

SYNDISK[®]

carrier system

SYNDISK-SYSTEM®



innovative carrier system with multiplex applications.

The Syndisk-System® is an innovative shaft-hub-connection for the transmission of high torque values based on a patented* formula to create the Syndisk-Geometry on every regular polygon.

It works as a carrier system for multiplex rotary applications with a maximum degree of sustainability, modularity and in addition to this it supports easy assembly and disassembly at the same time.

MODULARITY

The modular building block system enables various combinations to fulfill the customer's multiple tasks.

EFFICIENCY

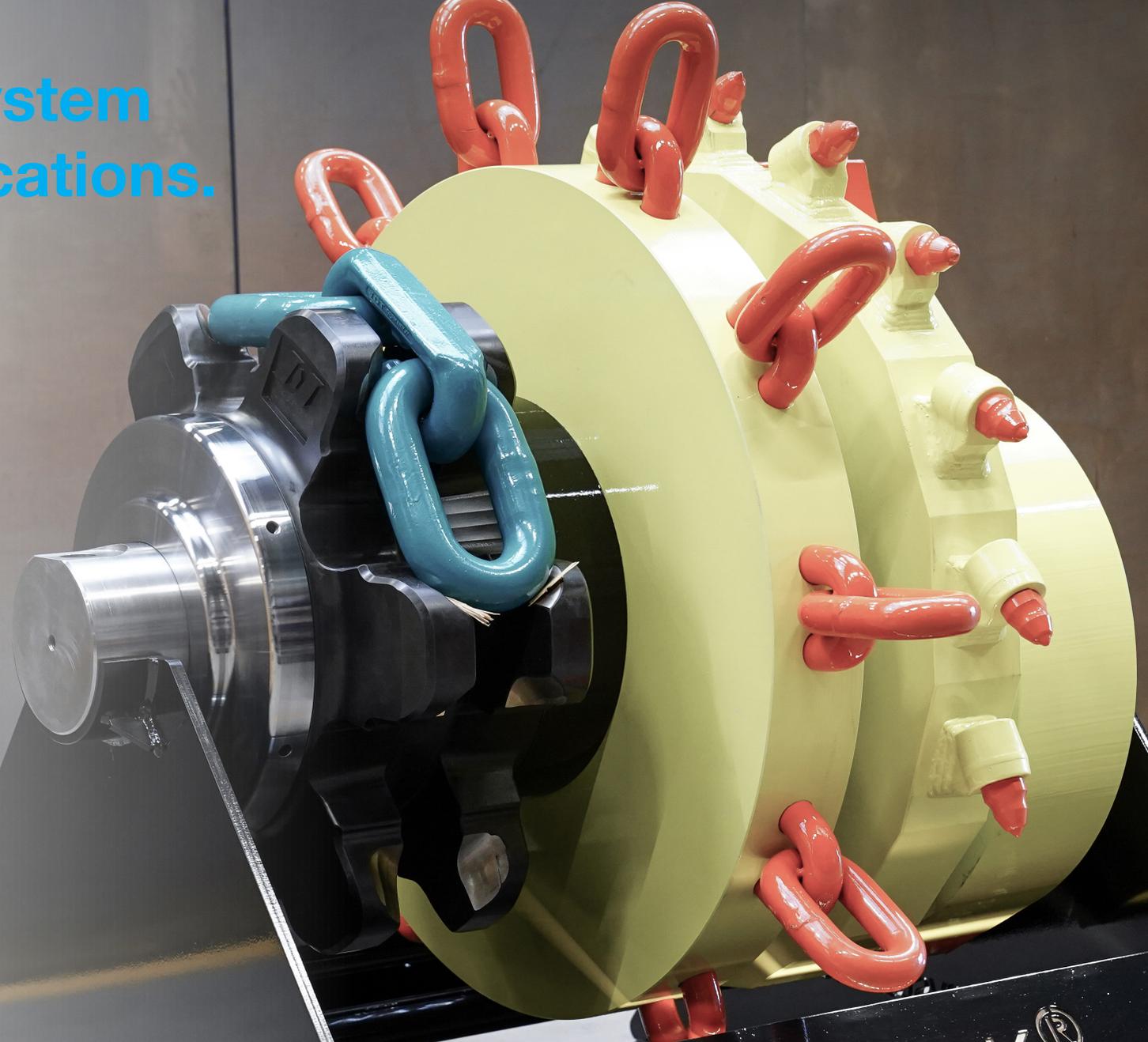
The system's maintenance and endurance reduces expensive standstill of the overall plant and offers multiple use.

FLEXIBILITY

The system's adaptation to individual conditions and dimensions as well as the possibility to easily adjust the system to changing individual conditions and dimensions.

SUSTAINABILITY

The system's durability extends life and modularity reduces the amount of spare parts and strengthens an economies of scope strategy for the customer.



*pending

www.syndisk-system.com

SYNDISK®
innovative carrier system for multiplex applications

SHAFT-HUB- CONNECTION

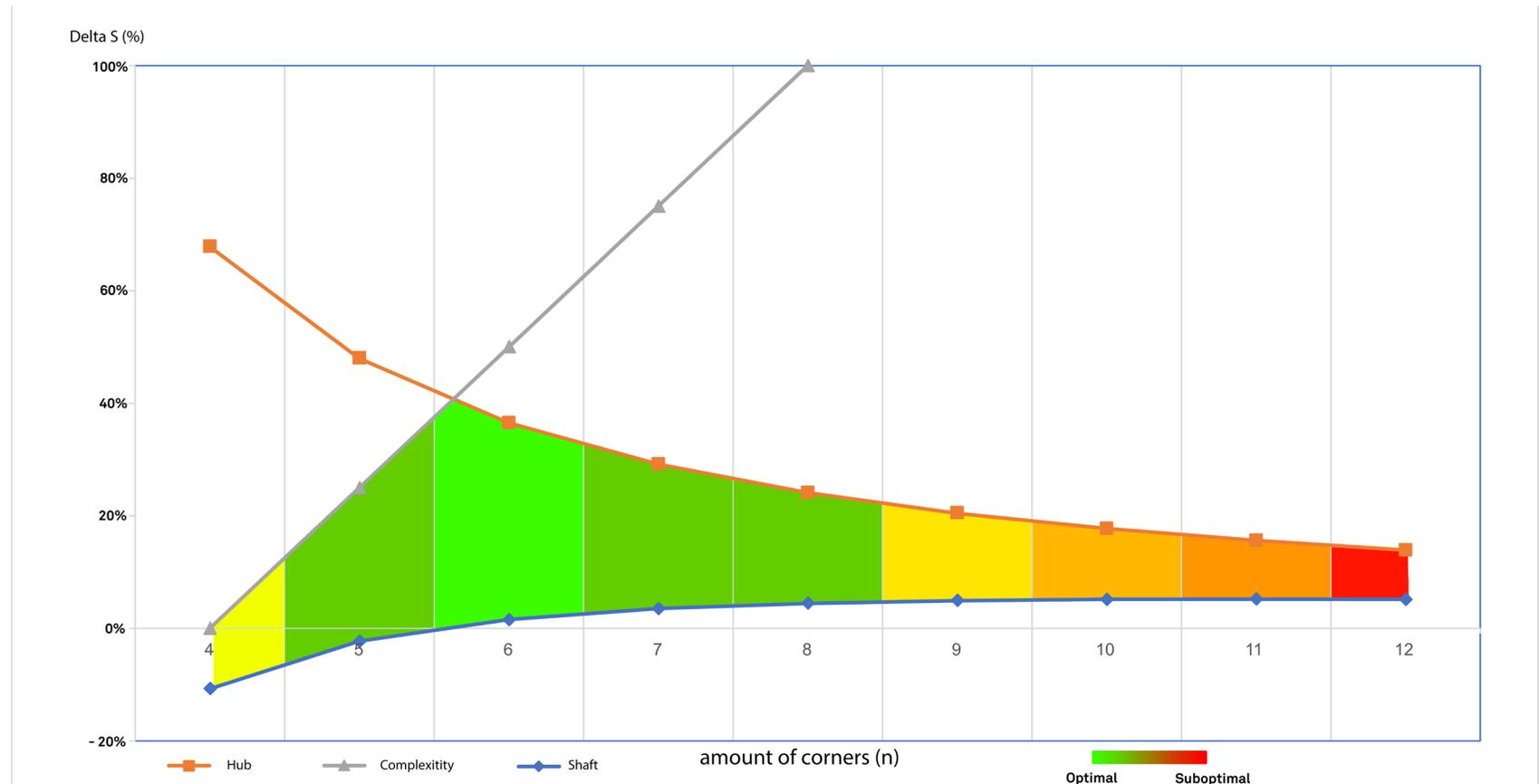
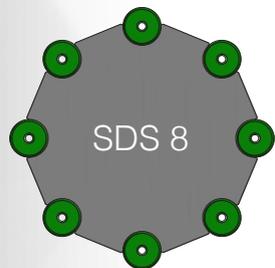
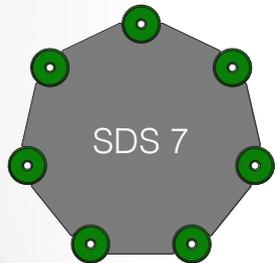
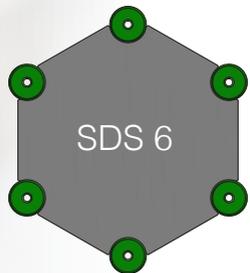
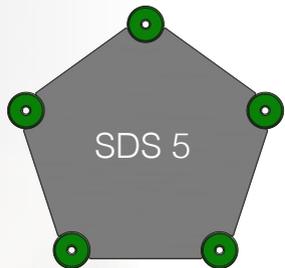
patented system.

The Shaft with Syndisk-Geometry, the carrier, is made from a high-alloy forged steel, quality tempered to withstand high loads. Moreover, the carrier is double treated in a special process to increase the resistance against abrasion, adhesion and corrosion which also improves the sliding properties for

easy installation of the discs. This leads to a high grade of sustainability and reusability. In a longterm, the end user can save money because only worn or damaged discs have to be exchanged and the carrier can be reused.

example for Syndisk® applied on a hexagon shaft

relative friction change on the component's surface.



The diagram shows the concrete decrease of the friction surface for assembly or disassembly purposes. For example, with a Syndisk-Geometry based on

a hexagon (as illustrated) the friction surface is reduced by 33% whereas the torque value is increased when full assembled! This means the mechanical installer

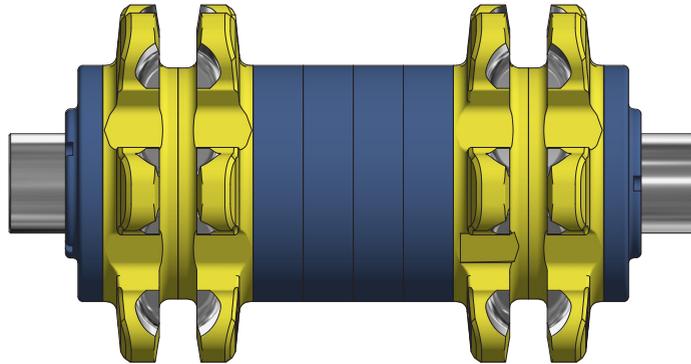
who is responsible for the assembly has one third friction resistance less. Friction and corrosion are the main reasons why assemblers often have to spend many times

longer for exchanging or maintaining equipment than originally planned. The whole assembly group is sealed against corrosion and is therefore a self-contained system

which can be implemented into nearly every existing overall-system or planned for a new system layout.

PRINCIPLE

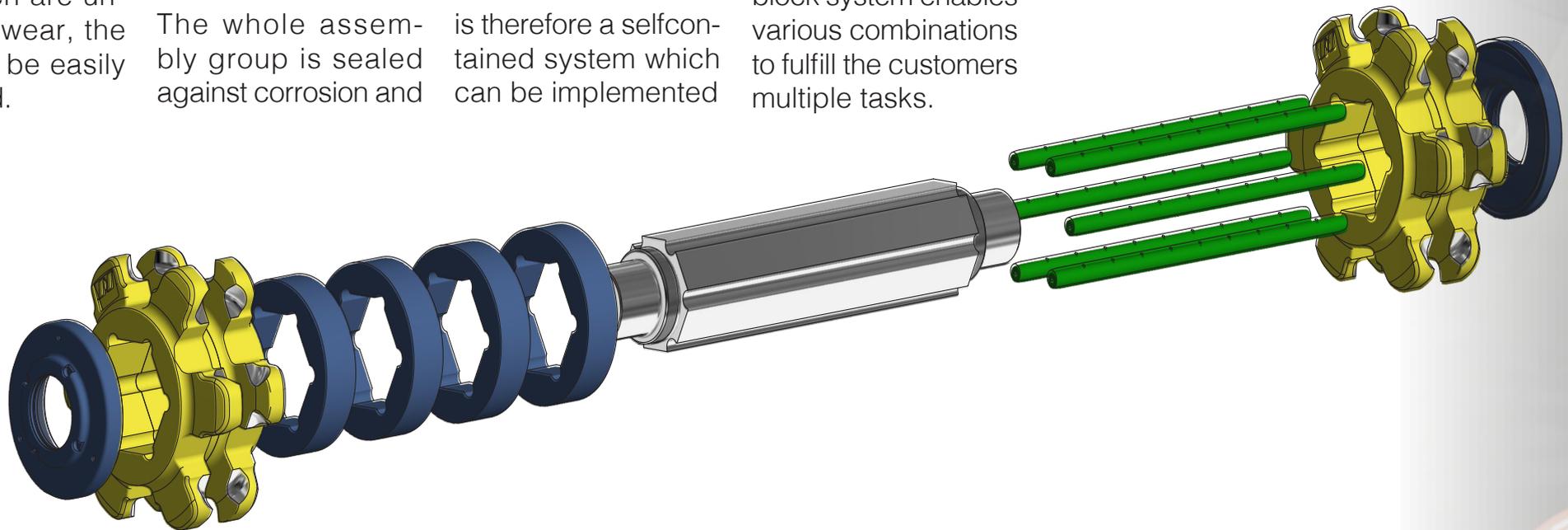
When full assembled the system increases the torque to the maximum potential of the shaft. In reverse order the friction surface of the shaft is decreased to a minimum which enables sustainable usage of the core component, the shaft, whereas the components which are under direct wear, the discs, can be easily exchanged.

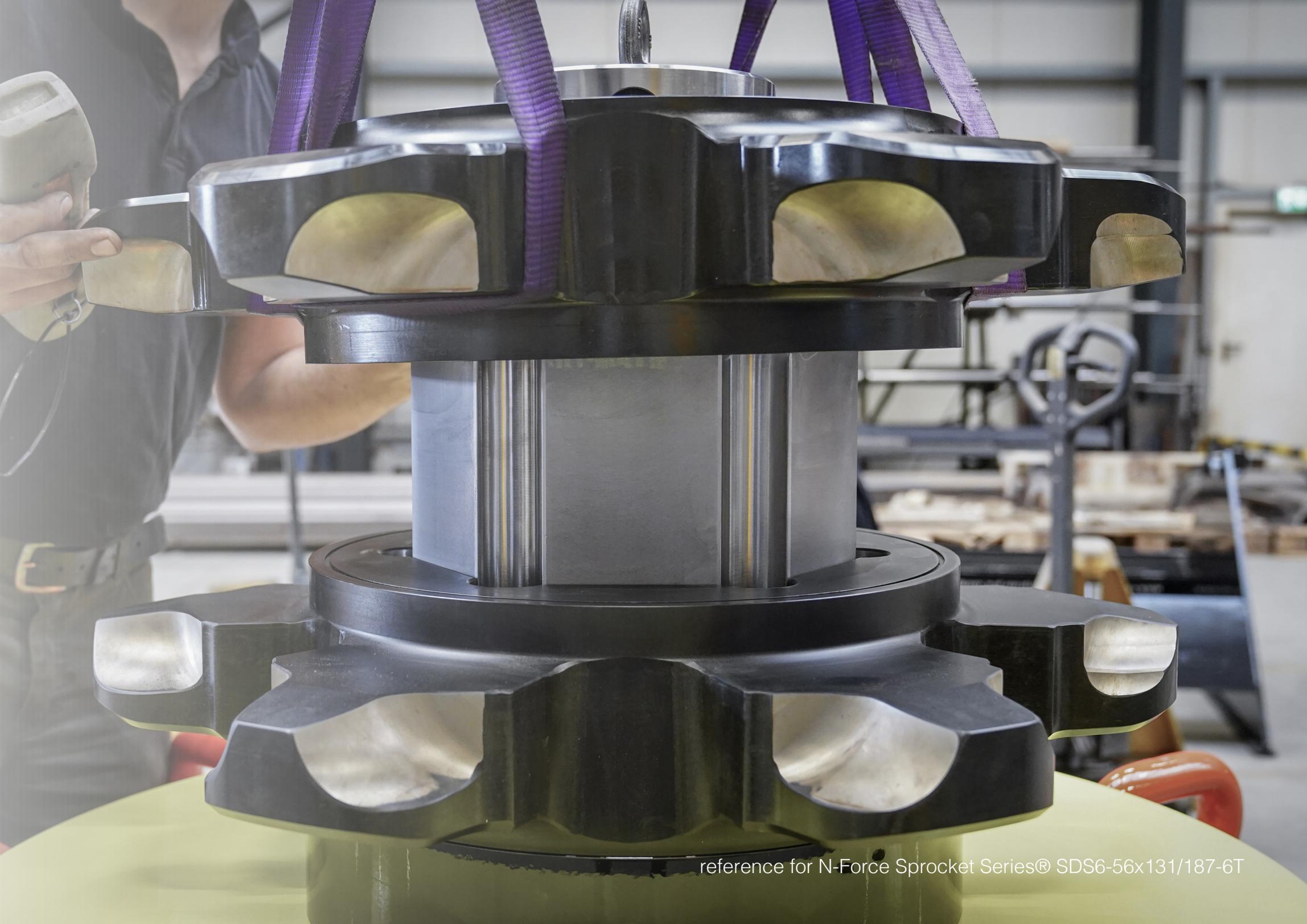


The whole assembly group is sealed against corrosion and is therefore a self-contained system which can be implemented

into nearly every existing overall-system or planned for a new system layout.

The N-Force Sprocket and Rotor Disc Series are designed to match the Syndisk-System perfectly and are made for working with high loads. The modular building block system enables various combinations to fulfill the customers multiple tasks.





reference for N-Force Sprocket Series® SDS6-56x131/187-6T



N-FORCE SPROCKET SERIES®

**maximum quality
for maximum life.**

The N-Force Sprocket Disc Series® which is a new way of manufacturing sprockets regarding material and heat treatment is our high end solution for highest requirements and maximum service life. The sprockets have a core hardness of appr. 1200 N/mm²+ and the hardness of the teeth

is appr. 63 HRc maximum. Although the hardness is very high the sprocket is still characterized by great toughness which is important. The N-Force Sprocket Series® is available starting with chain size 42mm up to 60+mm.

When using a common sprocket, the whole sprocket has to be exchanged against a new one if only one tooth is broken or heavily damaged. With Syndisk-System, only the affected disc has to be substituted by a new one. Even if a common sprocket is worn asymmetrically (which is the general case) it damages the chain and has to be exchanged depending on the concrete situation.

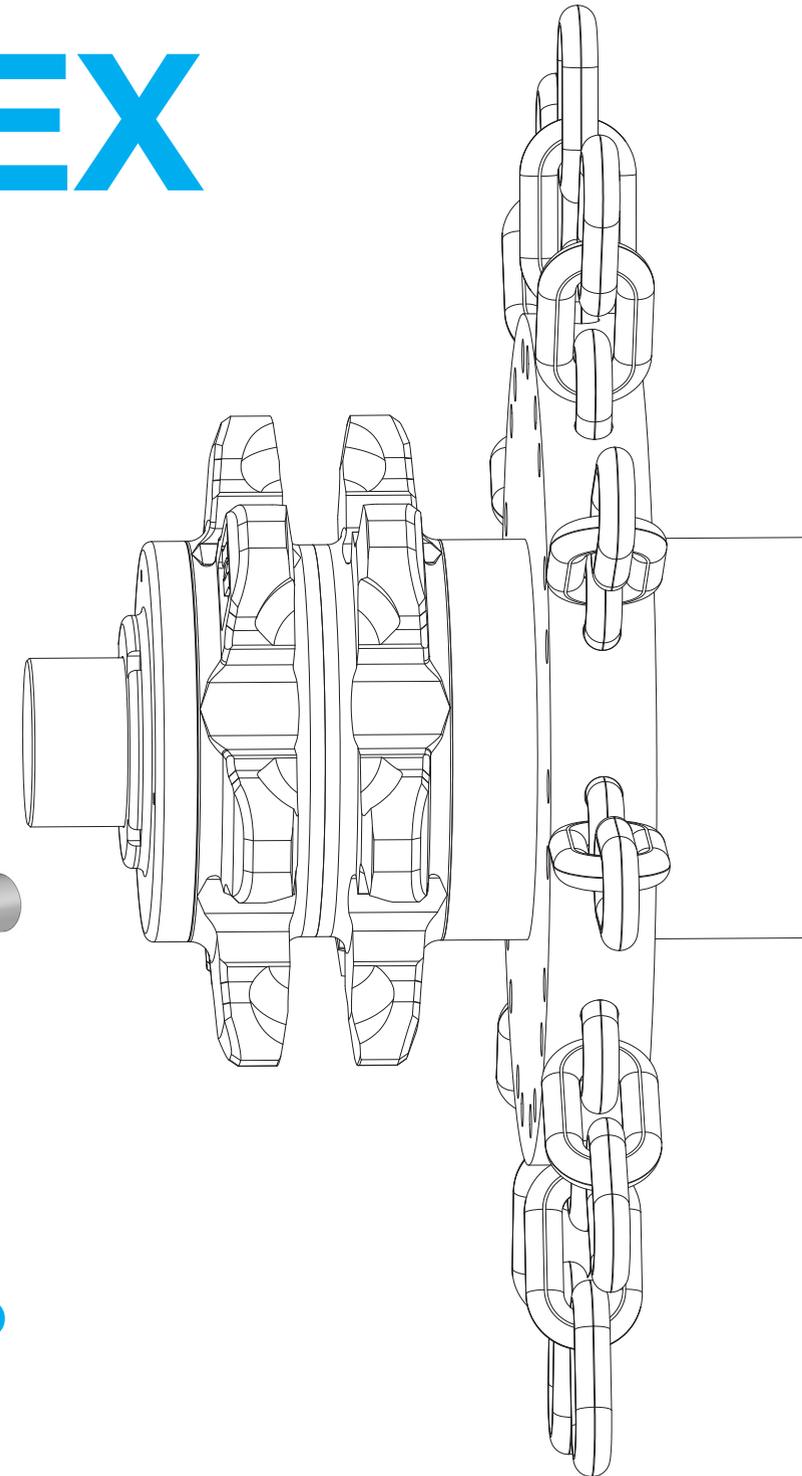
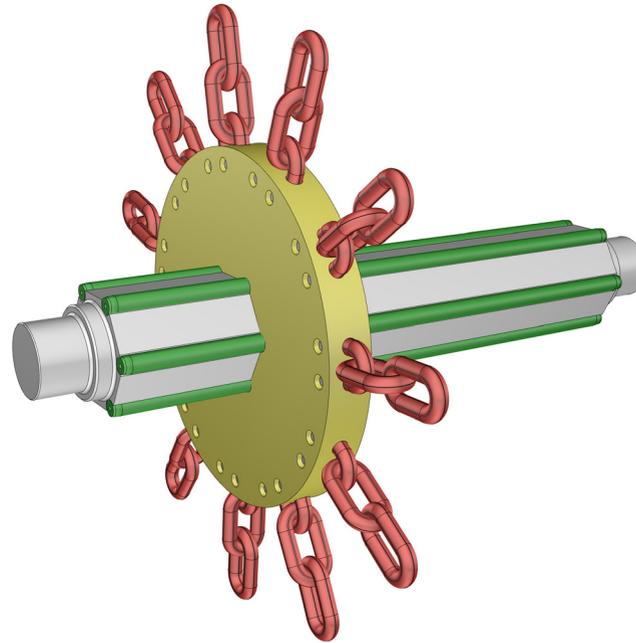
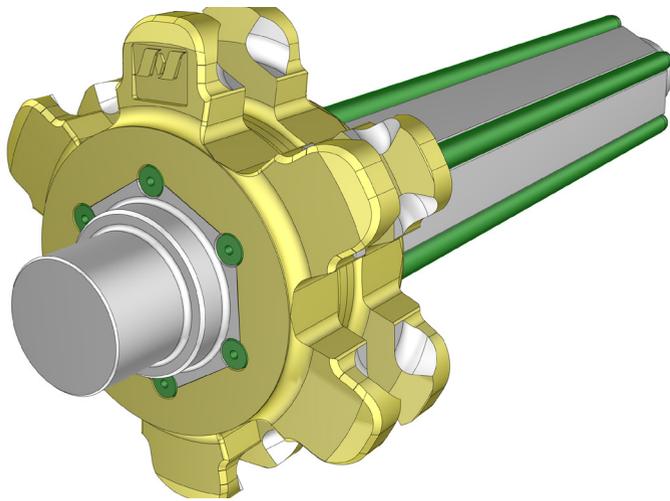
Opposed to Sprocket Discs on a Syndisk-System the arrangement of the discs on the carrier can be changed without buying new equipment. The customer can easily change the arrangement between the discs, means exchanging the position of slightly worn discs with the position of discs which are more subjected to wear.

Chain size d x t	Teeth T	Syndisk Geometry
42 / 110 x 137	5 - 8	SDS5 - SDS8
42 / 110 x 146	5 - 8	SDS5 - SDS8
48 / 115 x 152	5 - 8	SDS5 - SDS8
48 / 115 x 144/160	5 - 8	SDS5 - SDS8
52 / 127 x 170	6 - 8	SDS6 - SDS8
56 / 131x187	6 - 8	SDS6 - SDS8
60 / 135 x 181/197	6 - 8	SDS6 - SDS8
56 x 142 / 182	6 - 8	SDS6 - SDS8
60 x 181 / 197	6 - 8	SDS6 - SDS8
60+	6 - 8	on request

MULTIPLIX

N-Force Sprocket Series®

for chain sizes from 42mm to 60+mm

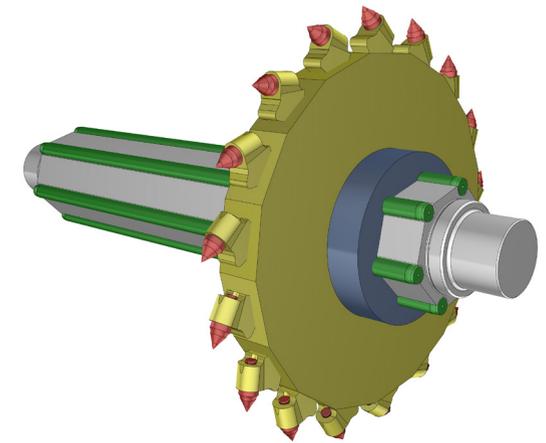
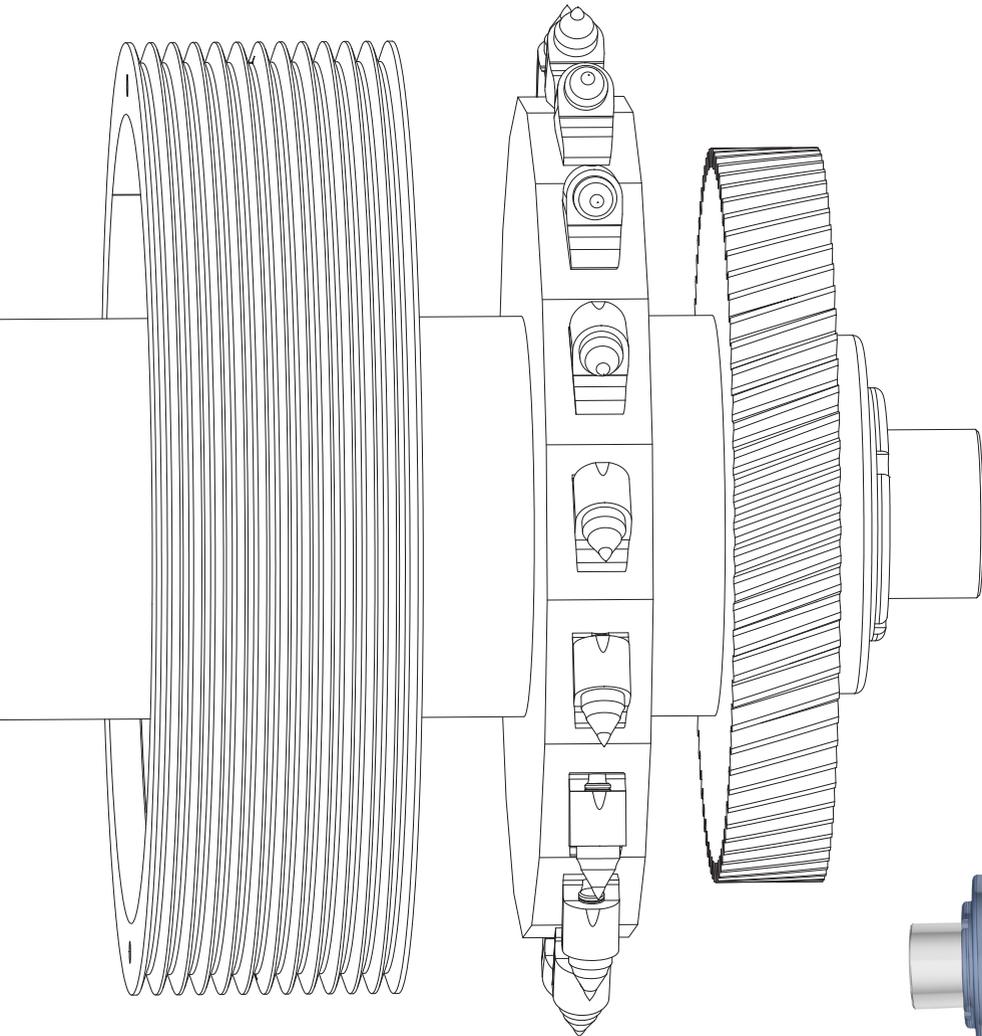


N-Force Chain Hammer®

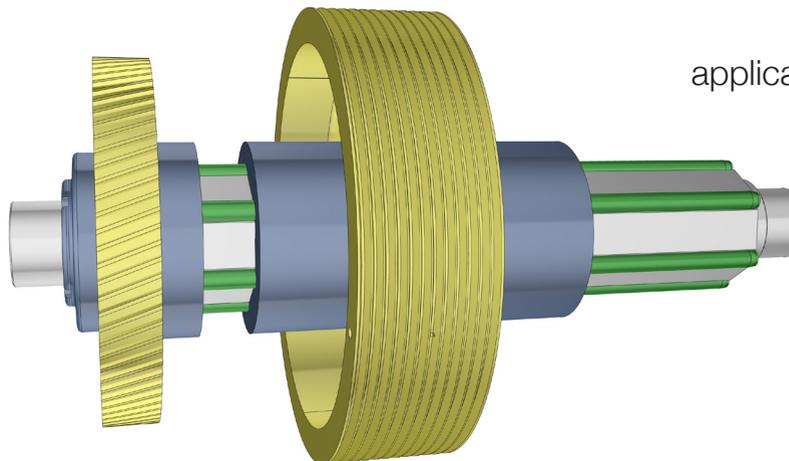
for horizontal or vertical alignment

APPLICATIONS

examples for
third-party applications



application example for rotor pick disc



application example for transmission components



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*patent pending (international)