

WARRIOR[®]

IN FURROW MOUNTED PLOUGH WITH HYDRAULIC FURROW
WIDTH ADJUSTMENT



*Made in Italy
since 1957*



MORO
ARATRI  [®]



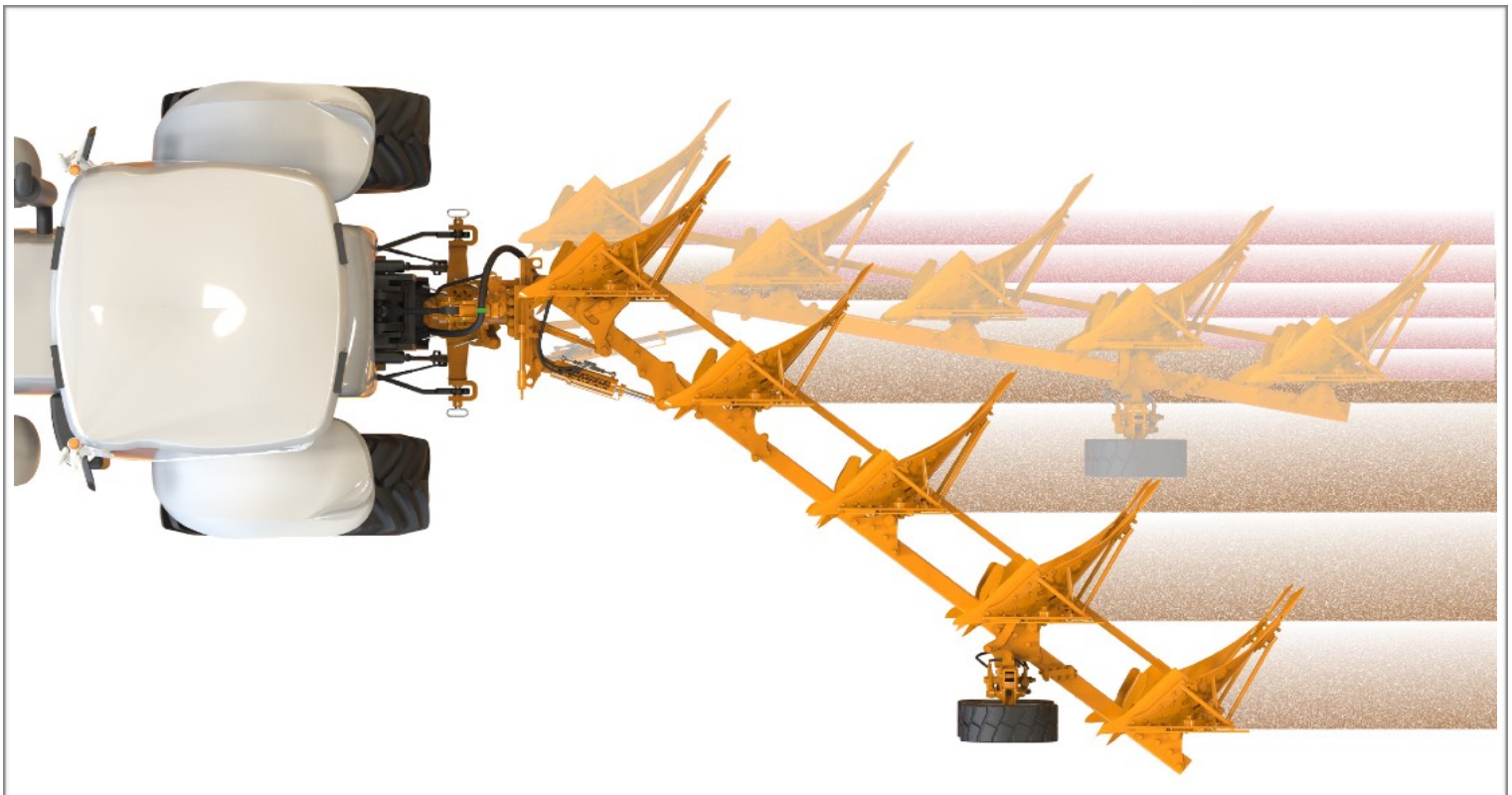
WARRIOR

It is the innovative line of mounted ploughs, equipped with hydraulic working width adjustment, available in versions with 2 to 6 bodies. Advanced CAD software is used for design and structural analysis of these machines, with simulated performance and fatigue testing. The chassis of the Warrior plough, like all the other structural parts, is made of special steel, with a very high yield load.



HYDRAULIC WIDTH ADJUSTMENT

Equipped with a unique hydraulic width adjustment, the Warrior ploughs allow the operator to determine and set the working width, according to different soil and climatic conditions. Each body can be continuously and simultaneously adjusted from 25 cm to 70 cm, maintaining the correct alignment and tilt of the working bodies. The Hydraulic adjustment can be used during the working stage, in order to facilitate finishing operations on fields of irregular shape, when ploughing headlands or working around obstacles such as trees or telephone poles etc.

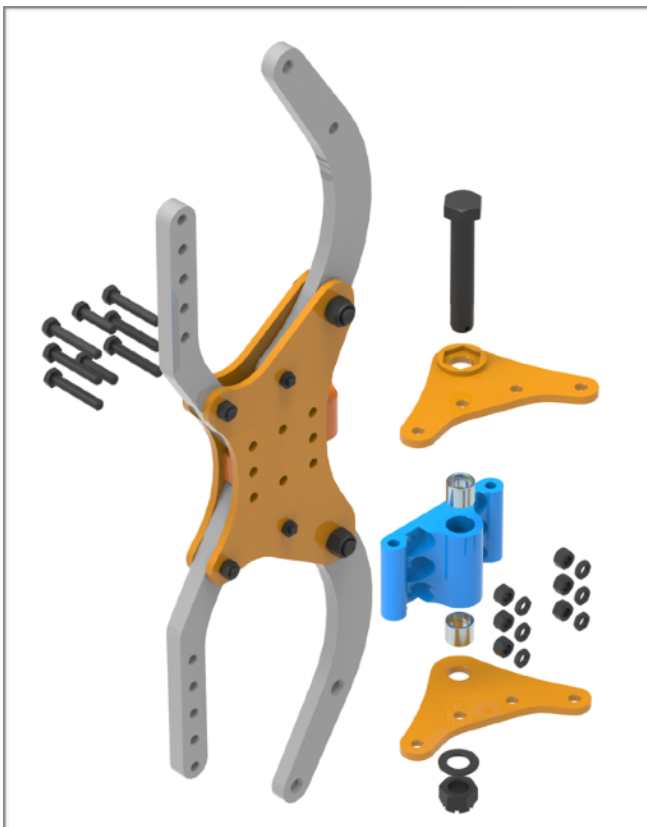




SMOOTH WIDTH ADJUSTMENT :

By means of a double acting hydraulic cylinder, it is possible to adjust the working width continuously while working, remaining comfortably seated in the driver's seat.

On request, it is available the system with two memory functions: automatic alignment of the frame during the turn over and adjustment of the working width. The frame is pivoted and rotated, then re-adjusted to the pre-selected furrow width.



THE CORE OF THE ADJUSTMENT:

The rotating movement of the system is entrusted to special mono-blocks in steel, without joints or welds, which hold special anti-wear bushings, ensuring high durability.



TECHNOLOGY

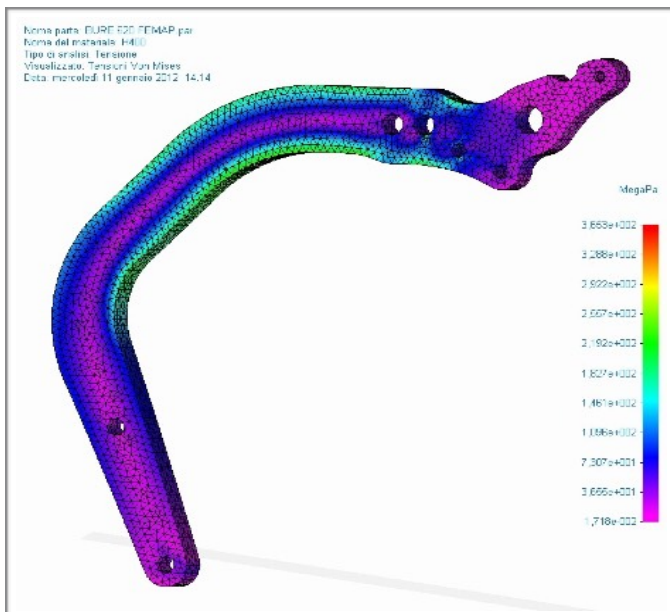
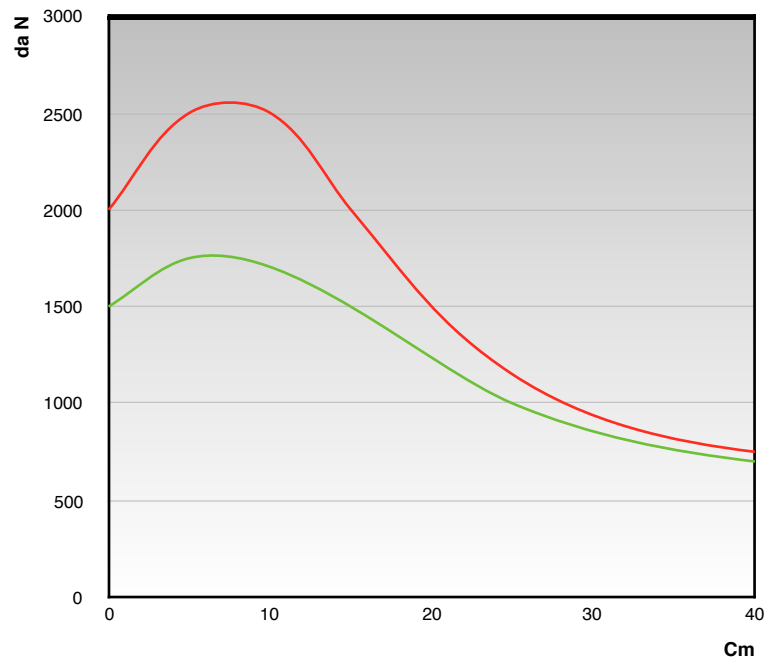


STONE SYSTEM

The MORO Aratri non-stop security system, protects the plough from damages when a body encounters an obstacle. This ensures a safe ploughing in stony soils.

The release is soft and without shocks, with a reduction of force as the leg rises.

The triggering pressure is adjustable, thus allowing the ploughing both in tenacious and light soils, avoiding the extraction of stones.



UNIQUE

The special shape of the leg guarantees the optimal kinematic: in case of impact, the body is quickly guided outside of the soil, overcoming the obstacle.

Special elastic steels enables also lateral movement: the STONE SYSTEM is able to absorb all the stresses and to ensure reliability and durability.



PATENTED

Each STONE SYSTEM body is provided with a couple of hydraulic jacks which allow the system to work. Bodies are fixed with bolts to the chassis, avoiding joints and connecting rods that could affect the reliability of the plough.



STONE SYSTEM element in working position and in simulation of obstacle



The constructive solution to entrust the delicate task of safeguarding the structure to a battery of accumulators, in comparison to a single accumulator, represents an important advantage in terms of reliability. The WARRIOR STONE SYSTEM is able to continue ploughing even in case of failure of one or more accumulators. Moreover, it is possible to exclude the hydraulic device and add a couple of shear bolt.

TECHNOLOGY

CS SYSTEM
COMPACT



COMPACT SYSTEM

It is the folding system invented by MORO Aratri. Available on request, not only it reduces the longitudinal encumbrance of the plough during transport, it also allows to significantly lighten the load on the tractor lift system.

All locking and re-opening movements are automatic, without manual operations: operating the hydraulic distributor of the tractor, the hydraulic jacks perform all movements.

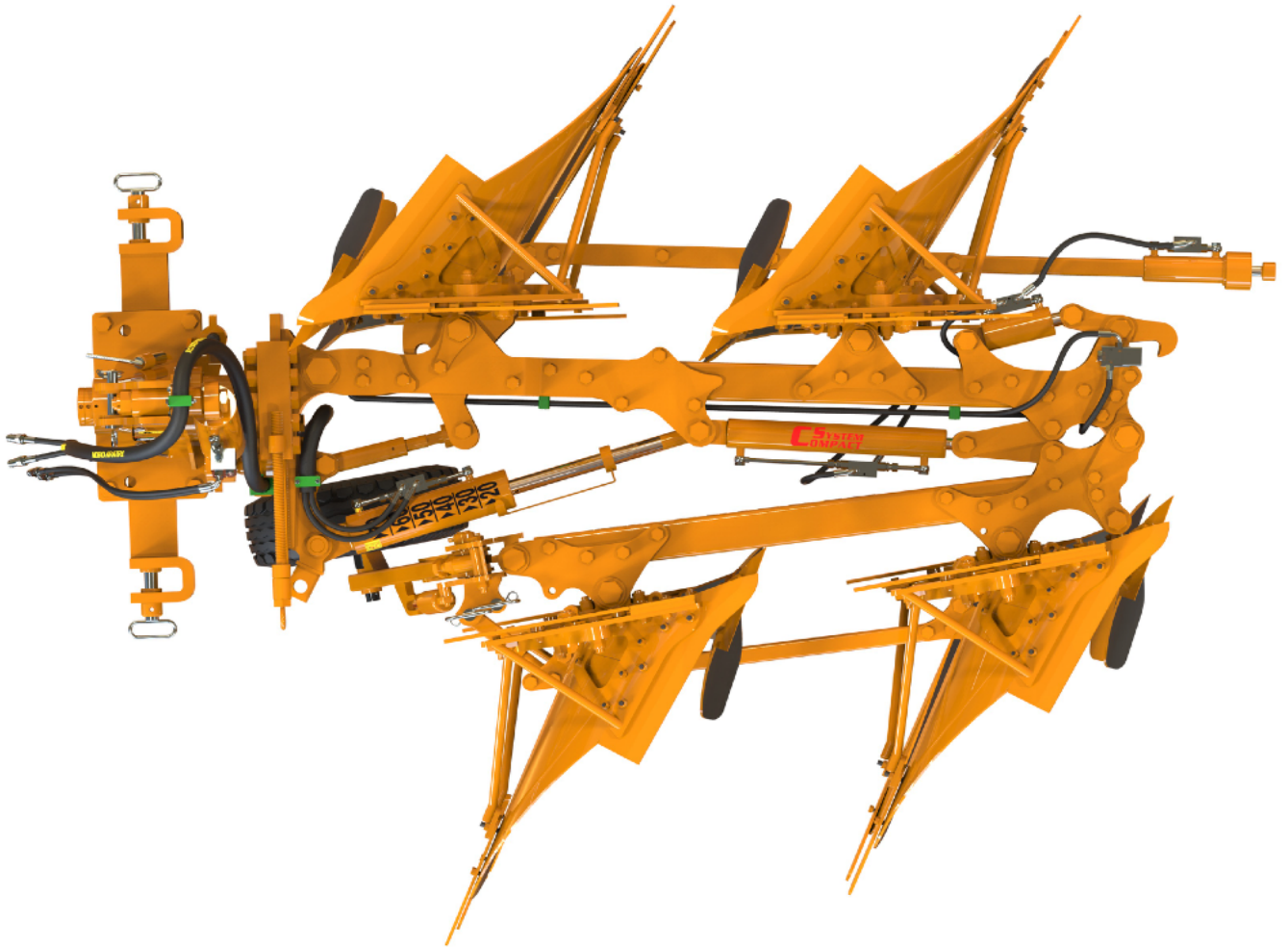
At the end of cycle, the hooks automatically take action to ensure the structural continuity and the perfect alignment of the frame.

On the WARRIOR, the COMPACT SYSTEM requires no additional hydraulic valves, since it uses the same distributor of the hydraulic width adjustment.



The special coupling system at the end of the opening cycle is carried out with specific levers with backlash and adjustable limit switches. Even after intensive use, the coupling accuracy is not compromised.

The whole system is assembled with bolts and, in case of need, the disassembly of the parts does not require demanding operations.



The movements of the COMPACT SYSTEM take place within a mono-block of steel, connected by pins and bushings with a special anti-wear treatment. Coupling of elements to the frame are made by bolts with 10.9 class, avoiding welded joints.



TECHNOLOGY

TS SYSTEM[®]
TRANSPORT



TRANSPORT SYSTEM

The patented working and transport system for ploughs which definitively resolves the problem of road safety.



Movements from working to transport position and vice versa, are hydraulically actuated. Due to the unique steering head, during transport the plough acts like a tractor-trailer.



TRANSPORT SYSTEM is available both hydraulic or mechanical.



TRANSPORT SYSTEM

Designed, built and patented by MORO Aratri, TRANSPORT SYSTEM is highly regarded for its exceptional functionality.

Easy road transport, safety and quick conversion from working to transport position, are the characteristics that make this system unique.

Tested by many farmers, TRANSPORT SYSTEM is not just a trailing system, but a real working tool that allows to carry and use the plough at its best.

It is provided with the MORO Aratri special and patented steering head.



MOULDBOARDS



STEEL

Boron steel mouldboard extremely wear resistant, for a precise and low power absorption ploughing.

Various models for a working depth ranging from 16 cm to 100 cm. Also available in multi layer steel plate.

([For further information please contact the sales network](#))



SLATTED

Boron steel slatted mouldboard for sticky soils. Excellent crumbling. Various models for a working depth ranging from 26 cm to 50 cm.

Synthetic version available.

([For further information please contact the sales network](#))



SYNTHETIC

Plastic mouldboard for wet and sticky soils without stones. It allows the soils to flow with less effort.

Various models for a working depth ranging from 16 cm to 100 cm.

([For further information please contact the sales network](#))



SCANDIC

Helicoidal mouldboard for a low power absorption ploughing. Specifically designed for the north european markets and for rice fields. Various models for a working depth ranging from 16 cm to 30 cm.

Synthetic version available.

([For further information please contact the sales network](#))

SKIMMERS

Rice field - Synthetic - Steel



EQUIPMENTS



TRASHBOARDS

Available on all the plough bodies, for ploughing without skimmers.

SHARES

High quality boron steel shares, heat treated and wear resistant. MORO shares provide an excellent penetration in any soil.

Available with reversible and interchangeable point.

DISC COULTER

Smooth or scalloped coultter disc, 500 or 580 mm diameter.

Easy to set in every soil condition.

Non-stop version available.

KNIFE COULTER

Available on all the plough bodies

PRECISION JOINT

On request, it is possible to add a precision joint which allows the addition or the removal of the last plough body, making the plough extremely versatile.



SINGLE DEPTH WHEEL

Depth wheel with hydraulic shock absorber, adjustable via turnbuckle. Positioned on the last body and mountable on every plough model.

DUAL DEPTH WHEEL

Adjustable dual depth wheel. Positioned on the penultimate or last body and mountable on every plough model.



TRANSPORT AND DEPTH WHEEL

Depth wheel with hydraulic shock absorber, adjustable via turnbuckle. Positioned on the last body, can be used as a transport wheel.

On 4 furrow ploughs upwards, it may be positioned on the penultimate body.



STANDARD HEADSTOCK

Each MORO plough is equipped with a hydraulic headstock with a double acting reversing cylinder. Vertical tilt can be adjusted independently via 2 turnbuckles.

On request, for the reversing unit it is possible to mount a memory cylinder.

DETACHABLE COUPLING YOKES HEADSTOCK



T SYSTEM[®]
RANSPORT

TRANSPORT SYSTEM HEADSTOCK

Patented and designed by MORO ARATRI, this exclusive headstock is available with the TRANSPORT SYSTEM and it is equipped with a steering axle. During transport, the axle can be unblocked, allowing the plough to act as a tractor trailer.



S FAST
YSTEM

ARTICULATED TOP LINK

Patented and designed by MORO Aratri, the special FAST SYSTEM accessory is available on the TRANSPORT SYSTEM headstock.

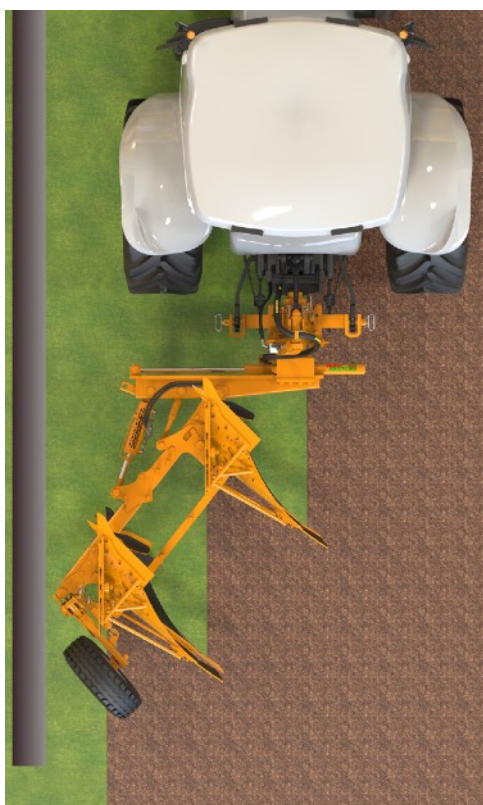
During the conversion from working to transport position, the top link is freed without detaching it from the plough.

SPECIFIC VERSIONS



For specific needs, the 2 and 3 furrow ploughs can be equipped with a hydraulic swift device, which allows a perfect field finishing, even in case of obstacles.

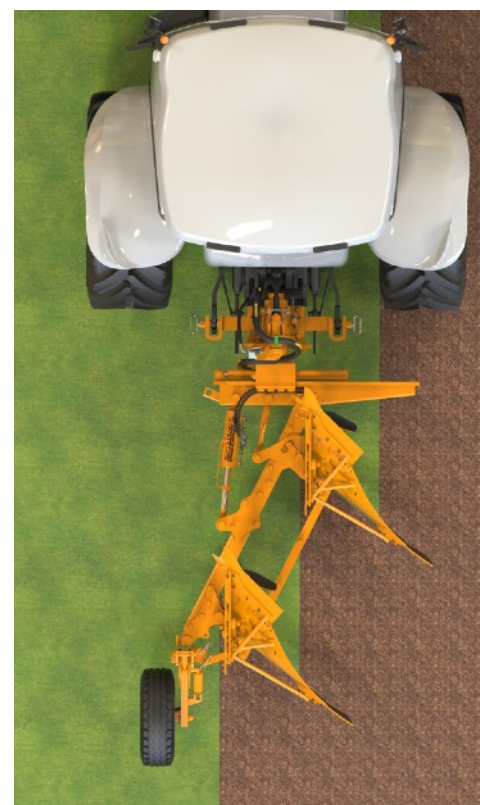
Maximum excursion: 95 cm.



FINISHING

← The WARRIOR plough is equipped with a specific reversible wheel with hydraulic shock absorber and adjustable depth, which can be easily placed in finishing position.

IN FURROW →



TECHNICAL DATA

6 FURROW

W6

MODEL	BODY SPACING cm	WORKING WIDTH cm	WORKING DEPTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
							HP	MAX *
EXA 18A Warrior	100-105	25-70	25-38	79/84	200x120	3000	330-420	450
EXA 16A Warrior	95-10	25-65	20-30	78/83	150x120	2650	270-320	350
EXA 14A Warrior	90-95	25-60	20-30	78	150x120	2300	220-270	300
EXA 12A Warrior	90-95	25-60	20-30	74/79	120x120	2000	190-230	250

5 FURROW

W5

MODEL	BODY SPACING cm	WORKING WIDTH cm	WORKING DEPTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
							HP	MAX *
PNT 20A Warrior	110-120	25-70	40-45	89/94	200x120	2850	340-420	450
PNT 18A Warrior	100-110	25-70	30-42	84/89	200x120	2600	270-350	370
PNT 16A Warrior	95-110	25-70	30-38	84/89	150x120	2300	200-260	280
PNT 14A Warrior	90-105	25-65	25-35	79/84	150x120	2000	170-210	230
PNT 12A Warrior	90-100	25-60	20-30	79	120x120	1750	150-180	190
PNT 10A Warrior	90-95	25-60	20-30	74	120x120	1550	140-150	160

4 FURROW

W4

MODEL	BODY SPACING cm	WORKING WIDTH cm	WORKING DEPTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
							HP	MAX *
QRV 22A Warrior	110-130	25-70	40-50	94	200x200	2600	340-420	450
QRV 20A Warrior	110-120	25-70	40-48	89/94	200x120	2350	280-350	370
QRV 18A Warrior	100-115	25-70	35-45	84/89	200x120	2050	220-280	300
QRV 16A Warrior	100-110	25-70	30-40	84/89	150x120	1850	170-220	230
QRV 14A Warrior	100-110	25-65	25-35	84	150x120	1650	150-180	190
QRV 12A Warrior	90-105	25-65	25-33	84	120x120	1450	130-150	160
QRV 10A Warrior	90-100	25-60	25-33	80	120x120	1300	120-140	150
QRV 8A Warrior	90-95	25-60	22-28	74	120x120	1180	100-130	140

3 FURROW

W3

MODEL	BODY SPACING cm	WORKING WIDTH cm	WORKING DEPTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
							HP	MAX *
TRV 22A Warrior	110-130	30-70	45-60	94	200x200	2500	300-400	420
TRV 20AP Warrior	110-130	25-70	45-55	89/94	200x120	2200	260-320	340
TRV 20A Warrior	110-120	25-70	40-50	89	200x120	2000	230-270	290
TRV 18A Warrior	110-115	25-70	35-45	84/89	200x120	1800	180-230	240
TRV 16A Warrior	100-115	25-70	30-40	89	150x120	1600	150-180	190
TRV 14A Warrior	100-110	25-65	30-35	84	150x120	1400	130-150	160
TRV 12A Warrior	100-110	25-65	25-33	84	120x120	1260	110-130	140
TRV 10A Warrior	95-105	25-60	25-33	80	120x120	1100	100-110	120
TRV 8A Warrior	90-100	25-60	22-28	74	120x120	950	90-100	110

2 FURROW

W2

MODEL	BODY SPACING cm	WORKING WIDTH cm	WORKING DEPTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
							HP	MAX *
BVM 24A Warrior	130-140	30-70	55-65	102	200x200	2150	260-300	350
BVM 22A Warrior	120-140	30-70	50-60	94	200x120	1950	210-260	270
BVM 20AP Warrior	120-130	25-70	50-55	94	200x120	1800	180-210	220
BVM 20A Warrior	120-130	25-70	45-55	94	200x120	1700	150-180	190
BVM 18AP Warrior	120-130	25-70	45-50	94	150x120	1550	130-150	165
BVM 18A Warrior	110-120	25-70	35-45	89	150x120	1400	120-140	150
BVM 16AP Warrior	110-120	25-70	35-45	89	150x120	1250	100-120	130
BVM 16A Warrior	110-120	25-70	30-40	84	150x120	1150	100-110	120
BVM 14A Warrior	100-120	25-65	30-40	84	150x120	1050	90-100	110
BVM 12A Warrior	100-110	25-65	25-30	80	120x120	950	80-90	100
BVM 10A Warrior	90-105	25-60	25-30	80	120x120	900	75-80	90
BVM 8A Warrior	90-100	25-60	22-28	74	120x120	800	70-75	80

The data indicated in this folder are approximate. The models described here can be subjected to modifications without any notice by the manufacturer. The drawings and photos may refer to equipment that is either optional or intended for other countries. Please apply to our Sales Network for any further information.

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