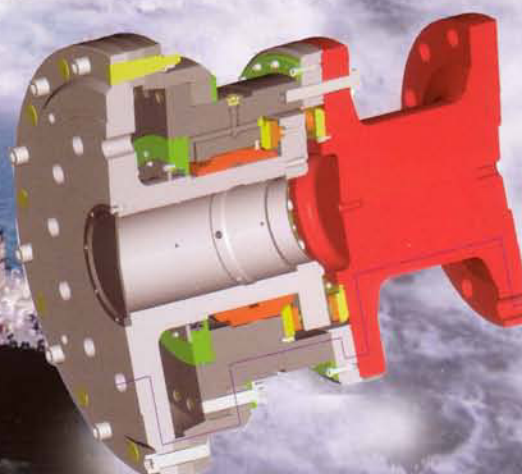
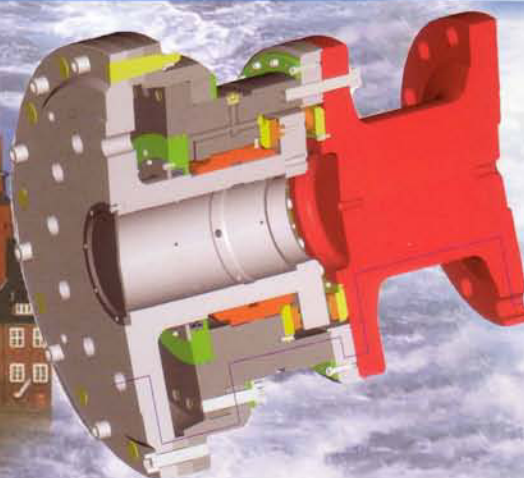
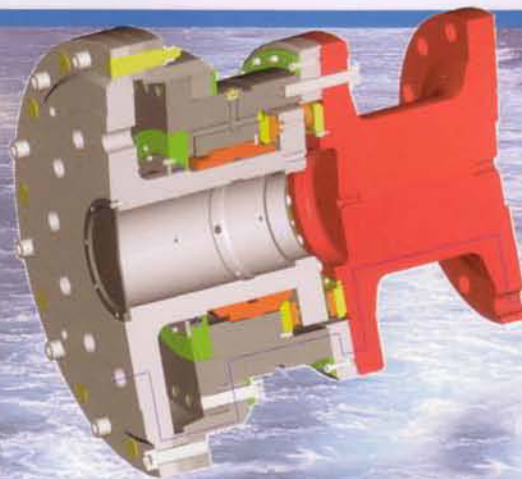


Customized Shaft Separating Devices for high Availability and Increased On-Board Safety

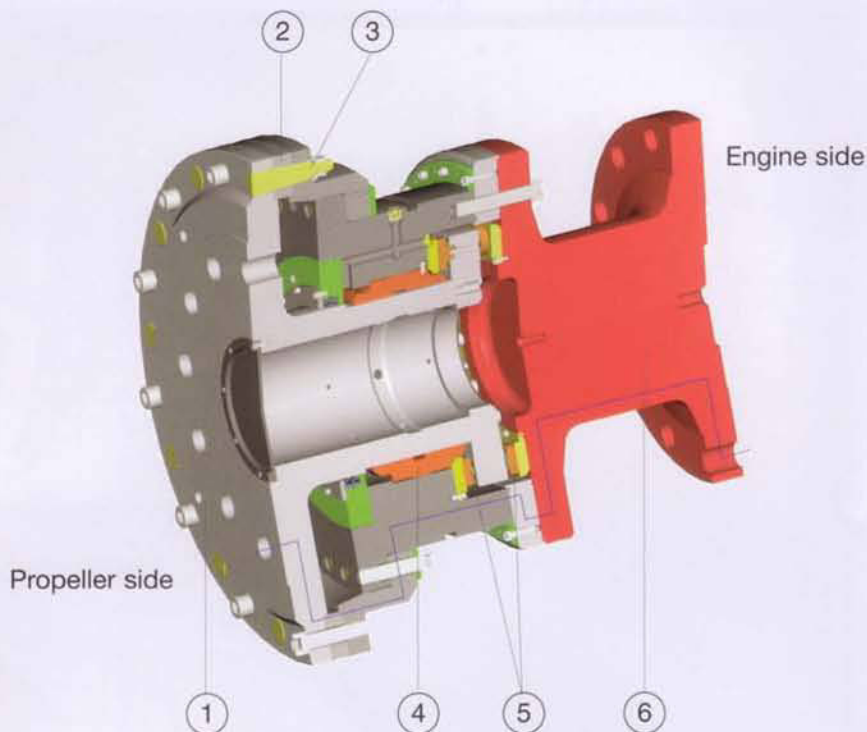


**Separating propeller shaft and engine
– for special applications you can rely
on RENK for the most economical
solution!**

KAZ

Key Components

1. Propeller-mounted hub
2. Spacer
3. Tapered pin
4. Radial bearing
5. Axial bearing
6. Engine-mounted flange



Functional Description

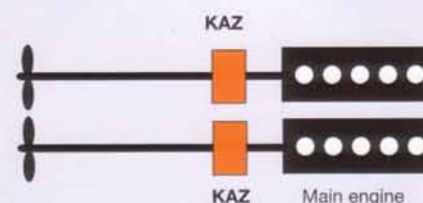
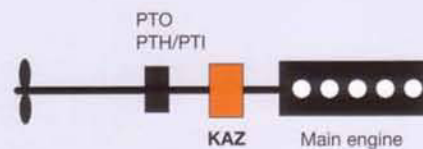
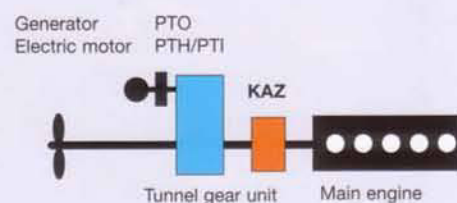
KAZ is a shiftable clutch designed to connect and separate engine and propeller. Torque is transmitted friction-locked and backlash-free via tapered pins. Shifting is performed under static conditions by removing the tapered pins and spacer. When the clutch is engaged, propeller thrust is transmitted directly to the exterior elements. Axial and radial bearings are then inoperative.

Benefits

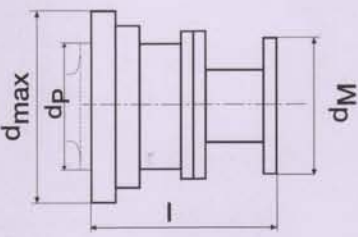
- Very compact construction
- Low weight
- Wear-free
- Installation requires no foundation
- Torque transmission via tapered pin
- No oil supply required
- Axial and radial bearings operative only when declutched

Applications

1. Auxiliary drive via PTH in case of main engine failure. The vessel remains manoeuvrable.
2. To use a shaft generator as a PTI, if additional power is to be imparted to the propeller with the clutch engaged. When the clutch is disengaged, the shaft generator can be used as PTH for back-up propulsion of the vessel.
3. If only one engine is to be operated with twin-propeller drives while the other propeller is rotated by the current at favourable efficiency (windmilling effect). This alternative may be used for maintenance operations on the engine when turned off.



Quickinfo	Application	Operation	Engage- ment time	Disengage ment time	PT Modes	Axial thrust
KAZ	Emergency, low shift frequency	Fitment for ON and OFF	20 min	10 min	PTO, PTI, PTH	ON via engine mounting, OFF via integrated thrust bearing

KAZ	Size	T_{nenn} kNm	l mm	d_{max} mm	Engine side	Propeller side	Weight kg
					d_M mm	d_p mm	
	31	400	980	880	600	600	1900
	35	580	1050	980	670	670	2600
	40	830	1130	1100	750	750	3500
	45	1150	1230	1250	880	880	4600
	50	1600	1350	1400	950	950	6100
	56	2250	1520	1570	1050	1050	8600
	63	3200	1700	1750	1120	1120	12000
	71	4500	1920	1950	1250	1250	17600

Products and services

Slide bearings

Standard and special versions of horizontal and vertical slide bearings for electrical machines, fans, compressors, pumps, turbines and general mechanical engineering. Slide bearings for transmissions. Shaft line bearings for marine applications and thrust blocks for merchant and military vessels, also shock resistant.

Clutches and couplings

Curved tooth couplings for industry, marine and ocean technology, and rail-bound vehicles; flexible disk couplings for slow- and high-speed industrial duties, diaphragm couplings for high-speed machinery, safety couplings. Torsionally elastic profile sleeve couplings.



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