

FREUDENBERG XPRESS® – QUALITY IN RECORD TIME

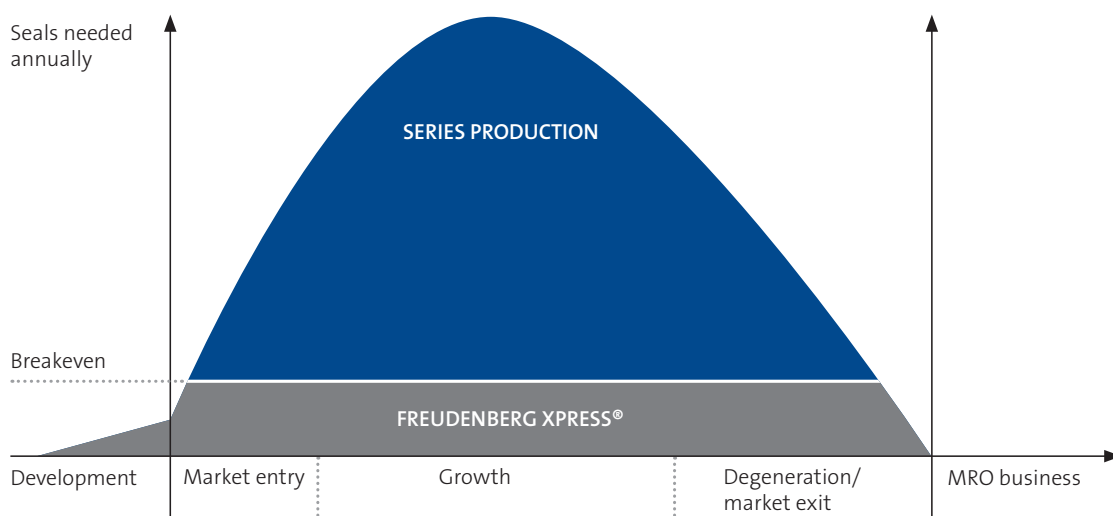


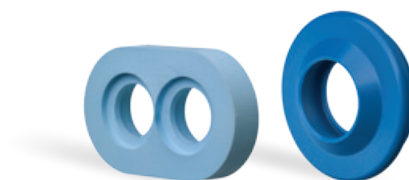
Freudenberg Xpress® stands for the highest possible quality and fast delivery at the same time. In addition to standard seals, complex formed parts and customer-specific solutions are produced based on drawings or samples, or on demand. Numerous investigations show that their mechanical qualities and thus their life spans nearly achieve those of seals produced in the conventional way. Among other factors, the high quality is made possible by the adaptation of processes typically found in series production as well as approaches that the company has developed itself – a unique feature in the market.

The integration of Freudenberg Xpress® in the product life cycle of a component allows the optimal purchasing strategy in each stage (see figure below). This is made possible by the use of original materials and profiles. If the annual demand for seals is below an individually defined breakeven point, purchasing them from Freudenberg Xpress® is the most economical option. If the breakeven point is exceeded, an investment in a series tool pays off. From small production runs, to the manufacture of prototypes and urgent deliveries in case of damage, all the way to the production of complex formed parts – Freudenberg Xpress® offers fast solutions with the usual Freudenberg quality.

VALUES FOR THE CUSTOMER

- Shortened delivery times thanks to prototyping
- Express delivery of standard items, within 24 hours in an emergency
- Original Freudenberg profiles and materials
- Industry-specific approvals such as FDA and USP Class VI
- Special shapes, materials and diameters upon request
- Local service centers worldwide
- Long life spans thanks to unique material properties





CHARACTERISTICS AND ADVANTAGES

Freudenberg Xpress® for the food and beverage industry

Freudenberg Xpress® offers EPDM, NBR, AU, PTFE and Fluoroprene® XP materials for the sensitive requirements of the food and beverage industry. Besides approvals for product-contact areas, the basic requirements here are primarily resistance to CIP/SIP processes, steam and fats as well as the minimization of flavor transfer. With regard to chemical and thermal stability, seals and formed parts from Freudenberg Xpress® are in no way inferior to parts produced in series. The materials for the food industry meet the requirements of all the important standards such as EU Reg.1935/2004, FDA and NSF, which enable their use worldwide.

Freudenberg Xpress® for the pharmaceutical and chemical industries

Temperature fluctuations, aggressive chemicals and solvents – these are standard conditions in pharmaceutical and chemical processes. The seals in use here must exhibit excellent

mechanical and thermal characteristics and, in case of use in the pharmaceutical industry, must be tested for compliance with USP Class VI and 3-A® Sanitary Standards. For these applications, Freudenberg Xpress® offers highly stable seals made of EPDM, PTFE and Fluoroprene® XP.

Product portfolio for the process industry

For the special requirements of the process industry, Freudenberg Xpress® offers numerous sealing solutions made of certified elastomers such as EPDM and Fluoroprene® XP as well as technical plastics such as PTFE and AU. In addition to standard seals such as O-rings, wipers, grooved rings and radial shaft seals, there are hardly any limits on what its technical developers can accomplish in the planning of formed parts and customer-specific seals like e.g. pigs.

STANDARD MATERIALS FOR THE PROCESS INDUSTRY

MATERIAL	COLOR	RANGE OF TEMPERATURES IN USE	WAREHOUSED	USP	FDA	EU REG. 1935/2004	EU REG. 10/2011	3-A® SANITARY STANDARDS	NSF 51	ADI FREE
75 Fluoroprene® XP 41	blue	-15 to +200 °C/ +5 to +392 °F	up to 250 mm	X	X	X		Class I	X	X
70 EPDM 291	black	-40 to +150 °C/ -40 to +302 °F	up to 250 mm	X	X	X		Class II	X	X
85 EPDM 292	black	-40 to +150 °C/ -40 to +302 °F	up to 250 mm	X	X	X		Class II		X
70 NBR 150	black	-20 to +100 °C/ -4 to +212 °F	up to 250 mm		X	X				X
88 NBR 156	black	-25 to +100 °C/ -13 to +212 °F	up to 250 mm		X	X				
94 AU 21730	blue	-25 to +110 °C/ -13 to +230 °F	up to 250 mm		X	X		Class II		
W FLON (PTFE)	white	-200 to +260 °C/ -328 to +500 °F	up to 1.000 mm		X					
EF FLON (PTFE)	beige	-200 to +260 °C/ -328 to +500 °F	up to 250 mm		X		X			

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