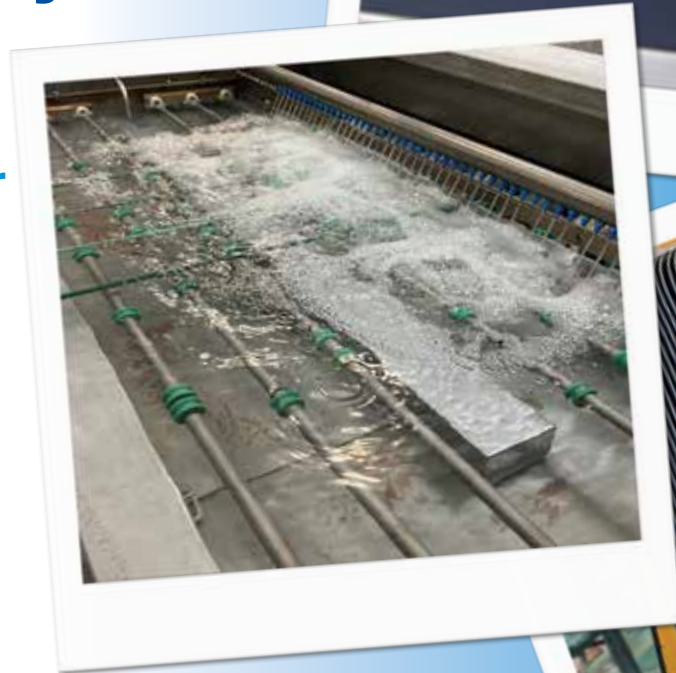


Chemetall adds value and increases process efficiency

A challenge at a U.S. automotive glass fabricator provided the opportunity for process improvements, which resulted in a 50% savings in labor and materials.



Our flat glass and optical glass industry customers benefit from our comprehensive portfolio of auxiliary chemical materials and extensive glass processing knowledge. Backed by our fully equipped laboratories, you will always receive the highest possible quality technical service and support.

Chemetall's solutions portfolio exceeds industry expectations

- + Coolants
- + Liquid Stain Protection
- + Powders for Stain Protection and Glass Separation
- + Cutting Fluids
- + Polishing Compounds
- + Detergents
- + Equipment

Chemetall adds value and increases process efficiency (Case study)

A Chemetall customer, who is a U.S. automotive glass fabricator and a global leader in the glass industry, supplies glass to many of the most important car manufacturers in the world. This facility represents the hallmark of quality in automotive OEM and replacement glass. The corporate values parallel those of Chemetall: an emphasis on quality, operational excellence, sustainability, integrity, customer-centricity, and most importantly, an innovative approach when developing solutions to encountered challenges.



Chemetall is the Surface Treatment global business unit of the Coatings division of BASF, a leading supplier of applied surface treatments for metal, plastic, and glass substrates in a vast range of industries and end markets. Chemetall innovates, develops, manufactures, and provides best-in-class technologies, systems, and expertise.



Spray nozzles are plugged with a heavy bio-slime. The biofilm is white in color and can be seen in the photo above the nozzles.



Dip slide showing bacterial contamination.

This particular glass plant manufactures and supplies the automotive glass for the rear window of a popular pickup truck. Chemetall was already providing glass grinding coolants and interleaving technology, so Chemetall was on-site when the customer began experiencing bacterial contamination in one of the automatic glass washers in their glass manufacturing process line.

Biofilms had accumulated in the spray nozzles, not only interfering with the efficiency of the wash quality, but also emitting a very bad odor. In keeping with the environmental and sustainability commitments of both the customer and Chemetall, as well as the local water district rules, only EPA approved biocides were considered.

Chemetall's Bret Penrod, Glass Segment Manager, North America, and expert John Mulhearn, Business Segment Manager, Food Group, combined their considerable insights to investigate further. First, they initiated on-site testing with dip slides and water samples, and sent them to the Chemetall laboratory in New Providence, New Jersey, for analysis.

Once the Chemetall team received the lab results and had clarity on the challenge, the next step was to take corrective action. They extensively researched and eventually referenced a previous "off-label" success with an EPA approved biofilm removal and bioremediation technology, commonly used for disinfecting food manufacturing equipment. Through this specific solution, the glass washer biofilm issues had been successfully mitigated at other plants.

Chemetall expert Chris Billups, Technical Sales Manager, stated, "Now that the washer is clean and free of bacteria, we are collaborating with the Food Group to thoroughly evaluate methods keep the washer clean and sanitized on an ongoing basis."

Chemetall adds value and increases process efficiency (Case study)

Chemetall suggested this disinfectant technology, and the treatment began. The disinfectant was applied with a foaming device to thoroughly clean the washer, emphasizing the hard to reach and hidden areas.



Foaming device with disinfectant.

Chemetall provided all the equipment for the cleaning and the expertise to carry out the cleaning, including supervision and labor. Chemetall stands behind its technology and customer-centric orientation, and the changeover has successfully mitigated the fouling issue.



(Top photo) Dip slide free of bacteria. (Bottom photo) Biofilms removed, the washer disinfected, and bacteria eliminated.

As a result of the expertise and local availability displayed by Chemetall, the customer has now awarded Chemetall additional business at this plant.

Bret Penrod attributed this success to collaboration, “We value our relationships, not just with our customers, but also with our colleagues here at Chemetall. Our collaborative culture has brought about yet another positive resolution; not only a cleaner and more productive washing system, but the odor free physical workspace is far more pleasant.”

Chemetall develops and expands relationships, and this process offers a window into the benefits of a partnership with an organization capable of wide ranging innovation and integrated solutions.

Chemetall is committed to the glass industry

- + Local engineers provide on-site support and service
- + Full service laboratory support with dedicated scientists
- + Products specifically designed for glass processing to maximize fabrication performance
- + Global support for international companies
- + More than 70 years of experience with glass processing chemistry

... the customer is extremely pleased, because not only was this specific issue resolved, but the glass is now even cleaner ...

Further, the customer is extremely pleased, because not only was this specific issue resolved, but the glass is now even cleaner. There is even less clogging of the filters on the washers, resulting in a 50% reduction in the labor required to purchase and change filters. This has led to significant cost-savings.



Nozzles flowing freely.

DETERGENTS

Detergents for glass washing machines

Acidic, neutral, and alkaline with either ionic and non-ionic products available. Specific detergent available for digitally printed glass.

EQUIPMENT

Process equipment

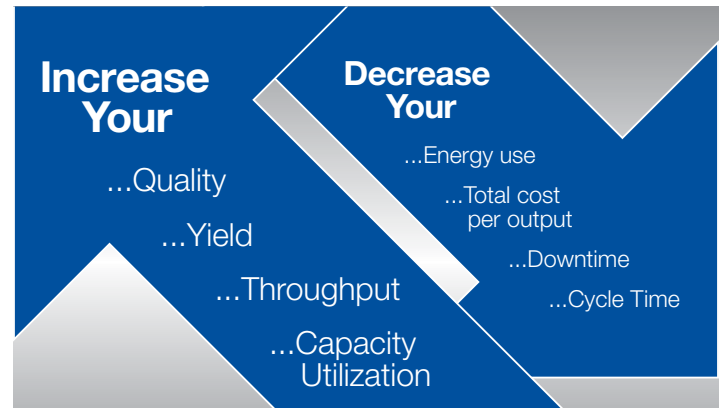
Data loggers, pumps, probes, and more. Equipment with remote monitoring and control.

SERVICE

Local engineers

Experts locally available to support your business. Let us manage the chemistry so you can focus on making and fabricating glass.

Our focus is you, our glass processing customer!



Cut it. Clean it. Coat it. Control it. Conserve it.® with us!

At Chemetall, we are dedicated, so you can expect more. Our global specialists are locally available. Our experts provide focused, passionate, and accountable support. You can expect the highest quality from our integrated portfolio of innovative products. Our labs are fast and accurate. We will collaborate with you to increase the efficiency of your process performance.

We are the Surface Treatment global business unit of the Coatings division of BASF, operating under the Chemetall brand, a leading supplier of applied surface treatments and services for metal, plastic, and glass substrates in a vast range of industries and end markets. As process innovators, fully dedicated to your success, we develop, manufacture, and provide best-in-class technologies, systems, and expertise.

Chemetall is proud to serve North America from the following locations

North American Headquarters

675 Central Avenue
New Providence, NJ
07974
Tel: 908-464-6900
Toll-free: 800-526-4473
Fax: 908-464-7914

Chemetall Canada Limited

100 Milverton Drive,
5th Floor,
Mississauga, Ontario,
Canada
L5R 4H1
Tel: 1-905-791-1628
Toll-free: 1-877-311-1471

Chemetall Mexicana, S.A. de C.V.

Avenida El Tepeyac No. 1420-B
Parque Industrial O'Donnell-Aeropuerto
El Marqués, Querétaro
C.P. 76250, México
Querétaro Tel: +52 (442) 227 2000
Monterrey Tel: +52 (81) 8371 2517

Chemetall U.S.

1100 Technology Drive
Jackson, MI 49201
Tel: 517-787-4846
Toll-free: 877-941-3800
Fax: 517-787-5538

Chemetall U.S.

46716 Lakeview Blvd.
Fremont, CA 94538
Tel: 408-387-5340
Fax: 408-809-2883

www.ChemetallNA.com

The product information contained in this brochure has been compiled to the best of our knowledge on the basis of thorough tests and research work and with regard to the current state of our practical experience in the industry. This product information is non-binding. Our statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. The user should undertake sufficient verification and testing to determine the suitability of the product for its particular purpose. We assume no risk or liability whatever in connection with any particular use, if not expressly confirmed by us in writing. Therefore, Chemetall grants no warranty and does not accept any liability in connection with this product information or its use. Except where noted otherwise, all registered trademarks are owned by Chemetall or its affiliated companies. The reproduction of any or all of the information contained in this brochure is expressly forbidden without Chemetall's prior written consent.