

SKF SEAL JET DD

The machine and materials for on-site, on-demand seal production

Distributor benefits

- Reduced stock and order handling costs – just-in-time, on-site production, with no need to stock single/low volume seals
- Increased availability - virtually no delivery time
- Easy to operate - no qualified CNC operator or application experience required
- Sealing solutions manufactured in the right seal profile and size with fit-for-purpose, high-end materials
- Extensive SKF sales and technical support

End-user benefits

- Standard seals in non-standard dimensions
- Increased availability and reduced delivery time - just-in-time availability from the nearest distributor
- No need to maintain in-house stock
- Local, single-source access to a comprehensive sealing solutions portfolio



Machined SKF seals available on-site

The SKF SEAL JET solution for distributors puts our proprietary machined seals concept to work for SKF distributors, allowing them to custom-machine seals right on-site at their facility.

The SKF SEAL JET DD system

Featuring proprietary software and high-precision cutting tools, the SKF SEAL JET DD machine uses Computer Numerical Control (CNC) technology to machine seals just-in-time.

The SKF SEAL JET DD system puts an extensive range of SKF sealing solutions and profiles within easy reach for shop personnel – without the need for a professional operator, costly moulds, tools, or special application engineering knowledge.

Technical and sales support from SKF gives distributors access to the full SKF seal portfolio of customized and standard sealing solutions.

The SKF SEAL JET solution for distributors also includes training on the SKF SEAL JET DD machine and software, sealing and material technology, and industrial seal products from SKF.



SKF SEAL JET DD machine specifications

Main dimensions	1 130 × 890 × 1 900 mm 1 270 × 1 280 × 1 900 mm*
Weight	800 kg
Machining area	
Max. clamping diameter	200 mm
Travel x-axis	550 mm
Max. tube length	160 mm
Main spindle drive	three-phase asynchronous motor with combined ventilation 3 kW
Noise level	75 dB (A)
Tool system	SKF-specific automatic tool changing system (patent pending)
Number of tool fixtures	10
Clamping system	SKF-specific (patent pending)
Lubrication system	maintenance-free lifetime greasing
Cooling air system	Minimum quantity lubrication unit with two nozzles (capacity 3,5 l)
Swarf suction unit internally	drive 1,5 kW with 90 l chip container
Requirements	
Power supply	3 × 208–480 V +PE; 7 kVA
Air supply	min. inlet pressure 6 bar max. inlet pressure 10 bar

* with mounted display



The right seal profile and high-end materials

SKF SEAL JET materials

The SKF SEAL JET solution for distributors produces seal profiles using proprietary polymeric materials. A semi-finished tube of one of the five materials below spins inside the SKF SEAL JET DD machine as the unit's high-precision cutting tools machine the seal.

ECOPUR DD is a thermoplastic polyurethane elastomer with excellent abrasion resistance, low compression set and high tear strength. It is suitable for hydraulic, pneumatic and selected rotary seals. Products made from this material can be used in mineral oil, in water up to 40 °C and in biodegradable hydraulic oils. Depending on the seal design and housing, seals made of ECOPUR DD can be used up to 300 bar.

SKF Econbr is an elastomer based on nitrile rubber (NBR) and is used for U-cup seals, and rotary seals. The material has good resistance to mineral oils and greases and HFA, HFB and HFC pressure fluids.

SKF Ecofkm is an elastomer based on fluoro rubber (FPM/FKM) that can be used for U-rings, lip seals, wipers and rotary seals. Its properties include high resistance to heat, weathering, ozone and many other chemicals. This material is compatible with mineral oils and greases containing sulphur, HFD pressure fluids, crude oil and sour gas.



Seal profiles S01-P, K09-D and R09-F (left to right).

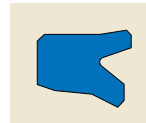
SKF Eceptfe is a thermoplastic material based on polytetrafluoro-ethylene (PTFE) with 15% glass fibre and 5% graphite. It is mainly used for back-up rings, O-rings, rotary seals and gaskets. It has outstanding chemical and temperature resistance. Thanks to the fillers, this material has optimized compression strength and sliding properties.

SKF Ectotal is a semi-crystalline polyacetal-copolymer (POM) which is used for anti extrusion rings, guide rings, bushings and scrapers. This material has good mechanical properties, low water absorption and good chemical resistance. It can be used in mineral oils and in water-based, fire-resistant hydraulic fluids (HFA, HFB and HFC).

Profiles proven in industrial applications

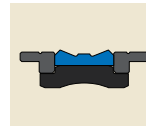
The SKF SEAL JET DD machine gives SKF distributors the ability to custom-machine ≤ 200 mm industrial seals in a range of profiles that satisfies approximately 80% of standard industrial application demands. Popular profiles include:

DS01



One of the most common seals for standard hydraulic cylinders, DS01-P can be modified to meet non-standard housing dimensions.

DK09-D



Featuring high extrusion resistance, DK09-D is a heavy-duty, double-acting piston seal perfectly suited for harsh mining industry applications.

DR09-F



Specially designed for applications with slow rotation under pressure, DR09-F is a rotary seal used for swiveling tables in machine tools, rotary distributors, or rotary joints.

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