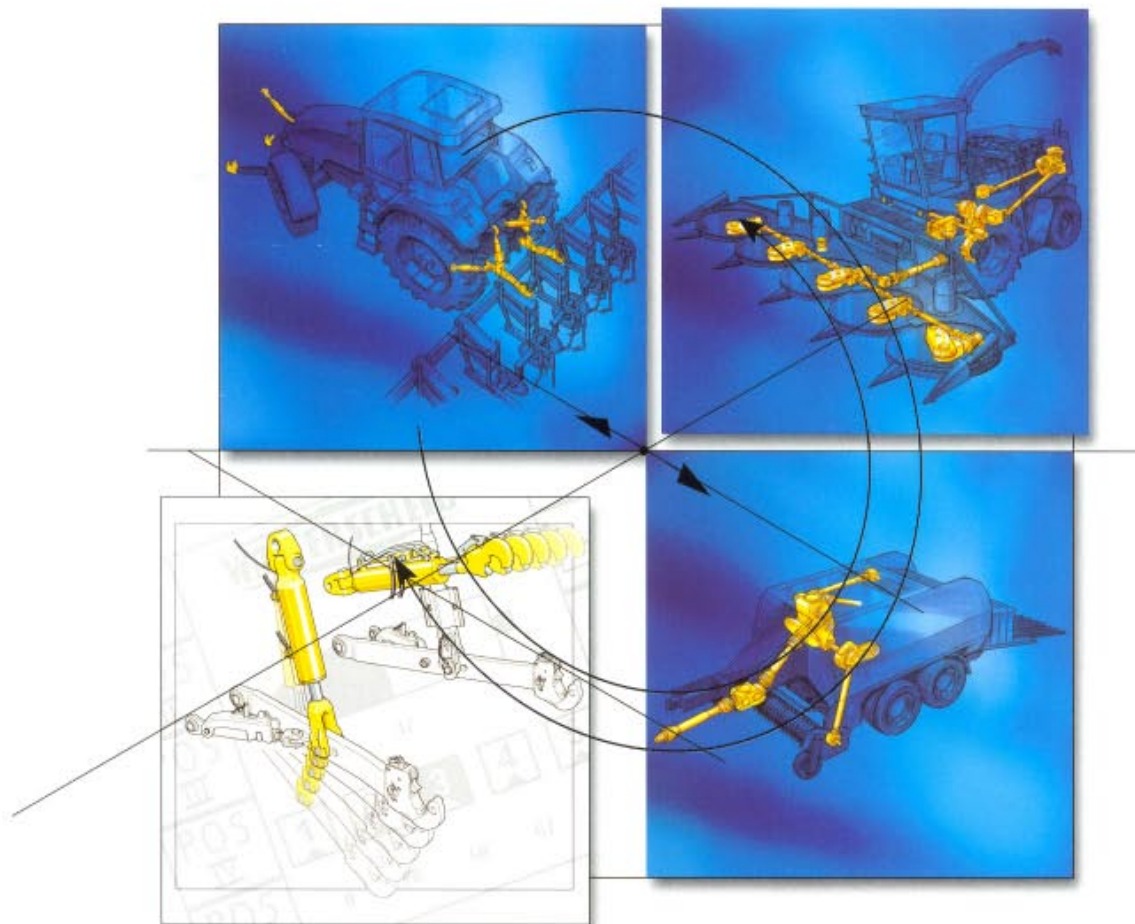


WALTERSCHEID

Agricultural Drive Lines and Tractor Attachment Systems



GKN Walterscheid GmbH

Technology tailored to the requirements in agriculture



In terms of world-market leader, **WALTERSCHEID** has always been a synonym for competence and quality in the manufacture of agricultural drive lines and tractor attachment systems. GKN Walterscheid GmbH is a company of the OffHighway Systems Division (OHS) within the GKN Group. Under the roof of OHS, various suppliers of the agritechnical and construction machinery industry are combined.

WALTERSCHEID sets trends – not only when it comes to the individual product. The system approach was adopted at an early stage already, and has been consistently pursued and perfectly converted into the Drive Line System (DLS).

WALTERSCHEID's competence in the fields of technology, design and quality is evidenced by a product range which comprises agricultural PTO drive shafts, clutches, gearboxes and tractor attachment systems. Such competence is not only attributable to extensive basic research, but also reflected in the continued advanced product development in line with market conditions and supported by state-of-the-art production technology and consistent quality control.

WALTERSCHEID gives weight to customer relations based on partnership in the development of agricultural systems.

- **If new products are developed the customer is actively supported** during the process from the basic idea to the production stage (Co-Engineering).
- **For its customers**, WALTERSCHEID assumes the development of individual drive line systems under own responsibility.
- **For optimisation of existing applications**, WALTERSCHEID offers appropriate assistance by experienced engineers and application engineers, a special measuring system from WALTERSCHEID also being available.

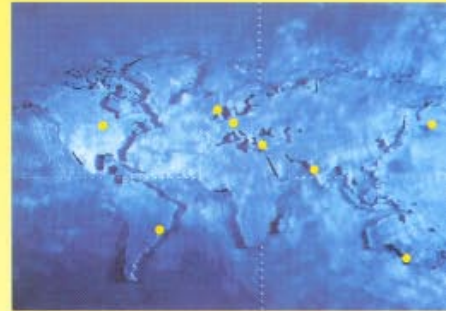
From the individual component to complex systems

■ **A wide range of products** comprising a multitude of standard versions and customised special solutions is at disposal and expanded further to suit the needs of the market.

■ **A dense sales and advisory service network** around the globe is available to support our customers in application engineering tasks. Latest technology, such as CAD, and the means of communication Internet and e-commerce ensure the exchange of in-depth information with our customers and compliance with the high quality standards applying to our work.

■ **Product service and co-operation** do not end when the machine is handed over to the user. Own bases and service partners are available world-wide to render adequate service and ensure the supply of spare parts.

■ **Based on our know-how and years of experience**, we are able to actively respond to changes apparent in the market and to offer adequate solutions at an early stage.



Drive Line System DLS

PTO Drive Shafts – Overload and Overrunning – Gearboxes and DLC Clutches



Standard PTO
Drive Shaft
W



Wide-angle PTO
Drive Shaft 80°
WW



Power Drive
PTO Drive Shaft
P



Tele-Space
PTO Drive Shaft
WTS

PTO drive shafts serve the purpose of transmitting power to the implement at the rear and also at the front of the tractor. All PTO drive shafts are equipped with a PTO drive shaft guard which meets the most stringent international test requirements.

For all tractor power ranges and implement sizes a harmonised range of products comprising standard and wide-angle PTO drive shafts (up to 80°) offers appropriate drive line solutions – economically viable, extensible and easy to service.

The range of Power Drive PTO drive shafts, with maintenance intervals up to 250 hours, has been designed for continuous use at high power, great safety and convenience.

Tele-Space, the PTO drive shaft coupler from WALTERSCHEID, provides more freedom of movement in coupling and uncoupling closely installed implements, such as artificial fertiliser distributor and field sprayer.

Product features and advantages for the user

Wide product range:

- Transmission of power up to more than 180 kW, depending on the PTO drive shaft type (5° bending angle, 1,000 hours)
- Standard and wide-angle PTO drive shafts 80°

Economy of time:

- Maintenance intervals up to 250 hours (seasonal)

Safety:

- Latest guard technology
- Guard without safety chain, depending on the arrangement
- Full guard concepts
- Flexible cones

Convenience:

- Easy maintenance of cross and bearing kits with cap bottom lubrication
- Advanced locking systems
- Ease of handling

Service:

- World-wide availability of spare parts

For more detailed information, please refer to our technical documents.





Drive Line System DLS

PTO Drive Shafts – Overload and Overrunning – Gearboxes and DLC Clutches

Walterscheid technology sets the standard for overload and overrunning clutches. To meet the different power requirements, WALTERSCHEID offers appropriate solutions whose high degree of functionality and low maintenance guarantee a long service life.

Overload clutches protect the tractor and implement against overload conditions caused by starting acceleration and blocking.

Overrunning clutches protect the tractor and implement against the effects of heavy rotating masses.

For every application, WALTERSCHEID offers the most convenient type of clutch.

Examples of typical applications:

Ratchet clutches

for manure spreaders, loader wagons, rotary tedders, potato harvesters, etc.

Cut-out clutches

for rotary harrows, liquid manure pumps, mixers, rope winches, silage boxes, etc.

Friction clutches

for high-pressure balers, rotary cultivators, rotary mowers, fans, forage harvesters, etc.

Overrunning clutches

for fans, forage harvesters, round balers, rotary mowers, etc.

Friction and overrunning clutches

for square balers, high-pressure balers, rotary mowers, etc.

Elastic clutches

for reciprocating harrows, rotor mowers, flail choppers, etc.

Product features and advantages for the user

Wide product range:

- Torque ranges up to more than 7000 Nm, depending on the clutch type

Application-specific selection:

- Torque-maintaining and cut-out clutches, overrunning clutches, friction and overrunning clutches

Saving of time and cost:

- Low-maintenance or maintenance-free clutches
- All clutches are easy to service
- Machines are exposed to less strain owing to highly accurate clutch response
- Machines can always be operated at the load limit
- Optimum machine dimensioning

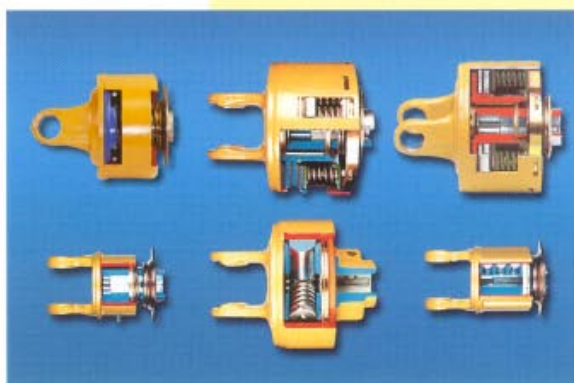
Convenience:

- Automatic re-engaging of cut-out clutches
- Torque-maintaining clutches allow gentle starting of machines with heavy flywheel masses

Service:

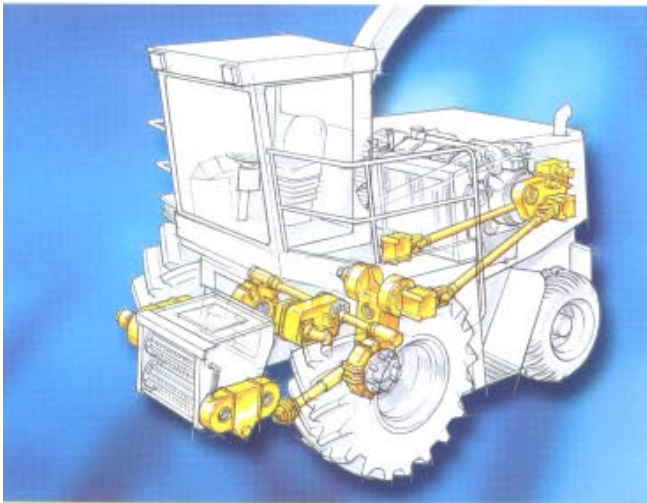
- World-wide availability of spare parts

For more detailed information, please refer to our technical documents.



Drive Line System DLS

PTO Drive Shafts – Overload and Overrunning – Gearboxes and DLC
Clutches



Range of gearboxes:

- Standard bevel gearboxes
- Selector gearboxes
- Final drive reductions
- Transfer gearboxes
- Reversing gearboxes
- Swivel gearboxes
- Gearbox components

WALTERSCHEID gearboxes for agricultural machines and special drives lines – From a multitude of gearbox types the optimum solution can be chosen to form an individual power-matched drive line.

Product features and advantages for the user

Wide product range:

- Spur gear units, bevel gear units
- Power range up to more than 140 kW
- Modular system

Efficiency:

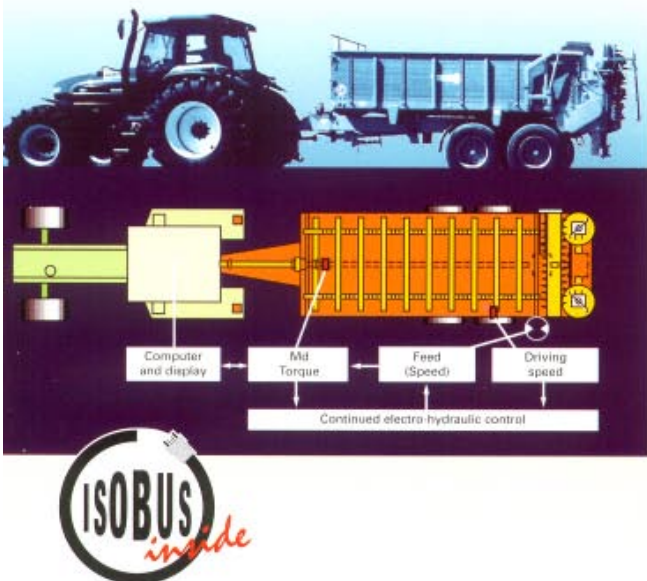
- Gearbox assuming frame function within the machine
- Integration of various modules, such as clutch or measuring device
- Swivel gearbox providing high mobility
- Tailor-made gearbox concepts for all applications

Ease of servicing:

- Low-maintenance gearboxes
- Lubricants are selected according to all applications conditions

For more detailed information, please refer to our technical documents.

Electronic Drive Line Control DLC



Convenience and economic operation – With travelling and working speeds increasing, the operator can no longer keep an eye on all machine functions. By means of torque and speed sensors, the electronic Drive Line Control DLC collects the load data in various functional areas of the machine thus keeping the entire machine in its optimum working range if critical limit values are reached. The economic efficiency of a machine which permanently operates in its optimum range increases by approx. 30 per cent.

Product features and advantages for the user:

- Higher degree of machine utilisation thus higher output per hour
- Machine protection
- Visual monitoring of the machine via a display in the tractor cabin
- Better co-ordination of different operations
- Less work load for the driver, economy of time
- Less repair, reduced wear and tear
- Soil protection due to reduced number of passages

Tractor Attachment System TAS

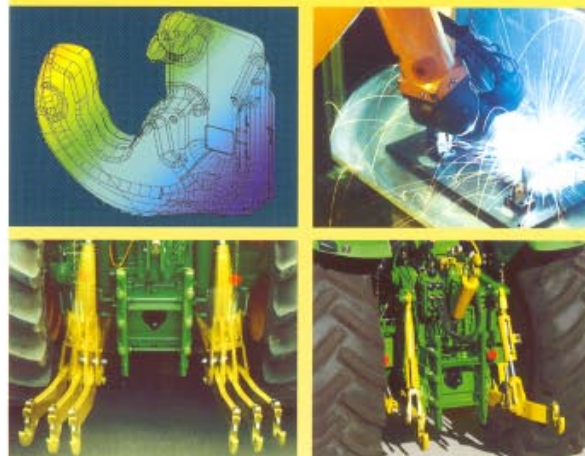
Automation at the tractor rear

The WALTERSCHEID Tractor Attachment System TAS has been used for decades as standard equipment by all renowned tractor manufacturers.

Core pieces of the TAS are the top link and lower link hooks which can easily be distinguished by their typical shape. These safety components excel by a high load capacity, insensitivity to dirt and automatic safety locking systems. Another TAS component is the implement stabilisation system which allows a floating position of the implement during the working phase and a rigid locked position during transport. Hydraulic lift links and top links serve to adapt the implement to actual operating requirements from the tractor seat. Owing to its modular configuration, the TAS can either be attached to the rear or the front, according to regional conditions or special customer requests.

The TAS components:

- WALTERSCHEID Three-Point Quick Coupler
Mechanical or hydraulic top link with hook, lower links with hook, lift link, ball guides
- WALTERSCHEID implement stabilisation system
Automatic mechanical or hydraulic lateral stabiliser
- WALTERSCHEID implement adjustment system
Hydraulic top link and lift link with twin-type non-return valve



Product features and advantages for the user:

Wide product range:

- All requirements are covered, from Category 1 to 4

Saving of time and cost:

- Efficient coupling by a single person from the tractor seat
- Lateral stabilisers enable automatic locking of the attached implement during road transport. No keeping to the track required when ploughing.
- Easy adjustment of the attached implement
- Insensitivity and durability of components ensured by high-quality materials

Safety:

- Automatic coupling minimises the amount of work required between tractor and implement

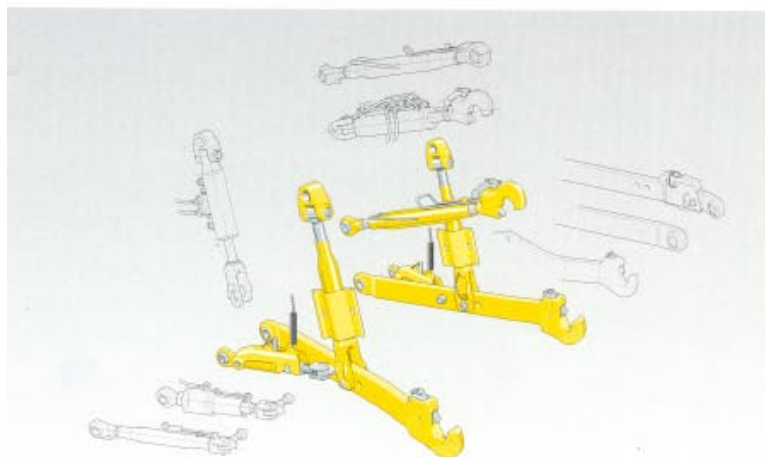
Service:

- World-wide availability of spare parts
- Easy retrofitting by replacement of components

Innovation:

- Continued advanced technical development in line with customer requirements

For more detailed information, please refer to our technical documents.



Modern testing facilities to support development and quality assurance



In the **WALTERSCHEID testing department**, field conditions are simulated on most diverse testing facilities. Basic research up to trial runs in the field support the development of products.

Testing programmes co-ordinated with the customer ensure compliance with current market requirements and guarantee the high quality of the original **WALTERSCHEID** products.



WALTERSCHEID
Rohrverbindungstechnik GmbH
Tube Connection Technology
 WALPRO Profile Ring Tube Fittings
 WALFORM Tube Fittings
 Flare Tube Fittings
 37° Flared Flanges SAE J518/ISO 6162

Welding Nipple Tube Fittings
 Flange, Banjo, Swivelling
 Taper Fittings
 Ball Valves
 Non-Return Valves



WALTERSCHEID
 technology sets
 the standard



GKN Walterscheid GmbH

Hauptstraße 150
 53797 Lohmar / Germany
 Phone +49 (0) 2246-12-0
 Fax +49 (0) 2246-12-3501
 www.walterscheid.com
 info@gknagriwal.de



FOR: VIC NSW QLD TAS	FOR: SA WA NT	FOR: NEW ZEALAND
WALTERSCHEID AUSTRALIA PTY LTD ABN 47 006 204 922 9 URBAN ST PO BOX 394 BRAESIDE VIC 3195	JAYBEN AUSTRALIA PTY LTD ABN 34 683 884 382 11 FREDERICKS RD ROYAL PARK PO BOX 2020 PORT ADELAIDE SA 5015	WALTERSCHEID (NZ) LTD 63 COLOMBO ST PO BOX 5477 HAMILTON - NEW ZEALAND
PHONE 03 9580 7300 FAX 03 9580 0379 MOBILE 0419 319 885 EMAIL walterscheid@walterscheid.com.au WEB www.walterscheid.com.au	PHONE 08 8341 1377 FAX 08 8341 1677 MOBILE 0417 794 800 EMAIL jayben@jayben.com.au WEB www.jayben.com.au	PHONE 07 846 7040 FAX 07 846 7041 MOBILE 0212 457 317 EMAIL walterscheid@xtra.co.nz



DLSTAS_B.PDF ELECTRONIC DOWNLOAD BROCHURE

© Walterscheid Australia. No reproduction without written authorisation.
 Information contained may be subject to change. Use products only for the specified applications