

Impact of regulation of products containing PFASs

Ostfildern, 01.09.2023

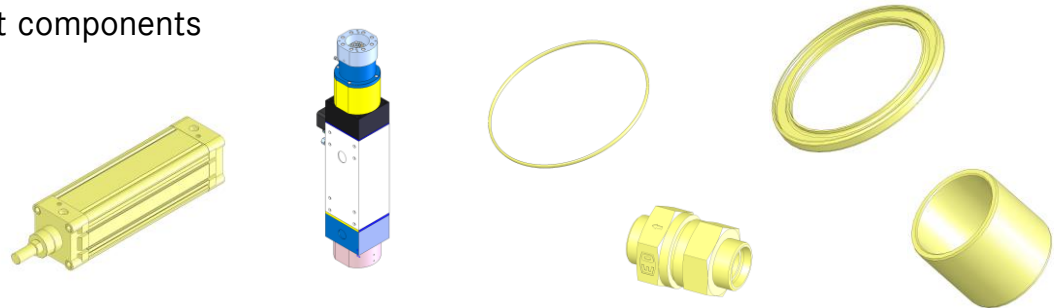


Engineering, M. Petschi

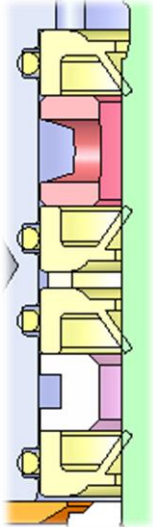


Overview of affected materials

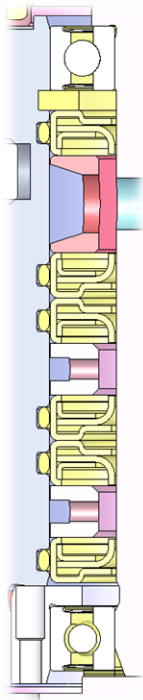
- **The following essential materials, which are important for Gehring, are affected by a possible PFAS ban:**
- Sealing rings for rotary distributors → very critical!
- O-rings for static and dynamic sealing
- Seals on cylinders, valves and screwed connections (here are partly alternatives available but partly with more than 400% price increase of the current costs). This additionally limits our competitiveness against non-EU machine builders.
- Plain bearings in elementary important components
- Seals on motor spindles
- Membranes on filter systems



Seals in rotary distributors for honing machines



Quelle: Fa. Gehring



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Honing machines require rotary distributors to supply cooling lubricant and measuring air.

Pneumatics must be supplied for dynamic pressure measurement. This has very high requirements on the tightness of the rotary distributor. Leakage of the system leads to incorrect measurement results and thus to rejects.

At present, this can only be achieved with PFAS-containing seals, as our own tests showed back in 2012. So far, there is no technical alternative solution to replace these seals.

Internal tests have shown that seals made of other sealing materials wear within <20% of the desired service life and the seal is not adequate.

Thus, in the event of a general ban on materials containing PFAS, we will no longer be able to successfully place honing machines on the market. This will massively endanger the existence of our company.



Dichtungsprüfstand Fa. Gehring

Arguments against a possible ban on PFASs

- **Materials:** There are no alternative sealing materials available for this particular application. Thus, in the event of a possible ban, functional machines can no longer be manufactured.
- **Development costs:** Increase in development costs as alternative materials have to be sought and tested. Prospects of success are currently negative. Resources for the search for alternative sealing materials are not available in the company and are hardly/not at all available on the labour market.
- **Cost:** Implementation of alternative concepts (except for seals) leads to additional costs and thus to a reduction in competitiveness, especially in markets that are not affected by a ban. These markets are the main customers for Gehring's products. This reduces and endangers sales and thus turnover, profit and ultimately jobs and the company.



EO2
Source: Fa. ParkerEO2



Wallformplus-M
Source: Fa. EATON

Example:
Possible changeover in screw fittings.
Costs increase massively.

Arguments against a possible ban on PFASs

- **Performance:** The performance of alternative seals is currently low, so that safe operation of the machines cannot be guaranteed without seals containing PFAS.
- **Aftersales:** Existing machines can only be converted at great expense for development and design. Of course, this requires that a technical solution is available on the market. Higher costs for our customers (and consequently also for the end users) due to the additional effort are inflationary.
- **Competitive advantages:** Machine manufacturers who are not subject to this possible ban can place machines on the market at significantly lower prices. This endangers competitiveness in these markets and leads to crowding out.
- **Supply chains:** Will be affected by new materials. Availability of "new" seals, when available, is uncertain. Delivery dates to customers cannot be bindingly promised. In order to receive orders, delivery dates must be bindingly promised and adhered to!
- **Quantities:** Gehring uses very small quantities of materials containing PFAS. A ban would be disproportionate compared to the consequences.