

SKF Coupling Systems for maritime applications

Products and solutions based on the SKF oil injection method



Increase days at sea

Mounting and dismantling of heavy marine components is simplified by the SKF oil injection method. Precision products such as SKF OK shaft and flange couplings, SKF Supergrip and Quickgrip Bolts, marine hydraulic nuts and propeller sleeves are based on this technology and reduce operations that previously took hours or even days to a few rapidly performed steps.

Over the life of a ship, the savings achieved by the SKF oil injection method are quite substantial in terms of reduced docking time and related costs.

Designed for high torques

The SKF oil injection method offers an innovative solution for connecting critical applications such as propeller shafts, propellers and rudder assemblies. High torques are transmitted by effecting a strong interference fit. Machining of shafts and other components can thus be simplified and strength increased.

SKF technology, quality and service

Since we developed the oil injection method we have carried the technology even further. Today, we continue to improve marine products, saving time and money for carriers around the world. Thanks to SKF's global sales and service network you can always find us in your local market.

To find your local contact take a look at www.skf-marine.com or scan the QR code below.



SKF Coupling Systems help the maritime industry worldwide to set the course for improved maintenance with shorter docking times and better total profitability.

A winner at sea

The right product and the right competence is a winning combination – also at sea. SKF Coupling Systems supports you with high-tech products from a global network, local service and backup, training and secure deliveries.

The SKF oil injection method offers benefits impossible to achieve with traditional couplings. The simplicity of mounting and dismantling and the high torque transmission capacity reduce docking time and improve reliability at sea.

Operation

Time required

SKF OK coupling

Mounting of coupling

approx. 1 hour

Dismounting of coupling

approx. 1 hour

Reliable oil injection method

SKF Coupling Systems has been a partner to the maritime industry since the 1940s when we invented the oil injection method. Since then, more than 50 000 couplings have been supplied for demanding applications in ships and power installations etc., all over the world. SKF has played an important role in continually reducing time and costs for shipyards by delivering good products, technical support and knowledge. As a player with a global marine network, SKF works as a long-term supplier of products, techniques and service to help marine customers improve their financial performance and competitiveness.

Get expertise – not just a product

SKF can offer you detailed analyses and advice on any aspect of your propulsion design work. Working as part of a team alongside SKF Coupling Systems will help you identify and implement the latest oil injection method.



One of the very first ships to be equipped with OK shaft couplings was the M/S Salamina. That was in 1945.

Since then we have equipped all types of vessels with products based on the SKF oil injection method, providing opportunities for improving operational time at sea.



Fully marine approved

Our precision-made products and systems are installed in a wide range of marine vessels all over the world. The products are approved for use by all leading international and national classification societies and regulatory bodies.

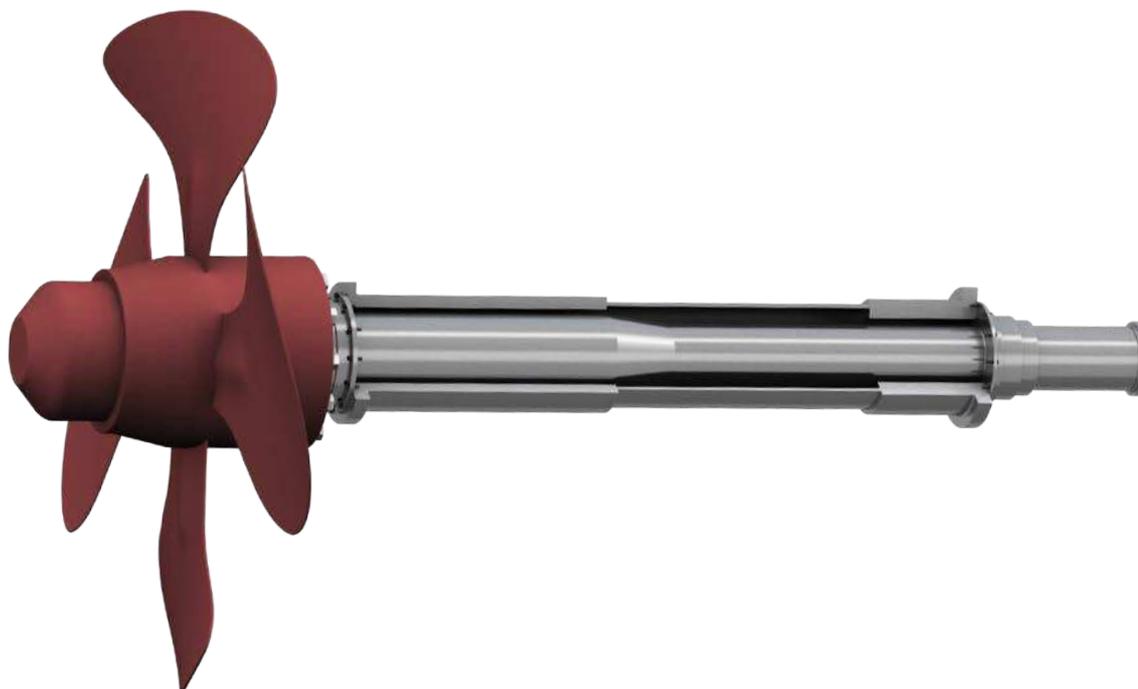
SKF Hydraulic shaft couplings, OKC and OKF

When using the SKF OK coupling in shaft connections, you are exploiting potent oil injection technology. Preparation of the shaft is simple. No keyways to machine, no taper and no thrust rings. Ease of mounting and dismounting combined with high torque capacity are characteristics of the SKF OK couplings.



SKF High-friction shaft couplings, OKCX and OKFX

SKF OKX and OKFX are strong couplings with a torque capacity that is around 50% higher. The couplings withstand heavy shock forces and rapid changes in rotational direction and are used in large heavily loaded shafts to optimize the design by reducing the diameter and coupling size. Furthermore, the pressure on the coupling is lower, thereby eliminating the need for reinforcement sleeves in hollow shafts.



SKF Hydraulic bolts, OKBS and OKBQ

SKF hydraulic bolt systems, Supergrip Bolts and Quickgrip Bolts offer a superior solution for connecting flange couplings. Compared with traditional bolt systems, SKF Supergrip Bolts and SKF Quickgrip Bolts are much faster and easier to install and remove. It takes much less time to fasten the coupling halves together and the result is far more secure.

The hydraulic bolt systems are designed specifically for high torque applications such as propeller shafts and rudder assemblies. Using them eliminates uncertainty regarding the downtime required for removing and installing the bolts.



SKF Propeller sleeve, OK00

The SKF OK00 propeller sleeve is a unique innovation designed to simplify the removal and mounting of fixed pitch propellers. It provides full interchangeability between the operating and spare propeller and eliminates the need for a spare propeller shaft.

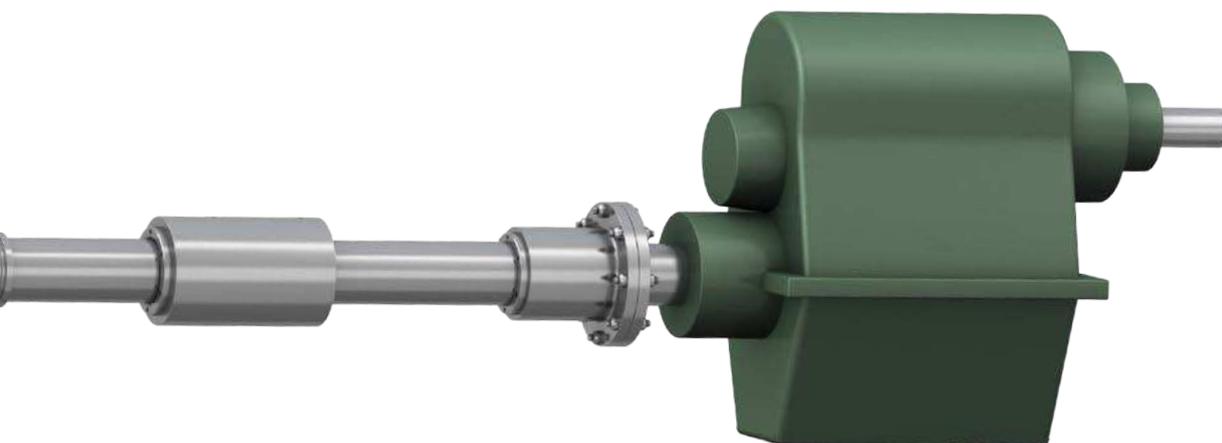
The internally tapered propeller sleeve fits into a propeller boss that has a straight cylindrical bore with normal manufacturing tolerances.



SKF Hydraulic nut and ring, OKTH and OKTC

The SKF oil injection method is an outstanding alternative for mounting and dismounting propellers. It enables a 50-ton propeller to be driven up the shaft in twenty minutes and dismounting of the propeller can be carried out in ten minutes. The propeller is hydraulically pressed onto tapered seating by a hydraulic ring or nut.

This is also the preferred method for mounting components such as rudder pintles and tillers when short service times are required.





SKF Coupling Systems AB was established in the early 1940s when SKF's Chief Engineer, Erland Bratt, invented the SKF oil injection method. As a result of continuous development, SKF is currently a world leader in selected market niches.

Our business concept is to develop, produce and supply products based on the SKF oil injection method. These products significantly reduce downtime and decrease maintenance costs for the capital-intensive equipment in which they are used.

SKF Sverige AB SKF Coupling Systems

SE-813 82 Hofors, Sweden.

Tel: +46 290 284 00. Fax: +46 290 282 70

E-mail: skf.coupling.systems@skf.com

Website: www.couplings.skf.com

couplings.skf.com | skf-marine.com

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