



BELTS AND SHEETS FOR COMPRESSION MOULDING

RELEASE SOLUTIONS FOR AUTOMOTIVE COMPOSITES

Compression moulding is the most cost effective option for the production of a range of lightweight, high strength interior automotive parts.

CHEMFAB® release solutions are used as processing aids when converting, bonding and shaping materials into composite parts. They are compatible with many press forming processes, where they protect the reusable moulds from the molten substrates and ensure easy release. Excellent temperature, mechanical strength and abrasion resistance allows precise reproducibility and reduces overall cost.

CHEMFAB® non-stick release sheets and belts can be configured for every type of machine, with features such as guidable edges, different types of joints and higher strength and textured options.

WITH OUR PRODUCTS YOU CAN ACHIEVE:

1 HIGHER QUALITY FINISHES

2 CONSISTENT PRODUCTION PROCESSES

3 IMPROVED PRODUCTIVITY AND COST EFFECTIVENESS



OPTIMAL RELEASE

In the moulding process, pressure and heat are applied to the resins and reinforcement materials, where they are bonded to form a composite material for further processing.

The conditions of curing must be carefully selected and closely monitored to make certain the product attains the desired geometry and shape.

CHEMFAB® non-stick, very smooth and superior release surface allows for the composite to solidify and be released from the mould in a continuous operation. The easy and consistent release allows for quick mould clean-up. It eliminates the need for using release agents or silicone sprays and therefore reduces the time between cycles.

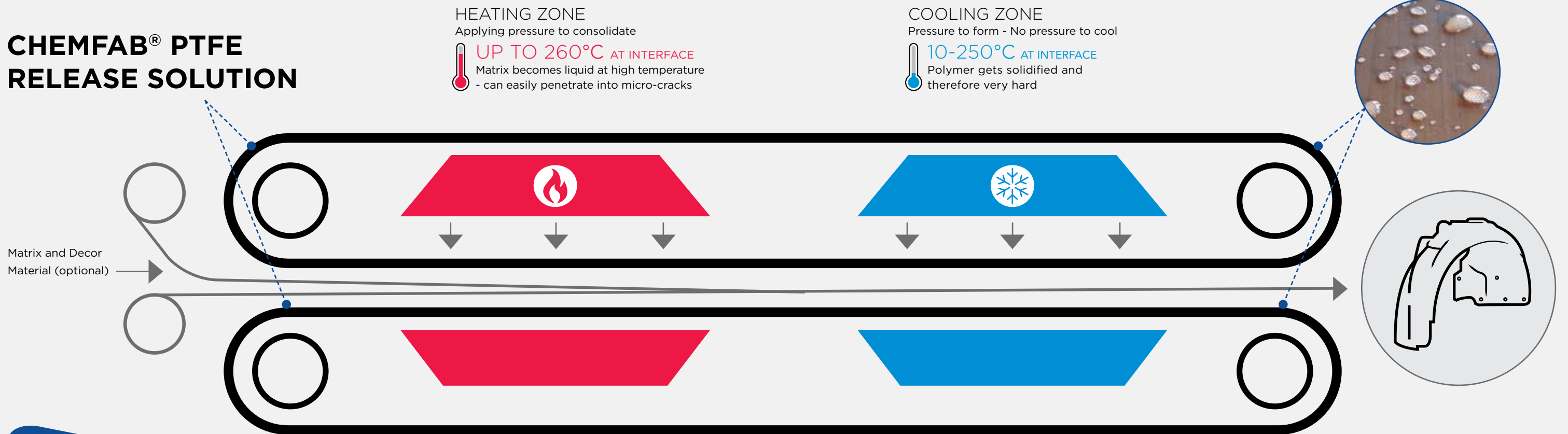
HIGHER QUALITY FINISHES

Compression moulding makes precision engineering possible with lots of geometric sizes, shapes and new materials for improved aesthetics and comfort in modern cars.

CHEMFAB® release solutions ensure that thermoplastic polymeric matrix material goes from the molten state to the moulding stage in a continuous process, thereby reducing scrap, rework, and the need for conventional inspection.

Dimensional stability of CHEMFAB® non-stick materials ensures higher quality of the finished composite, even in a high pressure and temperature environment. The smooth surface means that the imprint risk is reduced, while very low rates of elongation minimize the risk of defects occurring.

CHEMFAB® PTFE RELEASE SOLUTION



PROTECTING THE MOULD

Thanks to their chemical resistance, CHEMFAB® release solutions protect the mould from the aggressive compounds. This makes the mould reusable, prevents expensive repairs and replacement and therefore minimizes unplanned downtime.

The non-stick and chemically inert PTFE surface ensures that even the most abrasive and sticky compounds can be processed.

There is no risk of cross-contamination and no transfer of particles such as colour pigments from one production batch to the other. This minimizes the risk of defects or wastage of expensive compounds and also reduces the need for cleaning. CHEMFAB® release solutions are also available in the anti-static version for processing reactive substances.

ENSURING CONSISTENT PRODUCTION

Process conveyor belts transport materials during the press moulding process through the oven and the cooling processes. Because of the extreme and abrasive environment the belts/sheets can have a short life due to wear - which in turn can cause significant downtime and line stops.

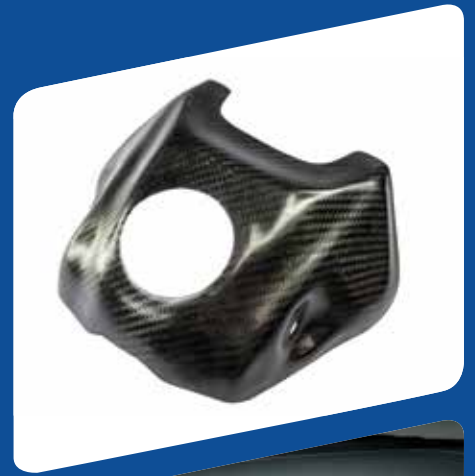
CHEMFAB® release solutions provide longer life belts/sheets, enabling more cycles and mould lifts. This higher productivity means faster turnarounds

and higher production volumes resulting in a reduced cost of the final component part.

When conveying materials throughout the whole press moulding process, CHEMFAB® products retain their shape and excellent non-stick release performance even in temperatures up to 260°C. With consistent heat conductivity and mechanical stability, they allow for stable and reliable processing and release of the composite at each stage of the process.

WHAT CAN BE MADE USING CHEMFAB® PRODUCTS?

- Parcel Shelves
- Dashboards
- Car Flooring
- Trunk Trims
- Wheel House Covers
- Head Liners
- Door Panels
- Other parts for NVH (noise, vibration and harshness) control



CHEMFAB® PRODUCTS OF CHOICE

| | |
|----------------------|---|
| CF110, CF210, CF310 | Standard products for basic requirements |
| SPO10-2 X, CF010-2 X | Hard wearing surface to withstand abrasive conditions |
| CF214-1 AS X | Hard wearing surface for processes with antistatic requirements |
| CLF910 | Laminated product for superior release and extended durability |

CASE STUDY

4X LONGER LIFE TIME

More cycles, smoother finish and reduced maintenance

By switching to a CHEMFAB® hard wearing and abrasion resistant SPO10-2 X, our customer produced 4 times more parcel shelves before requiring a belt change. The customer was previously using a standard competitive product that looks similar to our material, but failed to match the consistent long-life of SPO10-2 X.

RS/CM/EU/EN/V1

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