





# **Teres mounted reversible ploughs**

The plough for all situations



The new Teres plough enables AMAZONE to offer unique advantages for your farm. Maximum speed with minimum wear is possible thanks to the new SpeedBlade plough bodies. At the same time, the automatic front furrow adjustment provides perfect work results. AMAZONE always offers the right solution for any farm with the Teres, even those with the most diverse of requirements.



Page
4
6
8
10
12
14
16
18
20
22
24
26
28

2 3

# **Teres mounted reversible ploughs**



33 – 55 cm/furrow



H



Up to 10 km/h

4, 5 or 6 furrows



# The advantages at a glance:

- Unique SpeedBlade plough bodies with an enlarged front shin of the mouldboard and the Oplus hardening process allow higher speed with less wear
- Wide furrow clearance due to the state-of-the-art plough body concept
- The AutoAdapt hydraulic front furrow adjustment is fitted as standard and provides perfect matching to the last furrow, even under changeable conditions
- Simple adaption of the front furrow thanks to the infinitely variable hydraulic adjustment
- Rapid and gentle turnover process at larger furrow widths as a result of the SmartTurn frame swivel cylinder
- Wide choice of various side-mounted and rear-mounted support wheels for good transport on the road and safe and tidy working on the field
- ProtectShaft cross-shaft with integrated bearings for damping shock loads on the headland

# **MORE INFORMATION**

www.amazone.net/teres



PRODUCT FILM Find out more

# **Outstanding ploughing**

Teres mounted reversible ploughs



### The models

With the Teres, AMAZONE offers a mounted reversible plough in 4, 5 or 6 furrows and hydraulic furrow width adjustment from 33 cm to 55 cm. Designed for use under the most arduous of conditions, the Teres is a robust plough with a high degree of comfort, thanks to its easy handling and adjustment.

### The features at a glance

- 4, 5 or 6 furrows
- For tractors up to 300 hp
- Over-dimensioned beam: 150 x 150 x 8.8 mm
- Standard with hydraulic front furrow width adjustment
- Shear bolt or hydraulic overload protection





# An overview of the Teres models:

	No. of furrows	Interbody clearance	Frame height (cm)	Furrow width adjustment (cm)	Overload protection	Release force overload protection (kg)
		(cm)		Hydraulic furrow width adjustment		
	4					
Teres 300 V	5	100	80/85	33-55	Shear bolt	4,400
	6					
	4					
Teres 300 VS	5	100	80	33-55	Hydraulic	2,000
	6					

6 7

# Comfort, durability and low wear

The headstock of the Teres





Teres SmartCenter

### SmartCenter for more comfort

The uncluttered hose rail enables optimum hose routing to the tractor. So nothing stands in the way of quickly attaching the plough. The hose rail sits completely behind the headstock in the working position.

# Turnover shaft for a longer service life

Turnover shaft on the Teres

The large hollow turnover shaft with a diameter of 130 mm allows two bearings with the same dimensions. This markedly increases durability. At the same time, the turnover shaft enables clean routing of the hydraulic pipes without the hoses being damaged.

### AMAZONE ProtectShaft – for less wear

The bearing-mounted ProtectShaft cross-shaft with integrated lower link balls ensures low levels of wear and maximum durability. The pivot bearings have a dampening effect and protect the plough on the headland and when driving on the road. Thanks to the integrated balls, the durability of the cross shaft is increased markedly on account of the larger diameter. The cross-shaft with a fixed pin including lower link balls and Walterscheid clamp type guide cones is available as an alternative.



AMAZONE ProtectShaft for less wear



1 Cat. 3N with cylindrical pins

- 2 Cat. 3 with cylindrical pins
- 3 Cat. 4N with cylindrical pins
- (4) Cat. 3 with integrated balls

# Work without compromise



### The beam – high flexibility

The sturdy tubular 150 x 150 x 8.8 mm beam gives the Teres a high level of rigidity whilst maintaining a light weight. The simple yet strong design of the Teres enables the use of an extendable beam system. This means that an additional furrow can be removed or added in next to no time.

Extendable beam system with flange





Hydraulic adjustment of the furrow width

# SmartTurn – low-stress turnover in the shortest time!

Shortly after lifting the plough, the beam is swivelled in without causing any stress before the turnover process starts. The furrow width is not changed by swivelling in the beam. This prevents wear, especially on the plough body bearings, and also enables a higher ground clearance during turnover. Once the plough has been turned, the frame swivel cylinder automatically returns the beam to the working position. The swivel cylinder extends in accordance with the furrow width. In this respect, a push/pull cable relays the position of the furrow width to a valve, thereby restricting the cylinder travel.

# Teres V and Teres VS – hydraulically comfortable

The furrow width can be smoothly and hydraulically adjusted from the tractor seat on all Teres ploughs. A very clearly visible display, consisting of a scale and indicator, keeps the driver informed of the furrow width setting. The integrated kinematics of the Teres also automatically set the front furrow width, all the soil engaging tools and the support wheel.

#### The advantages of the Teres V and VS

- Variable furrow width from 33 cm to 55 cm per body
- Automatic adjustment of the front furrow when changing the furrow width thanks to AutoAdapt
- No readjustment necessary
- Comfortable and time-saving operation





# Automatic front furrow adjustment

Always the right setting thanks to AutoAdapt



Precise adjustment of the front furrow width when changing the overall width via the parallelogram



# AutoAdapt – automatic adjustment of the front furrow when changing the furrow width

The front furrow is also automatically adjusted by AutoAdapt when the overall furrow width is changed. Precise match-up is possible under any conditions thanks to the parallelogram and the hydraulic connection between the furrow width and front furrow cylinder. The accurate matching to the last furrow ensures perfect work results. AutoAdapt also has a positive effect on fuel consumption, since the pull point is not changed during the process.

#### The advantages thanks to AutoAdapt:

- Simple and comfortable adaptation of the front furrow to the furrow width
- Precise connection
- Robust, low-wear system for basic adjustment
- Highly responsive, even on the move, owing to direct control of the first body
- Perfect plough profile even on variable soils, slopes or when changing tractors
- One-off setting of the pull point via the parallelogram guidance



Perfect work results and satisfied customers thanks to AutoAdapt

# SpeedBlade plough bodies

Plough bodies from a new perspective



# SpeedBlade

Maximum speed – Minimum wear

# SpeedBlade – the new innovative plough bodies

The new SpeedBlade plough bodies, with their patented extra-large front shin on the mouldboard and the ©plus hardening process, ensure significantly less wear at high forward speeds. As ploughing speeds increase, the wear point shifts further backwards. Wear on conventional plough bodies begins directly on the mouldboard at higher speeds as a result of a smaller front shin. Only the front shin of the mouldboard has to be replaced thanks to this patented enlarged front shin. This avoids the troublesome and expensive replacement of the entire mouldboard.



SpeedBlade plough body with the patented large mouldboard front shin and the ©plus hardening process

# SpeedBlade body with patented AMAZONE mouldboard front shin



# First-class quality for long-lasting wear parts



# The ©plus tempering process – the know-how of heat treatment

As a manufacturer of wearing parts for the soil tillage industry, we can look back on a history spanning decades. Continual advances in materials and production technology as well as our expertise in heat treatment are the basis for achieving the highest possible quality in our wearing parts for ploughs.

Carbon in its purest form, diamond, is the hardest naturally occurring substance. A hardening process which involves introducing carbon into the steel is used to increase the hardness and durability of ©plus wearing parts. AMAZONE uses a unique hardening process to achieve a very high level of hardness on the front of components, such as the shin, to produce the optimum resistance to wear. The back remains relatively soft but at the same time extremely tough and impact resistant.

#### Benefits of the ©plus hardening process:

- Longer service life
- High impact resistance
- Less pulling power requirement
- Reduced fuel consumption
- Less sticking to the smoother outer surface



# Box section beam made of high-grade steel for a long service life

All the beams on AMAZONE ploughs are produced from a special high-tensile steel. The over-sized wall thickness means that, not only is the whole beam robust, but also all the bolt fixings are extremely strong with this heavy wall thickness also preventing any hole elongation or deformation of the box section around the bolt fixings. A further feature of the ploughs is the design of the plough beam without any weld seams.

# Cross-section of mouldboard – comparison of the different hardening methods





Coverage of the point with the wing

# Points – the right point for every application

#### The advantages of the different points:

#### Standard point:

- Also for extremely dry and hard conditions
- Angled at the front for optimum soil penetration
- The point covers the wing

#### HD point:

- Angled at the front for optimum soil penetration
- Armoured at the rear
- For particularly tough conditions and a long service life

#### **Reversible points:**

- With a very shallow angle for clean and effective soil penetration
- Point can be used on both sides
- Quickly reversible for short downtimes



# Covered point – maximum ease of pull of the plough body

Since the point covers the wing, the joint is protected by the point. This clever join up means that no plant residues, baler twine or root remnants get caught in the share.

### Open frog – to make things lighter

The shape of the open frog prevents soil from getting caught underneath. This means that the plough is even easier to pull. At the same time, the solid adjustable support of the slatted mouldboards provides more stability.



# **AMAZONE plough bodies**

Reliable – Easy to pull – Top-class



# **Overview**



X		1			
	E.				
Plough bodies	STW 35	STU 40	U 40	S 35	W 35
Minimum working depth approx. (cm)	18	18	18	15	15
Maximum working depth approx. (cm)	30	35	35	30	30
Maximum furrow width approx. (cm)	50	55	55	50	50
Suitability	- 0 + ++	- 0 + ++	- 0 + ++	- 0 + ++	- 0 + ++
Light, sticky soils (peat)					
Light soils (sand)					
Medium soil					
Heavy soil					
Very heavy soils (clay)					
Sloping terrain	•	•	•	•	•
Crumbling	•	•	•	0	•
Furrow clearance	٠	۰	•	•	
Pulling power requirement	•	•	•	•	•
Minimal soil inversion	٠	•	٥	•	•

# **Overload protection**

Always on the safe side





### Hydraulic overload protection

The hydraulic overload protection is basically a hydraulic cylinder with a directly connected, nitrogen-filled hydraulic accumulator on each pair of plough bodies. When triggered, the plough body pushes a piston into the accumulator via the hydraulic cylinder. The gas is compressed and automatically returns the body to its initial position after passing the obstacle. A choice can be made between the standard hydraulic protection with decentralised adjustment or the optional protection with central adjustment for convenient and quick adjustment of the release pressure of all bodies.

#### The benefits

#### Simple adaptation of the release force

- Smooth and material-protecting operation
- Exchangeable ball joints and sockets
- As standard, with additional shear bolt

# Mechanical overload protection with shear bolt

Shear bolts are the tried and tested standard solution for this system. Under load, the shear bolt snaps off at the predetermined breaking point and the plough body gives way to the obstacle by swivelling upwards. The high release forces of the shear bolt enable use even in heavy and hard soils.

#### The benefits

- ✔ 4,400 kg shear force
- Clean shear-off owing to the double-cut, hardened flange plates



### It's better to bend than to break

The pressure acting on the plough bodies is determined by many different factors. The correct release pressure is of great importance so as to ensure that the body sits firmly in the ground, but no stones are ploughed up. This can be comfortably set with the hydraulic overload protection. Unlike some other manufacturers, the release pressure decreases as the lift height increases. A gentle return of the body into the ground without damage can thus be ensured.

# The support wheel

Exact depth control and reliable self-driving effect



### Pendulum support wheels

A choice of mechanical or hydraulic pendulum support wheel is available for the Teres. Whereas the mechanical wheels are mounted laterally or at the rear, the hydraulic pendulum support wheels are only mounted laterally. Depth adjustment is provided mechanically via spindles or hydraulically from the comfort of the cab via a double-acting spool valve with a clear and easy-to-read scale.

### Combi wheel

AMAZONE offers the hydraulically or mechanically adjustable combi wheel for an easy handling when changing between the transport and working positions. In this respect, the hydraulic cylinder does not have to be detached, and the lever can be quickly separated from the wheel arm thanks to ultra-easy locking and unlocking. The wheel is mounted on the side of the Teres, thereby enabling ploughing right up to the boundary.



Hydraulic pendulum support wheel, lateral



Mechanical pendulum support wheel, rear



Hydraulic combi wheel, lateral





**Tyre size:** 10/75-15.3

**Tyre size:** 340/55-16



The various tyre sizes mean that the support wheel can be optimally adapted to any practical requirement.





# Perfect boundary ploughing

The support wheel is positioned at the side of the beam, so that ploughing close to the field border is possible. The wheel is located inside the furrow width at maximum furrow width. The wheel is located inside the machine even at medium furrow width. Working directly near boundaries or obstructions becomes even more precise as a result.

# **Equipment for every application**

Versatile for special requirements



### Trash boards

A cost-effective alternative to skimmers when incorporating surface crop residues. With additional support on the leg as standard.

### **Sword landsides**

The sword landside is an alternative to the disc coulter, which, especially on heavy, stony ground ensures a clean furrow wall and also reduces the wear and tear on the plough body.

# Landside protection

The landside protection increases the area of support of the plough on the furrow wall. This improves plough guidance significantly, especially on slopes.





Serrated disc coulter,  $\emptyset$  500 mm, with a long holder

Serrated disc coulter,  $\emptyset$  500 mm, with a short holder

Serrated disc coulter,  $\emptyset$  600 mm, with a long holder

### Disc coulters – a clean solution

The disc coulter is important for a clean ploughing finish. Disc coulters also make a considerable contribution to efficient ploughing. The disc coulters' precise cutting action helps achieve full inversion and complete incorporation of any crop residues as well as leaving an effective furrow clearance.

The disc coulter is available in a smooth or serrated profile with a diameter of 500 mm and in a serrated profile of 600 mm.



Spring-loaded, serrated disc coulter,  $\varnothing$  500 mm

### Skimmers – for every situation

The use of skimmers ensures blockage-free ploughing, even under the most difficult of conditions. The following skimmers are available:

#### M1 Skimmer

The M1 skimmer is universally suited for use in grassland ploughing as well as where there are large amounts of crop residues, especially maize straw.

#### G1 Skimmer

The use of the G1 skimmer ensures blockage-free ploughing, especially on heavy and sticky ground or when ploughing grassland for the first time. The easy adjustability of the skimmers means that the finish is left even more precise.



M1 Skimmer

G1 Skimmer

**Packers** 

Levelling and reconsolidation in one pass





Robust and adjustable swivel press arm

### Swivel press arm

A swivel press arm can be installed as an option for combining the plough with a packer. All packer arms are equipped with a spring-loaded catcher which dampens the load peaks caused when picking up the packer. The arm is operated hydraulically via an additional spool valve for optimum comfort.

### Packer – for even greater efficiency

AMAZONE has expanded the packer range via a strategic cooperation with the company Tigges for even greater efficiency on your farm. As a result, it is now possible to combine the Teres with packers from Tigges in a matching AMAZONE design. Various ring diameters as well as different ring profiles are offered. In addition, there is a choice of single or double ring packers up to a working width of 4.65 m.



More Information



www.tigges.com



### Teres mounted reversible ploughs

Model	Teres 300 V			Teres 300 VS		
No. of furrows	4	5	6	4	5	6
Tractor power up to (kW/hp)	220/300					
Interbody clearance (cm)	100					
Frame height (cm)	80, 85 80					
Furrow width adjustment	Hydraulic Hydraulic					
Overload protection	Shear bolt Hydraulic					
Furrow width per body (cm)	33-55					
Support wheel (dimension)	10/75-15.3 or 340/55-16 or 10/75-15					
Weight of the base machine (kg)	1,650	1,910	2,120	1,900	2,220	2,490



Illustrations, content and technical data are not binding and may differ depending on the level of equipment. Country-specific road traffic regulations apply and must be complied with, meaning that special approval may be required. The permissible axle loads and total weights of the tractor should be checked. Not all the listed combination options are possible with all tractor manufacturers.



AMAZONEN-WERKE H. DREYER SE & Co. KG P. O. Box 51 · 49202 Hasbergen-Gaste/Germany Phone +49 (0)5405 501-0 · Fax +49 (0)5405 501-193