

*Ortlinghaus*

AGRICULTURE  
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TECHNOLOGY  
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Engage your drive



## Agriculture Technology

### Ortlinghaus in agricultural technology

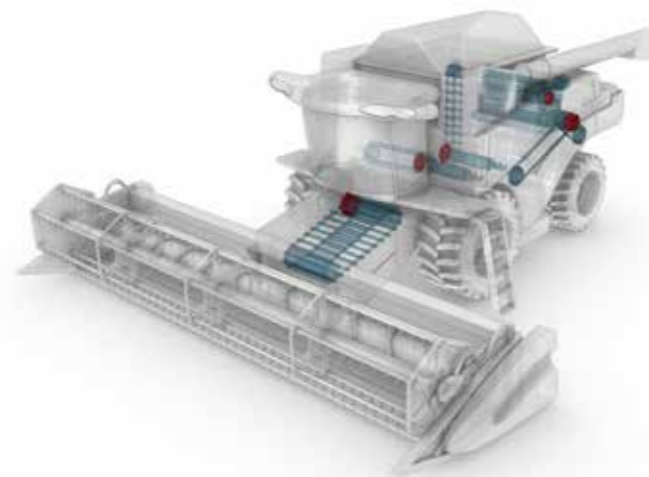
Ortlinghaus has a clear focus on the demands of customers in agricultural technology. We offer an increasing variety of modular clutch solutions that can be easily adapted to different requirements.

Due to our extensive specialist knowledge, years of experience and ongoing technical innovations we are always a qualified partner for our customers.

### | Self-propelled harvesting vehicles

#### Combine harvesters & forage harvesters

Ortlinghaus clutches are used in various applications in self-propelled harvesting vehicles, such as belt drives, inclined conveyors, compressors and threshing systems.



### | Trailers

#### Trailers

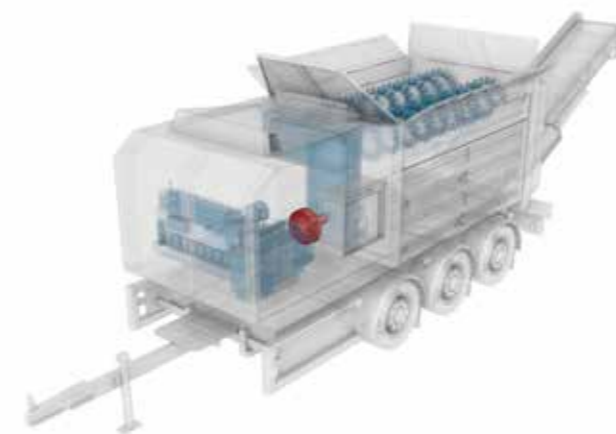
Pulling vehicles provide power to attached machines. Individual drives are engaged via additional clutches in the drivetrain on attached machines. For this purpose Ortlinghaus clutches are also available with radial oil inlets.



### | Tractors

#### Tractors & transporters

Tractors are used as pulling machines and provide power for attached machines. Ortlinghaus clutches are used here in PTO units or CVT gearboxes.



### | Shredders

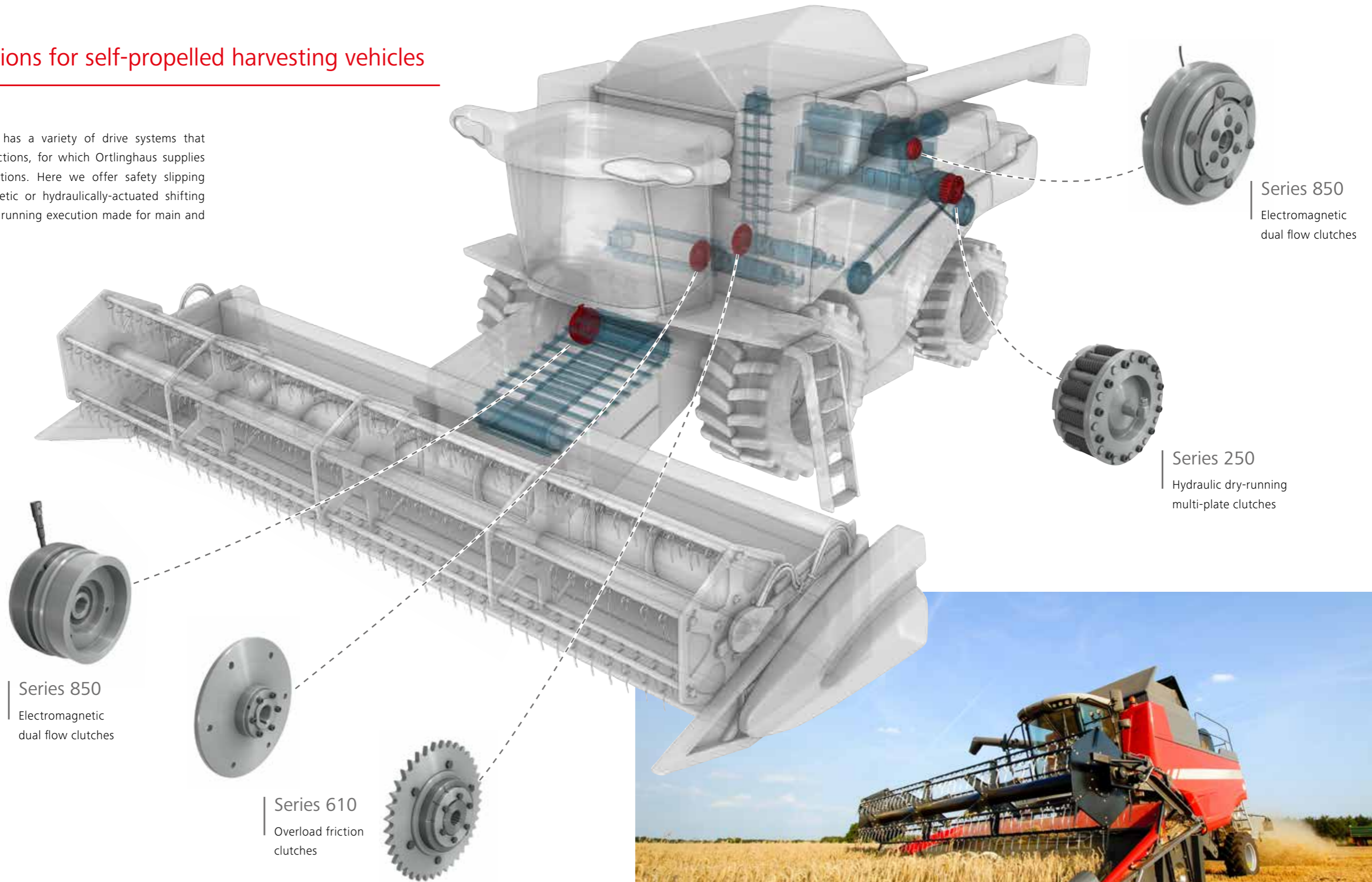
#### Shredding of various materials

Shredders are used to shred different materials. Ortlinghaus supplies different clutch systems, such as shifting clutches for diesel-powered shredders which, at the same time, provides an overload safety function and, on electric-powered shredders, overload clutches for protection of the gearbox.

## Clutch solutions for self-propelled harvesting vehicles

### Combine harvester

A combine harvester has a variety of drive systems that perform different functions, for which Ortlinghaus supplies customer-specific solutions. Here we offer safety slipping clutches, electromagnetic or hydraulically-actuated shifting clutches in wet or dry running execution made for main and auxiliary drives.

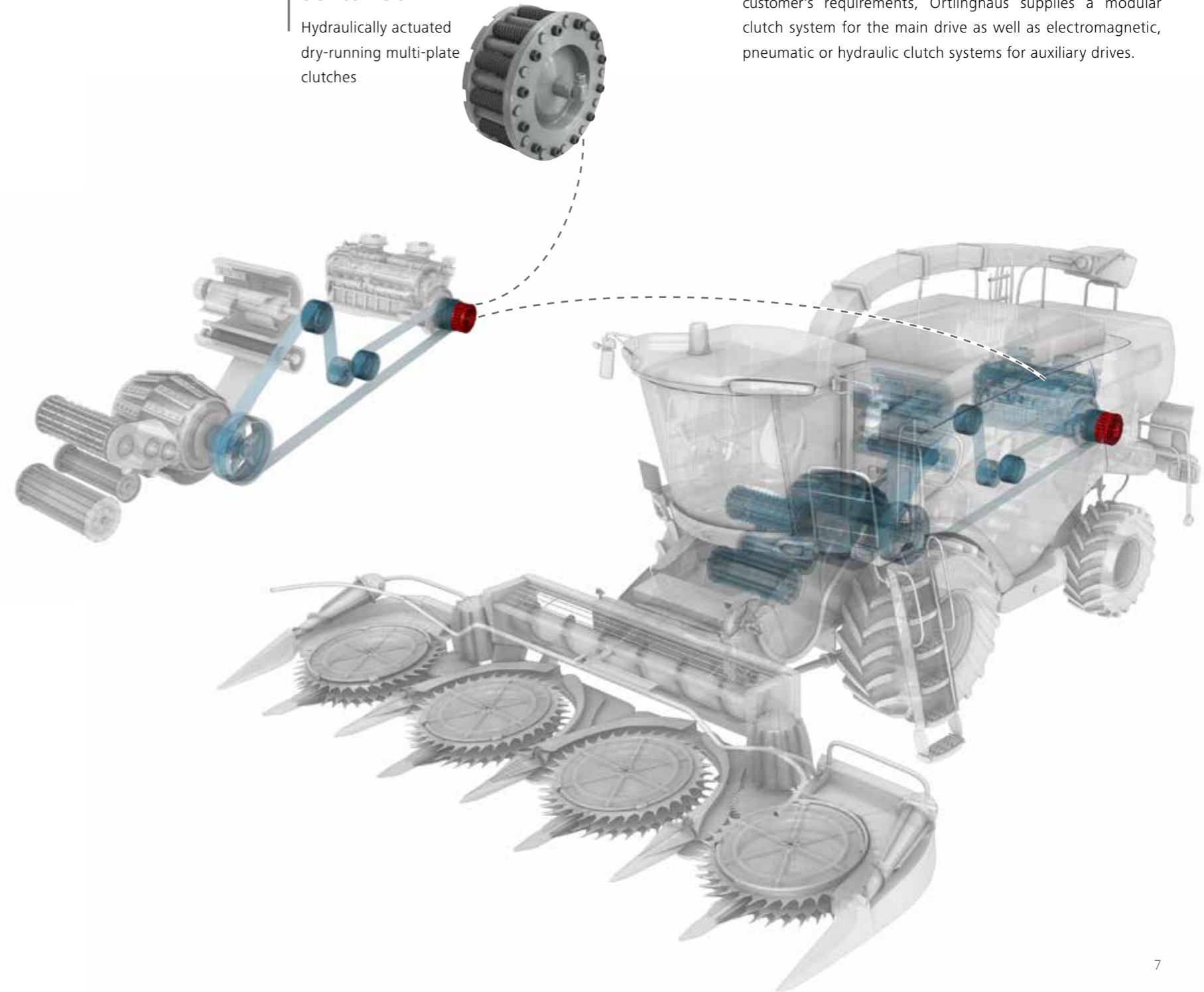




## Clutches for self-propelled harvesting vehicles

### Series 250

Hydraulically actuated  
dry-running multi-plate  
clutches



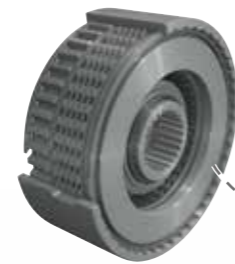
### Forage harvester

Various harvested products are collected, processed and loaded with a forage harvester. Designed to the customer's requirements, Ortlinghaus supplies a modular clutch system for the main drive as well as electromagnetic, pneumatic or hydraulic clutch systems for auxiliary drives.

## Clutches for tractors

### Tractors and transporters

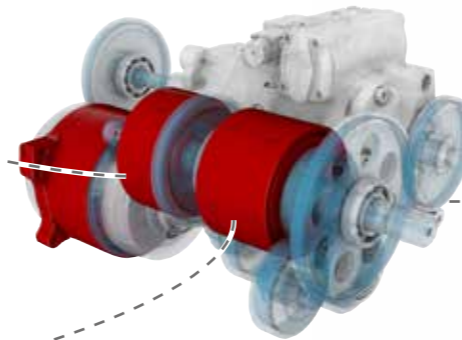
A main area of focus for Ortlinghaus are wet-running multi-plate clutches for power take-off (PTO) units and multi-plate clutches for main gearboxes. PTO units are used with front or rear power output. Suitable clutch solutions are available for power shift transmissions and continuously variable transmissions (CVT). They provide customer-specific solutions thanks to the modular clutch design.



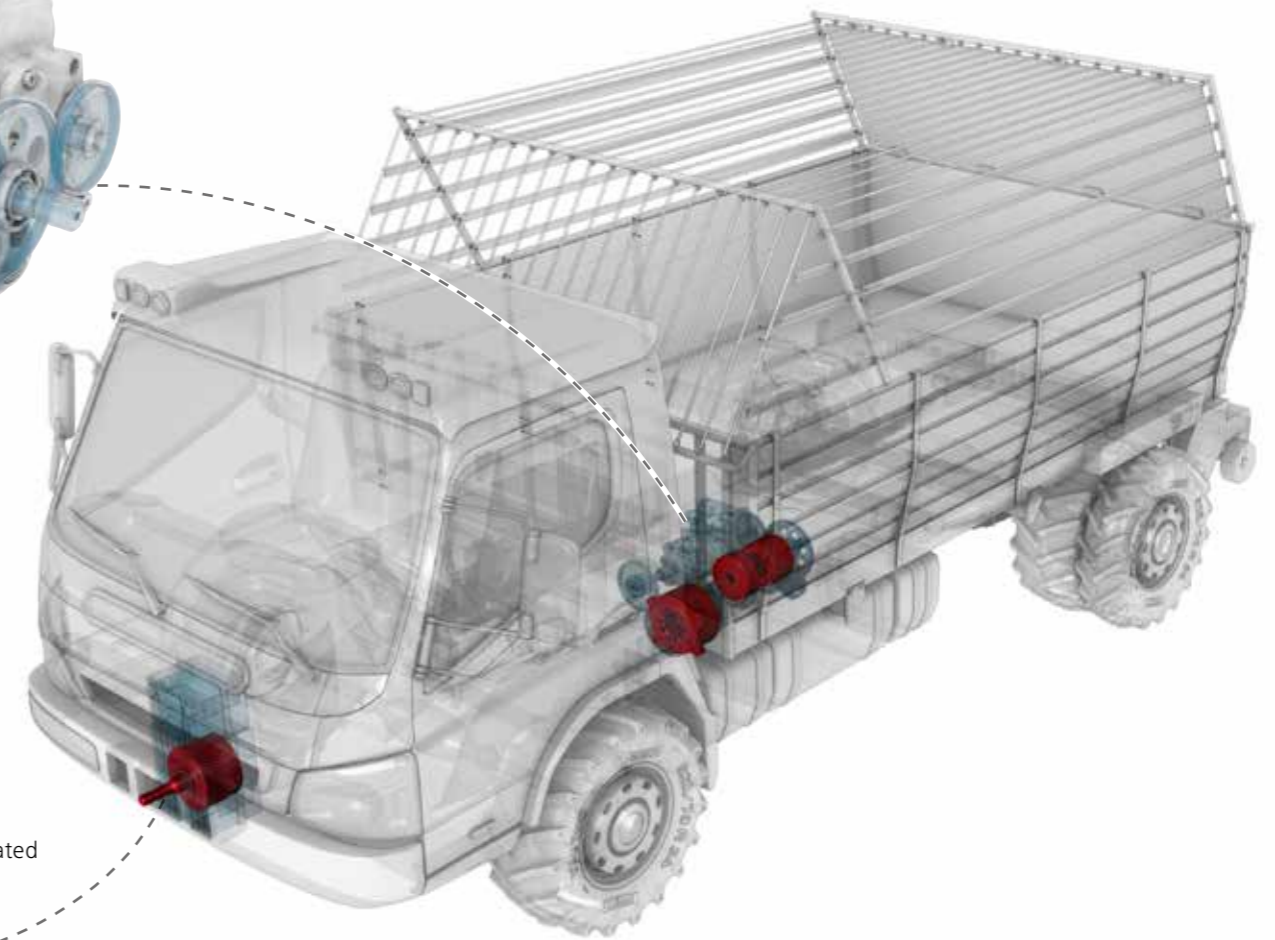
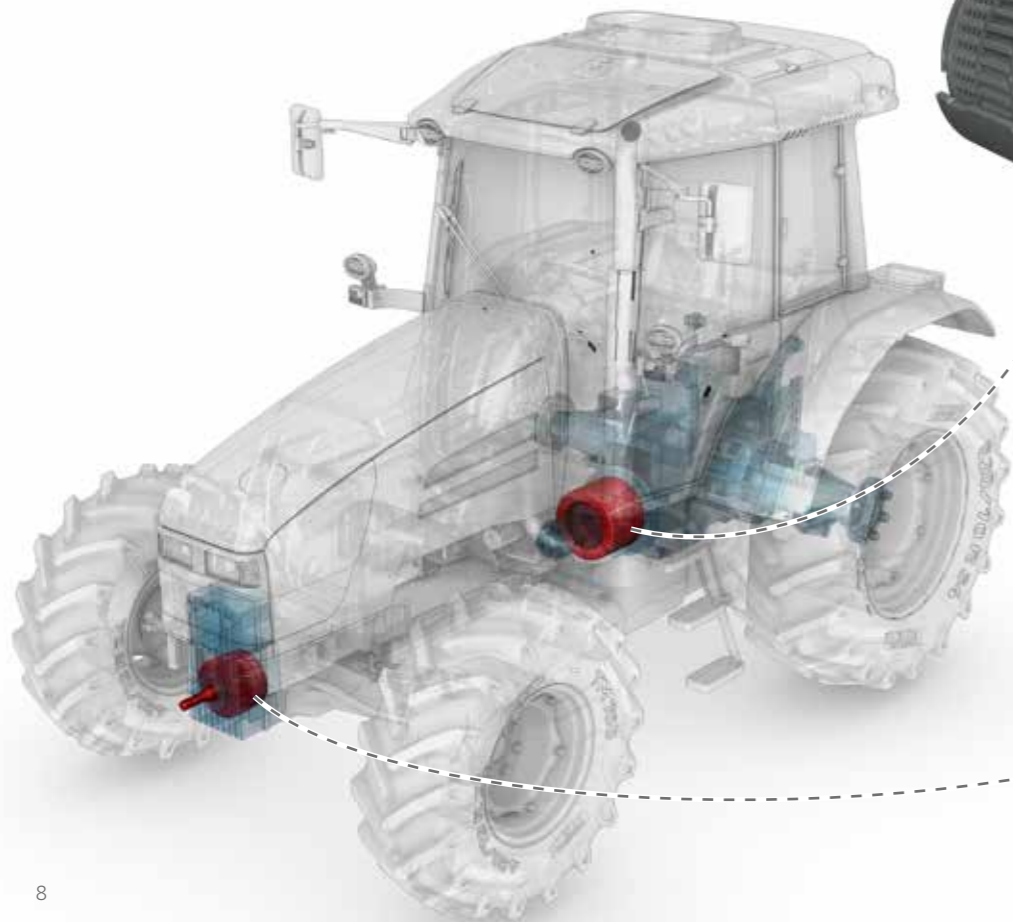
Series 240  
Hydraulically actuated  
wet-running single  
clutches



Series 245  
Hydraulically actuated  
wet-running double  
clutches



Series 260  
Hydraulically actuated  
wet-running PTO  
clutches





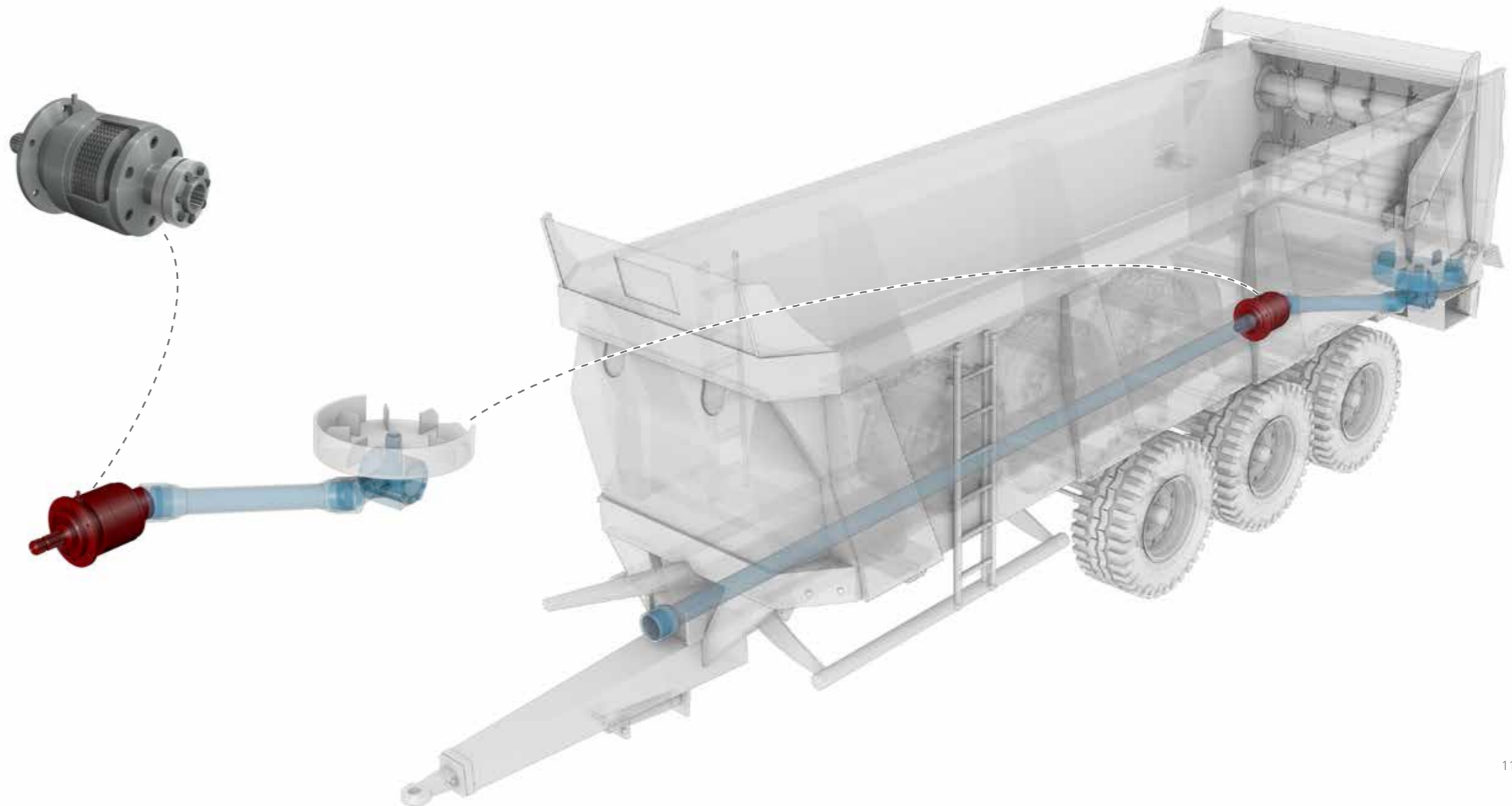
## Clutches for trailers

### Trailers

The clutches of series 230 and 430 can be installed linear in the drivetrain of trailers. With a pneumatical or hydraulical actuation via a radial inlet. This clutches are available in two sizes, in pressure spring activated or pressure spring deactivated design. For special applications, this clutch can also be supplied as a bistable version that can be mechanically locked in either engaged or disengaged position.

### Series 230 & 430

Dry-running multi-plate clutches with hydraulic or pneumatic external actuation

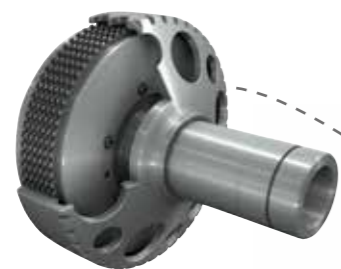




## Clutches for shredders

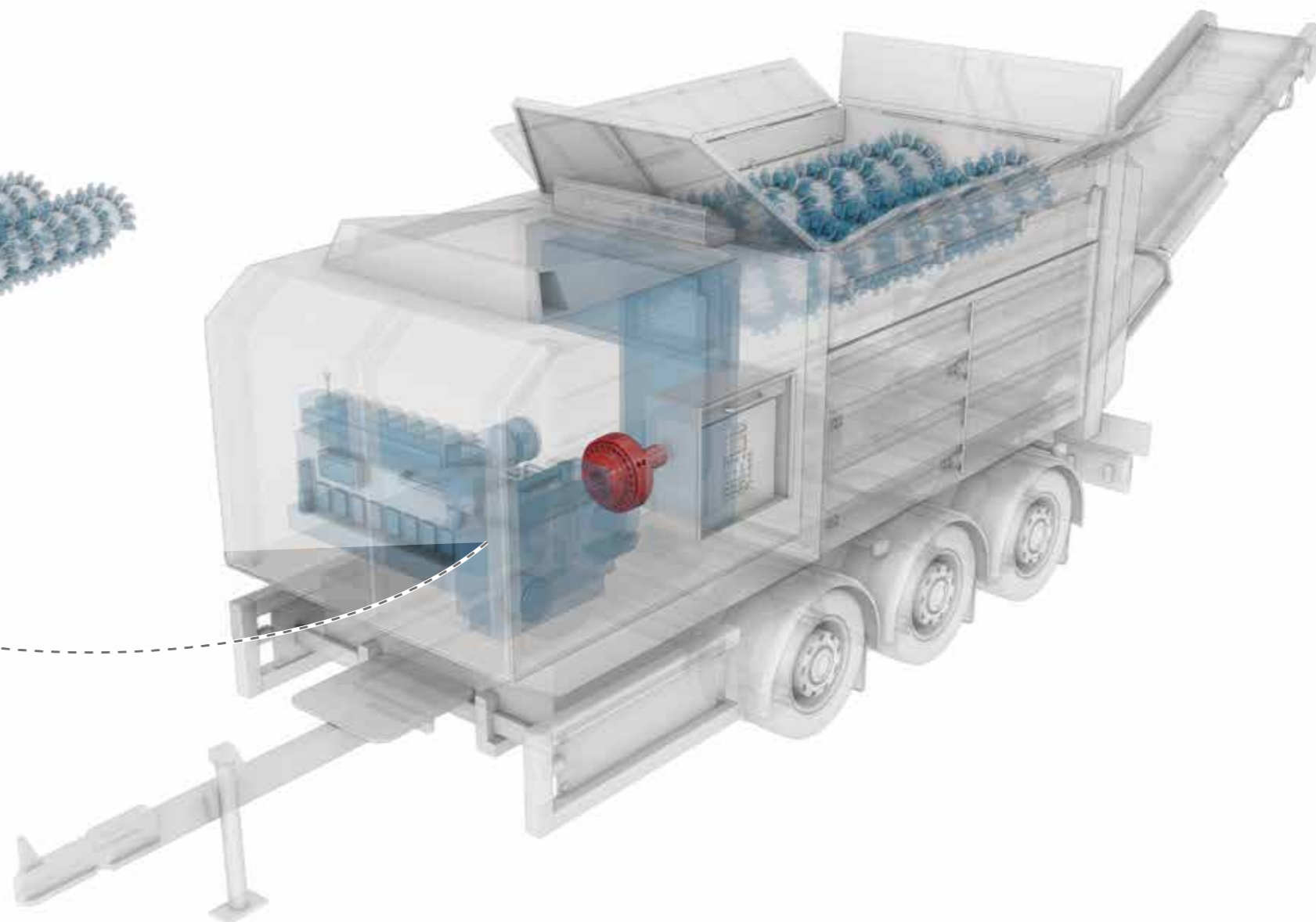
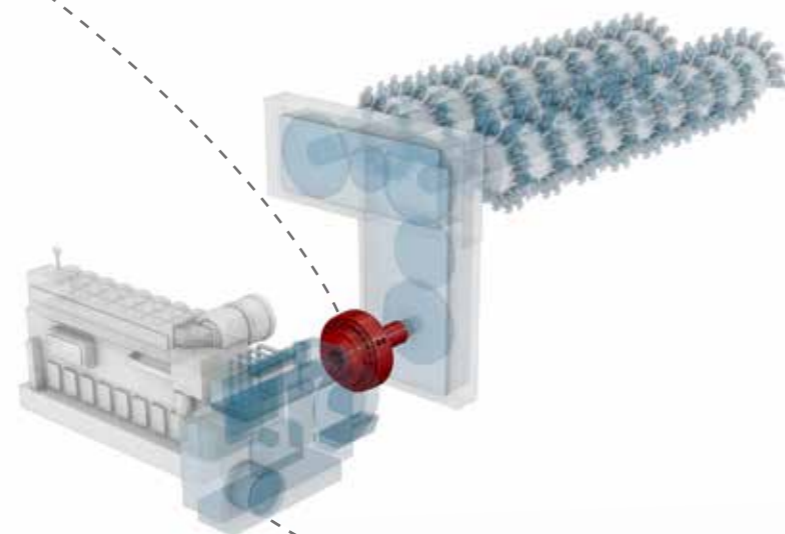
### Processing of different materials

Shredders are used for processing different materials. Clutches are installed in the drivetrain to prevent the machine from being overloaded. Here, spring-loaded slipping clutches are used as well as hydraulic shifting clutches. By use of these clutches it is possible to cap load peaks and, in doing so, extend the service life of the machine and prevent damage to the drivetrain.



### Series 610

Adjustable overload  
clutches with preconditioned  
friction system



## Dry-running multi-plate clutches - series 250

### Hydraulic dry-running multi-plate clutches

Ortlinghaus clutches of series 250 are distinguished by a high thermal load capacity. Due to the modular design of the clutch, it can be adapted flexibly to different torque requirements from 500 Nm to 10,000 Nm. Furthermore, customer-specific components such as V-belt pulleys or sprockets can be integrated in the system. This clutch can be supplied as an option with a rotating guide.

series 250			
	Feature	Size 44	Size 77
Torque	2 friction surfaces	700 Nm	3.300 Nm
	4 friction surfaces	1.400 Nm	6.600 Nm
	6 friction surfaces	2.100 Nm	10.000 Nm
Operating pressure	p	30 bar	30 bar
Spring return pressure	p	uo to 3,0 bar	up to 3,1 bar
Outer diameters	D1	185 mm	290 mm
Length	L1 <sub>max</sub>	109,5 mm	118 mm



### Configurable series

The modular structure of this design allows to easily adapt it to a wide range of requirements.



### Soft engagement

The clutch can be actuated with precision, which facilitates soft engagement.



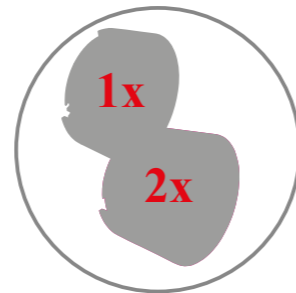
### Quiet engagement

Innovative, newly - d eveloped friction materials have been used to eliminate noise during the engagement procedure.





## Multi-plate clutches - series 240 & 245



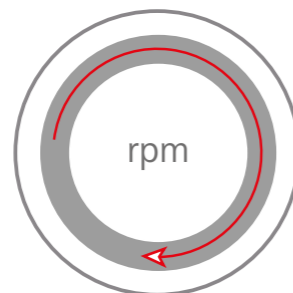
### Single or double clutches

Available as single clutch in series 240 and double clutch in series 245.



### Configurable series

The modular structure of this design makes it possible to easily adapt it to a wide range of requirements.



### Suitable for high speeds

These clutches are designed for very dynamic applications with high speeds.

### Hydraulic wet-running multi-plate clutches

With its modular structure, this system clutch is an ideal solution for gearboxes in agricultural technology.

The clutch has a high level of adaptability and, at the same time, benefits from cost optimisation. This is achieved by the configuration of the number of friction surfaces, friction lining combinations, customer interfaces and the availability of two sizes, which come with either a single or double clutch respectively.

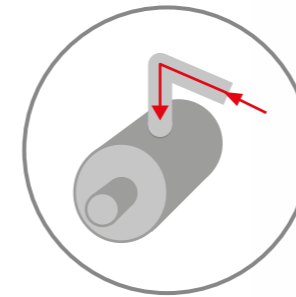
series 240 & 245			
	Feature	Size 31 Single clutch	Size 47 Double clutch
Dyn. torque depending on number of friction surfaces	$T_{dyn}$	up to 1200 Nm	up to 3500 Nm
Speed	n	2000 min <sup>-1</sup>	2000 min <sup>-1</sup>
Operating pressure	p	25 bar	25 bar
Outer diameter	D1	149 mm	200 mm
Length depending on number of friction surfaces	L1	60,5 mm	99 mm

## Multi-plate clutches - series 230 & 430

### Dry-running multi-plate clutches with external actuation

Through external, radial actuation this clutch can be used in cases in which it is not possible to supply the actuation oil centrally through the shaft. Dry-running plates allow a compact design.

series 230 & 430			
	Feature	Size 31	Size 43
Torque at 33 bar	T	700 Nm	4.000 Nm
At speed	n	1.000 min <sup>-1</sup>	1.000 min <sup>-1</sup>
Maximum speed	n <sub>max</sub>	1.000 min <sup>-1</sup>	1.000 min <sup>-1</sup>
Outer diameter	D1	156 mm	220 mm
Length	L1	283 mm	364 mm



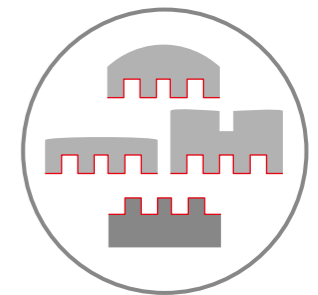
#### Radial actuation

Radial actuation allows the clutch to be used flexibly.



#### Protected against external influences

The sturdy housing reliably protects the actuator unit and the plate pack.



#### Standardised actuator unit

The executions for input and output can be easily adapted to customer requirements. There is no need to modify the actuator unit.

# Wet-running multi-plate clutches - series 260

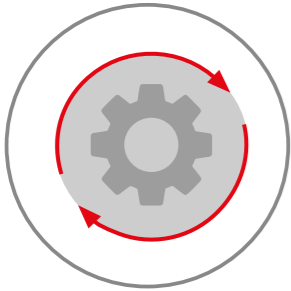


**Hydraulically actuated wet-running multi-plate clutches**  
 The multi-plate clutch series 260 is used as a clutch for power take-off units (PTO) and as a 2-speed PTO version where it is integrated in the manual gearbox. Customer-specific connections via the gearwheel and the power take-off shaft profile allow different interfaces to be achieved.



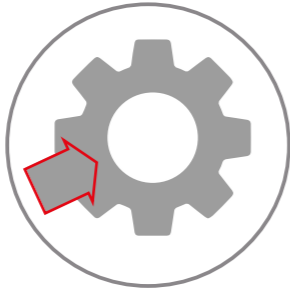
**Power take-off shaft profile in accordance with DIN**

The profile of the power take-off shaft is usually designed to comply with current standards, though it can be adapted to customer requirements if necessary.



**Integrated residual friction brake**

The integrated friction brake system prevents the power take-off shaft from rotating further as a result of residual friction when the clutch is disengaged.



**Connection via gearwheel**

Through a gearwheel a customer specific connection and a compact design were achieved.

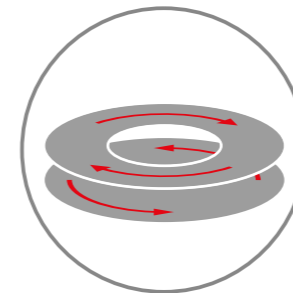
series 260				
	Feature	Size 27	Size 31	Size 47
Stat. torque	$T_{stat}$	750 Nm	1.800 Nm	3000 Nm
Speed	$n$	1200 rpm	1200 rpm	1200 rpm
Maximum speed	$n_{max}$	2000	2000	2000
Operating pressure	$p$	25 bar	25 bar	25 bar
Outer diameter	D1	108 mm	155 mm	200 mm
Length including PTO shaft	L1	225 mm	253 mm	295 mm

## Flexible couplings - series 620

### Flexible couplings

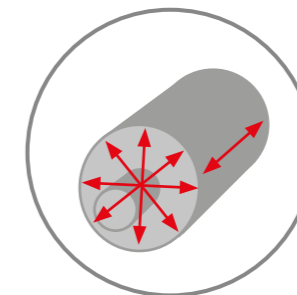
To enable the requisite torque to be transferred reliably, the couplings of series 620 provide compensation of radial and axial offset with high torsional rigidity at the same time.

series 620			
	Feature	Size 39	Size 55
Nominal torque	T	160 Nm	630 Nm
Outer diameters	D1	80 mm	220 mm
Length	L1	80 mm	170 mm



#### High torsional rigidity

The heavy duty design ensures that the specified torque can be transferred reliably.



#### High level of compensation possible

The compensating clutch of series 620 makes it possible to compensate both axial and radial shaft offset of up to  $\pm 2^\circ$ .



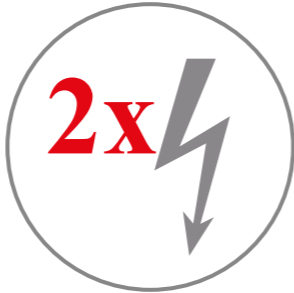
#### Configurable

3 to 6 damping elements can be selected depending on the requirements.

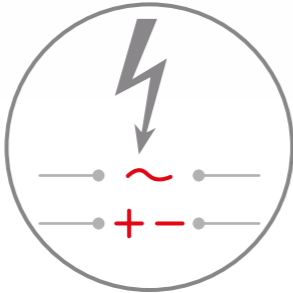
# Electromagnetic clutches - series 850

### Electromagnetic dual flow clutches

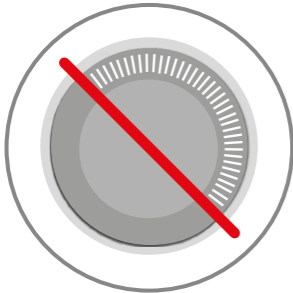
Our clutches of series 850 have a broad power spectrum thanks to the dual flow, which makes them ideal for small installation spaces.



**Dual flow**  
The electric dual flow allows this clutch to have a very wide power spectrum.



**Different voltages**  
The clutch can be provided suitable for different activation voltages.



**Single face clutch or tooth clutch**  
The electromagnetic clutch of series 850 is available as a single face clutch as well as tooth clutch.

	series 850			
	Feature	Size 59	Size 64	Size 70
Dyn. Torque	$T_{dyn}$	400 Nm	630 Nm	950 Nm
Stat. torque	$T_{stat}$	1.000 Nm	1.200 Nm	1.300 Nm
Speed	$n$	825 min <sup>-1</sup>	438 min <sup>-1</sup>	200 min <sup>-1</sup>
Maximum speed	$n_{max}$	2.500 min <sup>-1</sup>	2.500 min <sup>-1</sup>	2.200 min <sup>-1</sup>
Power consumption	at 80°C	72 W	98 W	95 W
Outer diameter	D1	266 mm	290 mm	266 mm
Length	L1	131	131	199

# Ortlinghaus

Ortlinghaus  
worldwide

- Sales & Service hub with spare parts
- Sales & Service hub

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