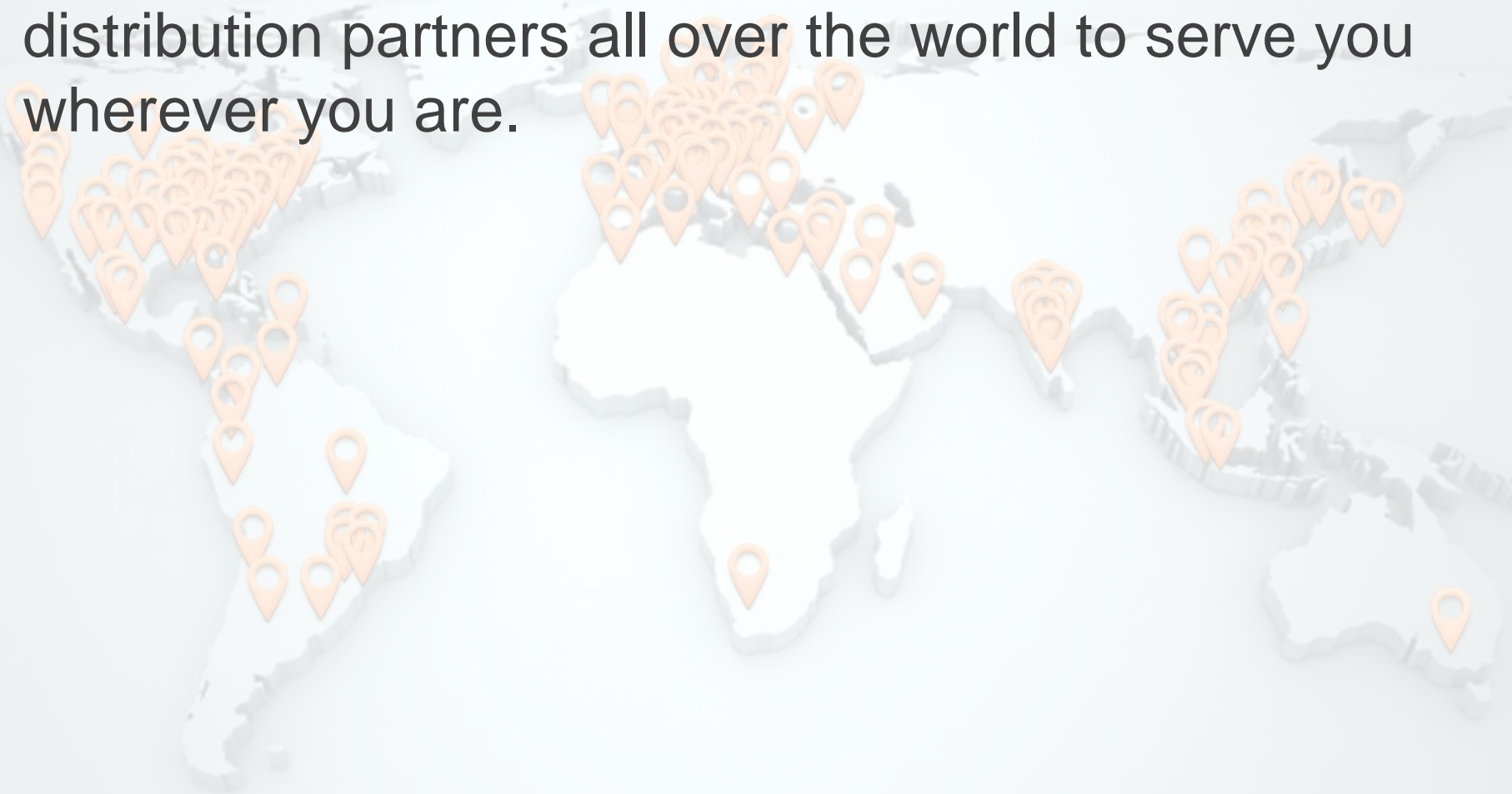
New materials and processes

Our Innovation Response

Release agents that:

- Are water-based
- Improve quality and productivity
- Are user-friendly, quick and easy to apply
- Are proven to work with both thermoset and TP pre-pregs
- Deliver reliable performance
- Work on the full range of moulding processes and mould substrates
- Comply with global regulatory lists

Offices, manufacturing facilities, laboratories and distribution partners all over the world to serve you wherever you are.



Value, performance and dependability delivered through insight, focus, hands-on knowledge and strength

- Industry knowledge
- Industry-dedicated R&D and technical support teams
- Singular focus on release agent solutions
- Support on your production floor
- Globally integrated to serve you where you are
- Market leader positioned for continued growth
- Sustainable approach to business



Release Innovation™

THANK YOU