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A powerful and compact connection

Shaft and axle connections with hydraulic high-pressure accessories

Whether between the ship's propulsion and propeller or in highly stressed drive trains of steam turbines, in reciprocating compressors or wind power plants: the requirements are set very high, since the connections must often cope with high dynamic and changing torsional forces in addition to partly axial forces. It is precisely to this demanding requirement profile of shaft and axle connections that the experienced specialists for hydraulic high pressure tools from Schaaf have tailored the new GripLoc coupling.

The GripLoc system is capable of safely transferring high forces (torques and axial forces) in the smallest installation space. Furthermore, the system is easily and rapidly installed and just as easy to disassemble again even after prolonged and intensive stress.

GripLoc operates according to the principle of a radial shrinkage connection, but without the serious disadvantages of this type of connection. In order to displace the two bushes against one another and release the connection again even after a long period of use, GripLoc operates with an integrated and removable hydraulic nut and SafeLoc element. The working principle of the system is simple, but extremely efficient.

The smallest dimensions of the entire coupling are rendered feasible by the friction coefficient increase developed by Schaaf, which functions like micro-toothing. With the friction coefficient increase, GripLoc achieves friction coefficients of up to $\mu = 0.7$.

Only the same tools as for establishment of the connection are required for release. Owing to the new construction of GripLoc, the system can be assembled and disassembled rapidly and as often as desired without any wear, all without any loss of the excellent frictional engagement properties.

All systems are subject to strict quality control and are tested among other aspects for material quality, dimensional stability, function and safety under pressure. This makes GripLoc the perfect addition to proven connection systems such as ExpaHub and ExpaTen. Equally efficient are hydraulic high-pressure accessories from Schaaf for the assembly and disassembly of conical shaft/hub connections and all kinds of oil press-fits. The result is an optimal solution for any shaft and axle connection.

All systems are subject to strict quality control at DIN EN ISO 9001:2008 and are tested among other aspects for material quality, dimensional stability, function and safety under pressure. Material test certificates in addition to attestations and factory test certificates of the renowned acceptance associations are available on request.