



Semi-mounted carriage plough
VARI-CHALLENGER





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VARI-CHALLENGER

Semi-mounted carriage plough

MAXIMISE YOUR WORK OUTPUT!

THE VARI-CHALLENGER IS SPECIALLY DESIGNED FOR GRAIN FARMS, AGRICULTURAL CONTRACTORS AND COOPERATIVES FOR INTENSIVE USE. IT IS PERFECTLY SUITABLE FOR USE WITH TRACTORS RANGING FROM 190 TO 450 HP, AND IT IS AVAILABLE FROM 8 TO 10 MOULDBOARDS WITH A WIDE RANGE OF OPTIONS.



RELIABILITY

The large-sized welded frame results in improved structure robustness. The 220 x 220 mm frame beam ensures maximum strength.

SIMPLICITY

Quality ploughing makes seedbed preparation easier and reduces energy consumption. Easy and precise settings help to achieve this goal. Levelling, working depth and offset can be adjusted without tools.

EFFICIENCY

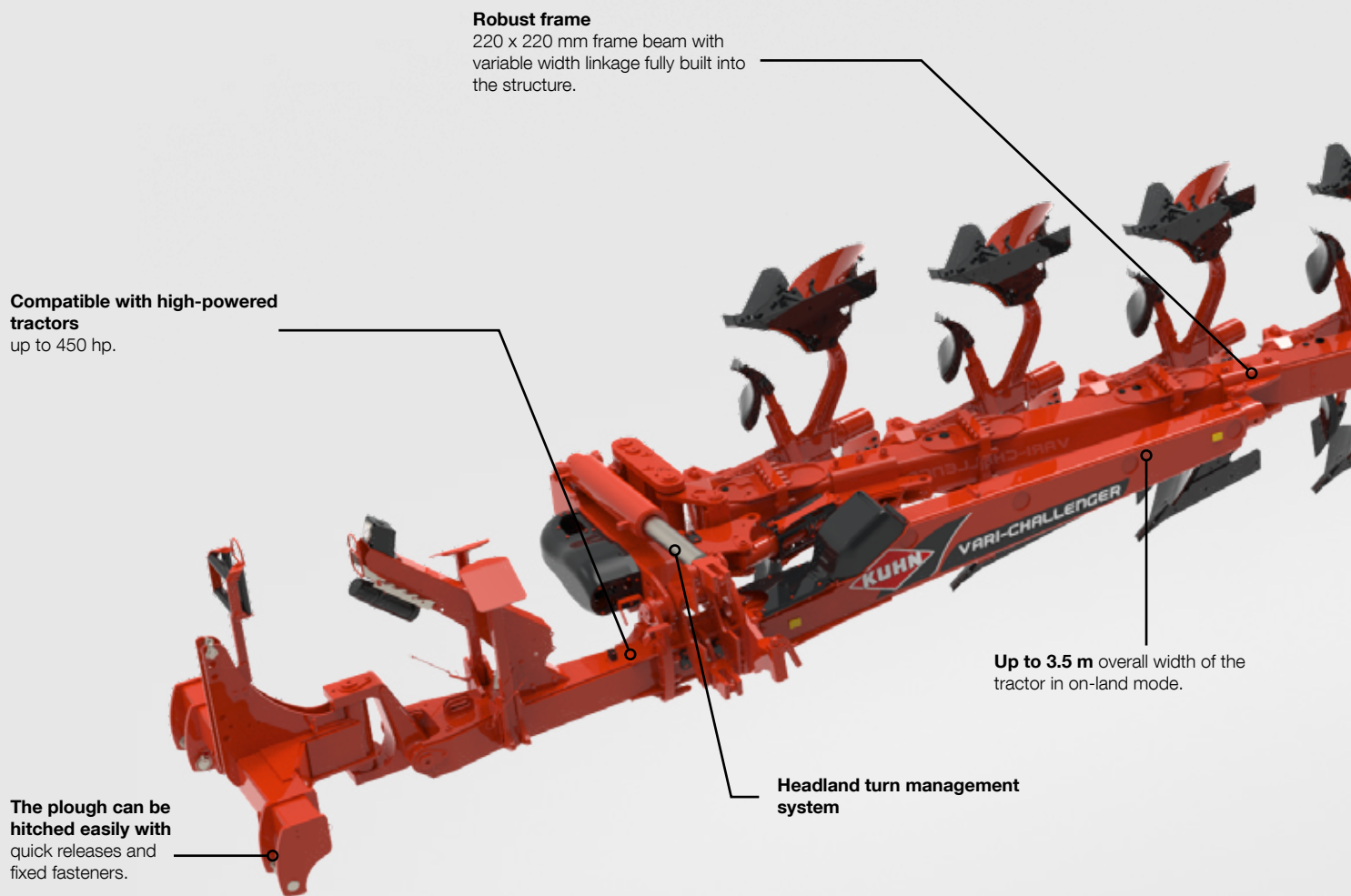
The VARI-CHALLENGER plough is equipped with a rear section lift system for a gradual start to furrows and optimal traction power.

The 110° turning radius allows for short manoeuvring and facilitates headland turns for high work rates.

VARI-CHALLENGER

THE SEMI-MOUNTED MACHINE THAT ADAPTS TO YOUR WORKING CONDITIONS

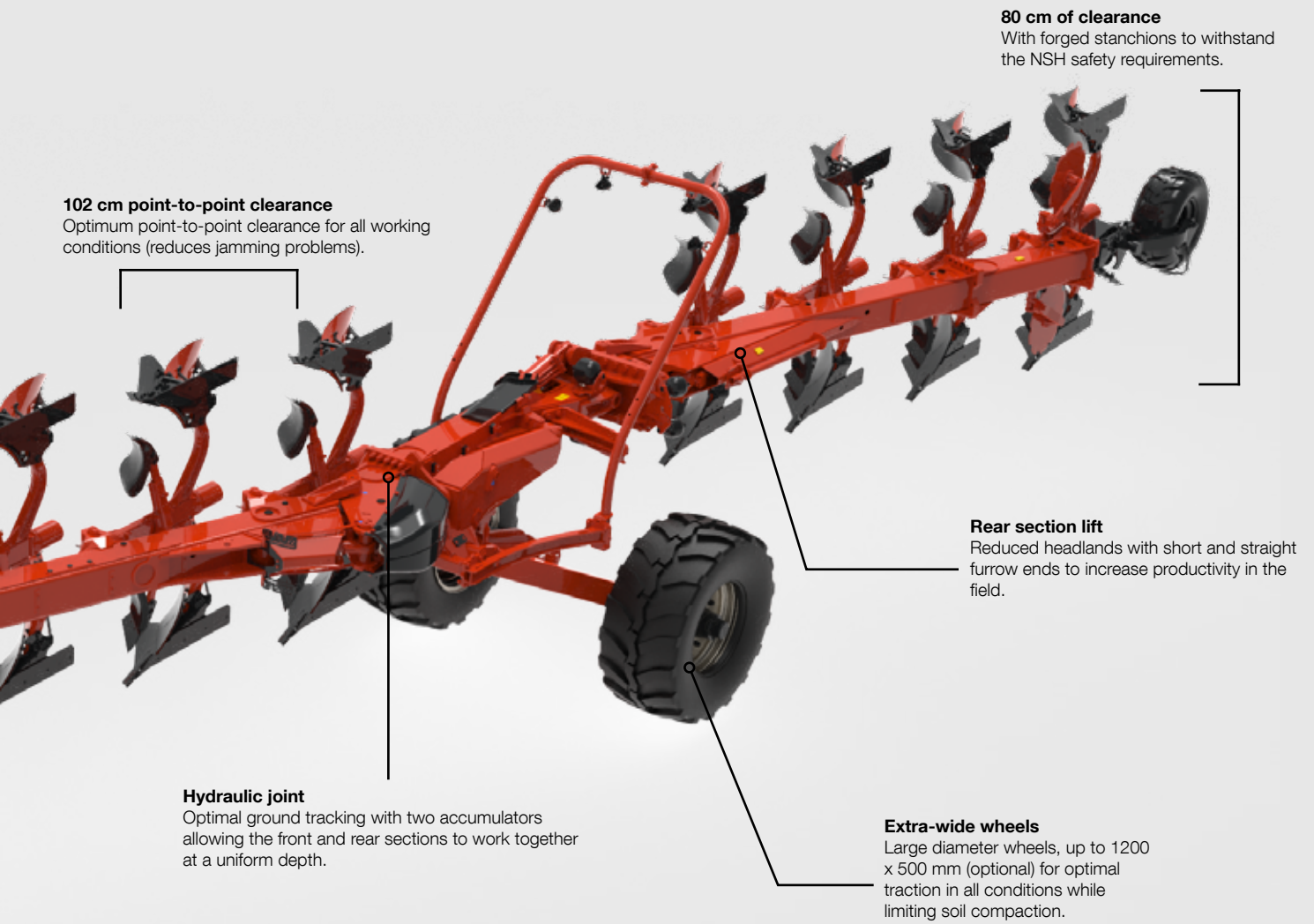
The VARI-CHALLENGER semi-mounted carriage plough is packed with Kuhn's expertise in plough design and manufacture. With a 220 x 220 mm frame, an on-land version, a rear section lift and a 110° turning radius, the VARI-CHALLENGER is sure to win farmers over.



Variable width

- VARI-LARGE link built into the chassis (14 to 22 inches / 35 to 55 cm)
- Protected against the elements (stones, soil, residue, dust, etc.)
- Maintenance-free
- Working width indicator visible from the driver's seat





102 cm point-to-point clearance

Optimum point-to-point clearance for all working conditions (reduces jamming problems).

80 cm of clearance

With forged stanchions to withstand the NSH safety requirements.

Rear section lift

Reduced headlands with short and straight furrow ends to increase productivity in the field.

Hydraulic joint

Optimal ground tracking with two accumulators allowing the front and rear sections to work together at a uniform depth.

Extra-wide wheels

Large diameter wheels, up to 1200 x 500 mm (optional) for optimal traction in all conditions while limiting soil compaction.

VARI-CHALLENGER

AN ULTRA-MANOEUVRABLE SEMI-MOUNTED CARRIAGE PLOUGH

The VARI-CHALLENGER is a semi-mounted carriage plough with unbeatable functional flexibility. It has a 110° turning radius, a quick and safe headland turn management system, and a carriage that ensures stability and traction for both work and transport.

110° TURNING ANGLE

The 110° turning radius allows for easy handling at the headland and quick turns. The large distance between the hitching shafts and the first share tip eliminates any risk of interference with the tractor when turning. Driving on the roads is easier and safer.



Gradual turning

The chassis of the VARI-CHALLENGER is equipped with two large double-acting cylinders to ensure gradual and secure turning without the need for a mechanical system. This reduces the load on the lifting arms.

On the in-furrow version, the hydraulic levelling locking system ensures optimum penetration even in tough conditions.



Stability

The VARI-CHALLENGER carriage consists of 2 large diameter wheels (1200 x 500 mm) with a track length of 2 metres. This design provides high load capacity for easier driving both in the field and during transport. The stability during transport and protection of the structure is combined with the lift float of the lifting cylinder.

PERFECT GROUND TRACKING ADAPTS TO YOUR TERRAIN

Ploughing quality is measured by a consistent working depth, which in turn guarantees regular burial of crop residue, good levelling of the soil for successful sowing and identical rooting potential at all points on the plot.



Front and back articulation

In the working position, the front and rear sections articulate on the carriage to allow each section to work at the same depth. Even on uneven ground (ridges and troughs), the ploughing depth is the same.

At the furrow ends, when the front section mouldboards emerge from the ground, the rear section is held at the required working depth without any effort.



Rear section lift

With the in-cab hydraulic valve, you control the rear section lift to reduce the size of the headlands. The straight, flat furrow end makes ploughing easier and more fuel-efficient.

In tough conditions, it is possible to work with the front section only.

PLOUGHING VERSATILITY

The VARI-CHALLENGER semi-mounted plough makes it possible to plough in-furrow or on-land to adapt perfectly to the working conditions.



On-land offset on ON LAND version

The on-land offset is available for optimum use of:

- Traction power and reduced fuel consumption.
- The type of tractor available. If the tractor is to be used for other applications requiring dual-wheel tractors, wide tyres or even tracks, it will be fully suitable for on-land activities while limiting soil compaction.



Versatility of the ON LAND version

- Use with up to 3.5-metre tractor overall width.
- Possibility of working in the furrow when grip conditions are no longer satisfactory on the land.
- On-land ploughing does not smear the furrow bottom and reduces tyre wear in stony conditions.



100% controlled working depth

Working depth regularity of the front mouldboards is ensured by two large diameter wheels (690 mm). Each wheel can be adjusted independently to achieve a perfect result.

Convenient use

Easier and safer handling at the headland.

The number of hydraulic valves to be operated at the headland is reduced.

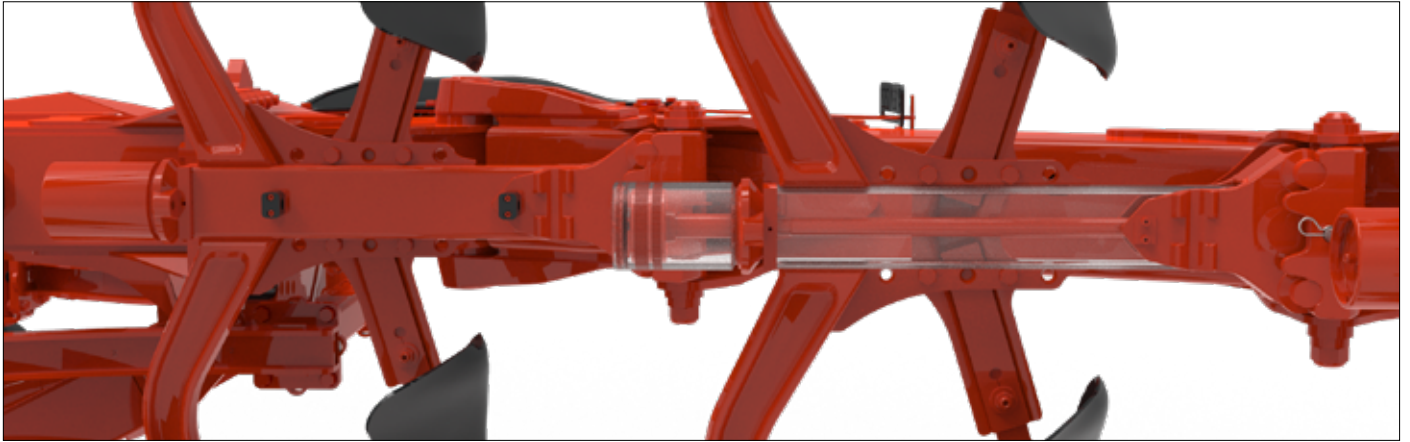
The electro-hydraulic sequence combines turning and folding-unfolding of the cross-braces with the action of a single valve, as well as the lifting of the rear section.

HYDRAULIC SAFETY SYSTEM FOR OPTIMAL PROTECTION

NSH IS THE ONLY SAFETY SYSTEM ON THE MARKET TO PROVIDE:

- Quick adaptation of the share tip force to the working conditions (700 to 1500 kg) to avoid slippage or stone jamming.
- Centralised effort adjustment at the tip of all mouldboards to save time.
- An increasing triggering curve for easier furrow entry when avoiding obstacles.
- Vertical clearance of 70 cm and lateral clearance of 20 cm (left and right) for full protection.
- VARIBAR option: instantly adjust the share point pressure from the driver's seat for greater comfort.
- MAXIBAR option: possibility to over-size the share tip force up to 2500 kg for working in very heavy clay soil.





Simple design

- Integration of all safety elements in the beam to increase the clearance of soil and residue flow
- Longer service life: all pressure surfaces are heat-treated and transmit the forces directly to the beam axis via the forged and treated one-piece tie rod.
- Maintenance-free for greater peace of mind: a single bushed joint.



WEAR PARTS

Backed by nearly 160 years of experience in ploughing, KUHN has developed ranges of mouldboards, skimmers and share points adapted to all the requirements of farmers. Made from high quality and robust materials, KUHN plough parts are designed to ensure optimal penetration in all soil conditions with a maximum service life.


PLOUGH MOULDBOARDS


Essential KUHN solutions



Helical L

Versatile mouldboard for standing or flat ploughing finish depending on the working speed. High clearance of the furrow bottom for wide tyres.


 Working depth
20 to 35 cm.


 Recommended tyre width:
650 mm



Helical T

For well-formed furrows ploughed at shallow to medium depth. Suitable for use with wide tyres. Recommended for surface tillage.


 Working depth
12 to 25 cm.


 Recommended tyre width:
650 mm



Cylindrical-helical N

Multi-purpose plough mouldboard. Cylindrical at the front and helical at the back, requiring less power.


 Working depth
15 to 30 cm.


 Recommended tyre width:
650 mm



Helical HC

For deep ploughing with well-formed furrows, suitable for sticky clays and "competition" ploughing. Available in plastic for heavy, damp clays.


 Working depth
15 to 30 cm.


 Recommended tyre width:
650 mm



Cylindrical P

For spring soil preparation with good surface crumbling for immediate seeding. High-speed capacity.


 Working depth
20 to 35 cm.


 Recommended tyre width:
650 mm



Slatted mouldboard V

Made up of interchangeable and independent slats. It keeps heavy, damp soils from sticking.

 Working depth
20 to 30 cm.

 Working depth
20 to 30 cm.

Increase the service life of your mouldboards by 40%



The mouldboards are made with unequal layers of TRIPLEX steel, with a thicker wearing layer where it counts and a softer layer in the middle to guarantee the best compromise between wear resistance and ploughing quality.

When you choose a KUHN plough equipped with mouldboards made with unequal layers of TRIPLEX steel, you can be sure that you are getting one of the best cost-per-hectare deals on the market.

SKIMMERS

The skimmer is critical as it cuts the strip of soil to bury the residue at the bottom of the furrow before the plough mouldboard passes through.



		Versatile skimmer ZX	Maize skimmer ZRL	Large capacity skimmer ZGC	Helical skimmer ZHL	Deflector DF
Working conditions	Living plant residues rooted and shredded	+	+	+	++	o
	Living plant residues rooted and not shredded	+	+	++	++	+
	Meadow	o	o	+	++	o
	Stubble with shredded straw	++	++	++	+	+
	Stubble with straw removed	++	+	+	++	o
	Non shredded large residues	o	++	+	+	+
Working quality	Distribution of residues over the entire ploughing profile	+	+	+	+	++
	Intermediate ploughing (residues scattered on the surface)	++	++	++	+	+
	Deep ploughing (with no residues on the surface)	++	+	+	++	o
Working speed (kph)		6 - 10	6 - 10	6 - 8	6-10	6 - 8

Nearly adapted Adapted Perfect



SHARE POINTS



MARATHON share point

Its special profile allows for better protection of the parts and a regular wear profile for good penetration.

OLYMPIC share point (standard)

Patented share point of unrivalled quality. Its special profile will achieve maximum penetration and protection of the coulter and frog.

SUPER MARATHON share points

A patented manufacturing process with tungsten carbide. There is no wet area under the carbide plate. Up to 5 times more resistant than a standard share tip.

Technical specifications

	VARI-CHALLENGER IN-FURROW		
Model	8 ((4+1) + 3)	9 ((4+1) + (3+1))	10 ((4+1+1) + (3+1))
Min. power (kW/hp)	149/203	168/228	186/253
Max. power (kW/hp)	265/360	298/405	331/450
Weight (kg) for NSH safety system	6392	6792	7192
Cutting width (m)	35 to 55		
Cutting width (inches)	14 to 22		
Clearance under plough beam (cm)	80		
Clearance between mouldboards (cm)	102		
Beam section (mm)	220 x 220		
Linkages	3/4N/4		
Hydraulic fitting	Lifting: 1 DA Turning: 1 DA Rear section lift: 1 DA KTH 105 hydraulic selector - 2 functions: 1 DA (Hydraulic offset, variable width)		

¹: depending on the country and the road regulations in force, some configurations are not available.



KUHN PARTS



Parts designed to last

With our high-tech foundries and forges and state-of-the-art production facilities, KUHN manufactures spare parts that will last for years to come. You can really count on our expertise and our genuine parts. Through our KUHN PARTS warehouses, farmers benefit from our customer support and logistics services which ensure fast and reliable repair solutions in collaboration with your nearest KUHN Authorised Partner.

VARI-CHALLENGER ON-LAND		
8 ((4+1) + 3)	9 ((4+1) + (3+1))	10 ((4+1+1) + (3+1))
149/203	168/228	186/253
265/360	298/405	331/450
6972	7372	7772
35 to 55		
14 to 22		
80		
102		
220 x 220		
3/4N/4		
Lifting: 1 DA Turning: 1 DA Rear section lift: 1 DA KTH 105 hydraulic selector - 2 functions: 1 DA (Hydraulic offset, variable width)		

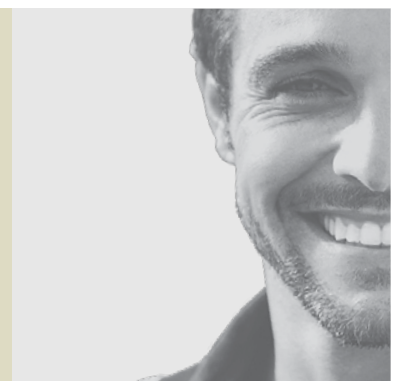
KUHN SERVICES*

KUHN sos order - Express spare parts service 24/7

KUHN protect+ - The choice of professionals!

KUHN i tech - For ever quicker repairs!

KUHN finance - Invest rationally!



* Some services are not available in all countries. **except for 1st January, 1st May and 25th December.

MyKUHN

THE LINK TO MY SUCCESS

MyKUHN is your on-line customer space. Sign up now and discover how the exclusive services offered by MyKUHN will facilitate the management of your fleet of KUHN machines and terminals as well as help you maximize their performance. Once identified, on computer, smartphone or tablet, you will have access to parts catalogs, technical documentation and numerous connected services.



Discover the KUHN semi-mounted plough ranges



1. VARI-LEADER - 2. VARI-MANAGER - 3. CHALLENGER - 4. VARI-CHALLENGER - 5. MULTI-LEADER XT

KUH-N-HUARD SAS - Zone Horizon - 2, Rue de Québec - F-44110 CHÂTEAUBRIANT - France

For more information about your nearest KUH-N dealer, visit our website www.kuhn.com

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