

CASE STUDY - RUBBER

Release agent free of per- and polyfluoroalkyl substances for rubber moulding does not leave any contamination in the cavities of the mould

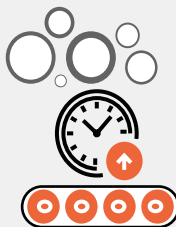
+750 hrs/year
Production up-time



appr. -30.000
EUR/Year savings
through reduced
cleaning effort



up to 100
Production
cycles in
manufacture
without
mould fouling



WHAT WE ACHIEVED.

One of the leading manufacturers of precision seals in Europe was looking for a reliable product for processing FFKM (perfluorelastomers). After a short time, the release agents used from a competitor to date resulted in mould contamination, so that parts could not be released from the mould. The associated cleaning effort and the scrap rate were no longer sustainable for the customer.

The new release agents needed to be water-based and semi-permanent. Clear requirements also included the reduction of mould fouling and reliable demoulding of the finished products.

HOW WE GOT THERE.

Our sales experts established contact with the new customer in intensive discussions. They involved different departments to get an accurate picture of the requirements. In close consultation with our R&D department, they presented various release agent formulations as solutions.

This included a newly developed Chem-Trend product free of per- and polyfluoroalkyl substances for the rubber sector. The transparent communication of further results from our in-house tests with the new formulation increased the trustful cooperation between Chem-Trend and the new customer.

The release agent with the most promising test results was tested in the customer's own laboratory and also in

production. There, it provided impressive results both in compression moulding and injection moulding. The customer then decided to extend the testing to include additional elastomers besides FFKM. On this basis, the customer decided to switch their entire production to the new release agent.

OUR SOLUTION.

The Chem-Trend Mono-Coat® 6060W met all customer requirements. The product impressed in the tests, enabling up to 100 cycles without release agent residues in the cavities. With its per- and polyfluoroalkyl substances free formulation, it ensures the highest quality and safety in the manufacture of precision seals.

Chem-Trend has set itself the goal of eliminating all PFAS from its current product portfolio by the end of 2023 and is also committed to refraining from using these chemicals in new developments. Chem-Trend will also apply these standards to future acquisitions.

Mono-Coat® 6060W is suitable for use in all common processes in the rubber industry, such as conventional moulding, injection moulding and transfer moulding. It has been specially developed for silicone-rubber processing, but also gives impressive results with compounds such as FFKM, FKM, HNBR and EPDM. It ensures a low transfer of release agent to the end products and is suitable for processing at high temperatures. It is a ready to use product.

HANDPRINT IMPACT

At Chem-Trend, we pride ourselves on our long history of sustainability efforts. However, it is our effect on our customers' processes that provides the greatest impact. It goes beyond our global Footprint; it is our even wider Handprint.

Here, we achieved the following:

- PFAS-free water-based release agent solution for greater safety in production and avoiding harm to the environment
- Proven excellent release effect without mould fouling for extended cleaning cycles and reduced waste



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For more information about our rubber capabilities, our innovations, or other stories, visit DE.CHEMTREND.COM.



Waste



Energy



Emissions