

## CONVER C700 - AMPHITRAX

The Amphitrax pontoon system is designed specifically as substitute undercarriage for mid-sized excavators to carry out work in difficult terrain, where soil is too unstable or where there is too much water for a normal crawler or wheeled excavator to work in.

Amphitrax pontoons transform a normal excavator into a versatile amphibious machine which has the ability to manoeuvre in virtually all areas; Functionality of the excavator can now be used almost anywhere.



The large footprint creates low ground pressure while the track pads of different length ensure good grip. On each pontoon, oil filled and sealed Berco track chains are used with bolted on aluminium and steel track pads. Berco chains and the support rollers are very durable and do not require a lot of maintenance to last, especially compared to commonly used multiple chain systems.

*Amphitrax pontoons are currently available for the 8 ton Takeuchi midi excavator. Other types and models can be used on application.*

### PONTOON CONSTRUCTION

The pontoons are constructed around a reinforced centre section of high-grade construction steel, which incorporate the track tensioner, hydrostatic drive, rollers and track guides.

On either side of this centre section compartmentalized buoyancy tanks are provided. The bottom panel of these tanks are made out of a thicker and more durable steel to withstand external loads imposed on the panel during operation.

The pontoons are equipped with integral foot supports, lifting and lashing eyes and watertight inspection hatches. The mounting points for the superstructure consist of two heavy box sections across the pontoons.



## TRACKS

For the tracks lubricated Berco chains are used, which offer excellent wear resistance, even in the most severe working conditions, because of the high running rail hardness, the low pin and bushing friction wear and sealed oil lubrication.



To limit the total weight of the pontoons and to increase traction in soft surfaces the chains are provided with a mix of narrow aluminium and wide Boron steel track pads.

On the front a track tensioning idler is provided, with on the back a two speed hydrostatic drive motor with a single sprocket. Heavy duty lubricated support rollers and chain guides are provided on the underside to keep the track in line.

The patented hydraulic track width adjustment system helps to limit transport width to less than 3,0m.

## ARM SET

To get the best out of the excavator on Amphitrax pontoons, arm length must be increased in most cases. Both the standard mono-boom and dipper should be lengthened by 1.5 m. On the Amphitrax with a Takeuchi TB285 this results in the following operational reach:

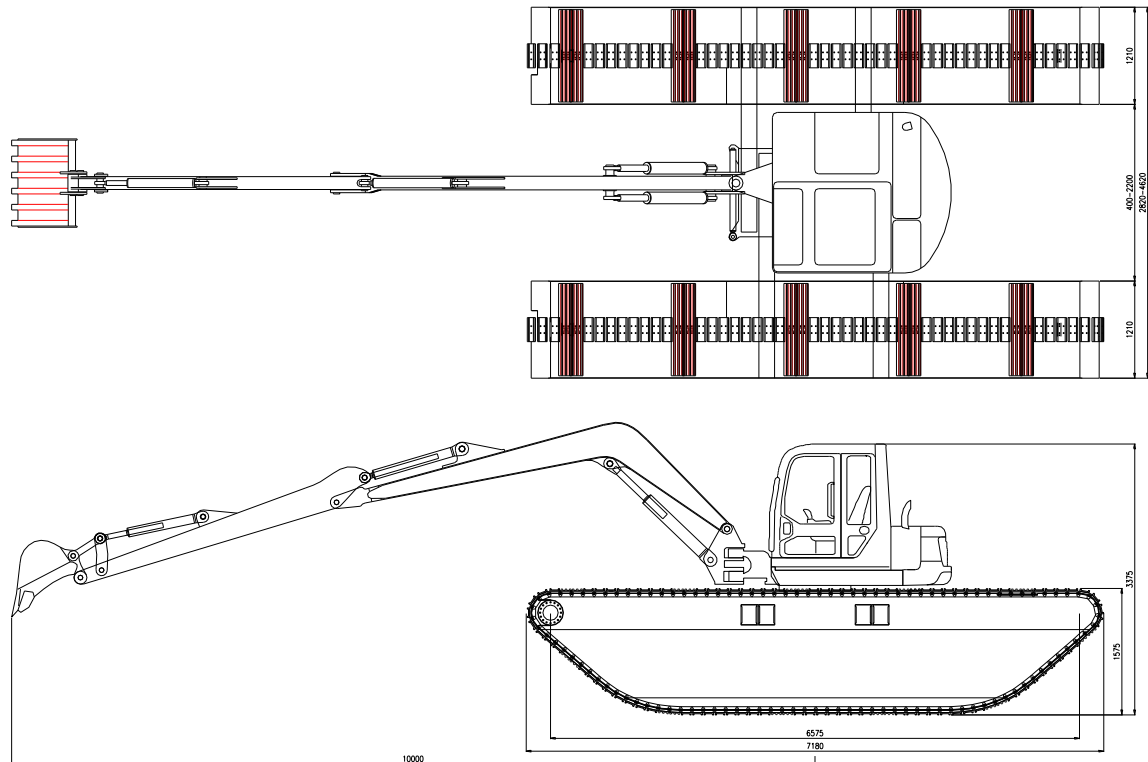


Max. digging radius	10.100 m
Max. digging depth	6.400 m
Max. vertical digging depth	4.100 m
Max. digging height	10.000 m
Max. discharge height	8.200 m
Min. discharge height	2.300 m
Max. vertical digging radius	7.400 m

## BASIC PONTOON DIMENSIONS

L x B x H	7,18 x 1,21 x 1,58 m	
Weight undercarriage	Approx. 11.500 kg	Incl. hydr. width reduction
Hydraulic requirements	100 l/min at 300 bar	2x 1" connection pressure and return
		1x 1/4" leakage connection
Track shoe width	300 mm alu / 1.200mm boron	
Maximum speed	2 / 4 km/hr* (low-/highgear)	* depending on available hydraulics

## AMPHITRAX - TAKEUCHI TB285 LSA



Engine	Yanmar 4TNV98T, 54 kW Tier 3 diesel engine	
Hydraulic system	Pump type	Variable axial piston + gearwheel pumps
Attachment function	Medium flow	Max. 40 ltr/min.
	High flow	Max. 90 ltr/min.
Slewing speed	10.7 rpm	
Tool connection	Std CW10	Hydraulic actuated quick release
L x B x H	9,59 x 2,90 x 3,34 m	Minimum transport dimensions
Working width	2,82 – 4,62 m	Hydraulic extension
Total weight	Approx. 16,5 ton	
Ground pressure	Approx. 160 gr/cm <sup>2</sup>	
Maximum gradeability	30°	
Maximum inclination	25°	
Maximum speed	1 / 5 km/hr	Water / Land

## AMPHITRAX – OPTIONS

### Side pontoons

To improve buoyancy of Amphitrax a set of detachable side pontoons is available. The Amphitrax tracks system is in standard spec provided with integrated mounting points, for a secure and durable connection of these side pontoons.

The side pontoons (LxHxW ~ 6,5 x 1,2 x 1,0m) are constructed out of high grade construction steel and are reinforced on all locations where the pontoons are exposed to external forces.

Each pontoon has an integrated spud tube with locking system for the fitment of a spud pole, integrated steps and lifting lugs.

### Sputpoles

For stabilisation of the Amphitrax-excavator in deeper water up to 5m a set of hydraulically adjustable sputpoles can be supplied. The sputpoles with the hydraulic height adjustment unit can be fitted and locked in the pontoon integrated spud tube. The sputpoles come with the required hydraulic preparations to the base excavator.

### Double thruster unit

For propulsion of the Amphitrax-excavator in deeper water a set of two hydraulic thrusters can be supplied. The thrusters are located on the rear between the Amphitrax-pontoons. Each thruster is connected to the pontoons by means of mechanical and hydraulic quick couplings. To simplify (dis)assembly a lifting eye is provided. The thrusters are controlled by the track control pedals. By means of a function switch valve the operator can switch between tracks and thrusters.

## AMPHITRAX – ATTACHMENTS

### Digger bucket CB080

CW10 connector  
Working width 80 cm  
Capacity 400 ltr  
Weight 195 kg



### Dredging bucket CB150p

CW10 connector  
Perforated steel  
Working width 150 cm  
Capacity 350 ltr  
Weight 165 kg



### **Uprooter CUR200**

CW10 connector  
16 no. Hardox teeth  
Working width 200 cm  
Tooth length 40 cm  
Weight 150 kg



### **Weedrake CWR225**

CW10 connector  
15 no. exchangeable loader forks  
Working width 225 cm  
Tooth length 70 cm  
Weight 135 kg



### **Mowing bucket MXL300**

CW10 connector  
Single acting system  
Hydraulic drive  
Working width 300 cm  
Oil requirements 40 l/min at 150 bar  
Weight 350 kg



Optional: bucket extensions for reed cutting.



*Midi-excavator with arm-extension. Extension not required for the lengthened Amphitrax arms.*

### **Dredgepump with cutter DP150.6**

With CW10 connector

Discharge diameter 6" (150mm)

Max. pressure 30 mWK

Spherical passage 40 mm

Oil requirements 90 l/min at 200 Bar (pump)

Weight 210 kg

Suitable for dredging silt, with the lengthened excavators arm up to more than 7 meters deep.



Pump characteristics as shown below. If other type of excavator must be used , possibility of use of pump is depending on the hydraulic provisions of the excavator.

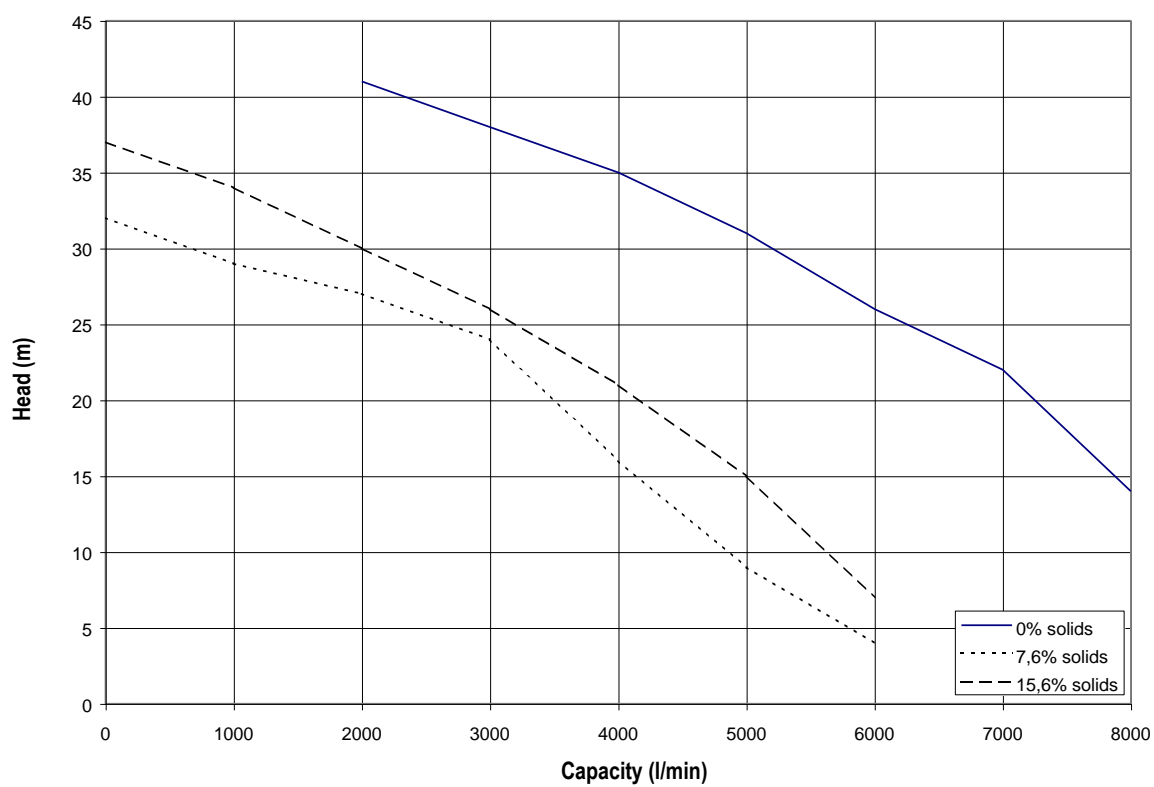
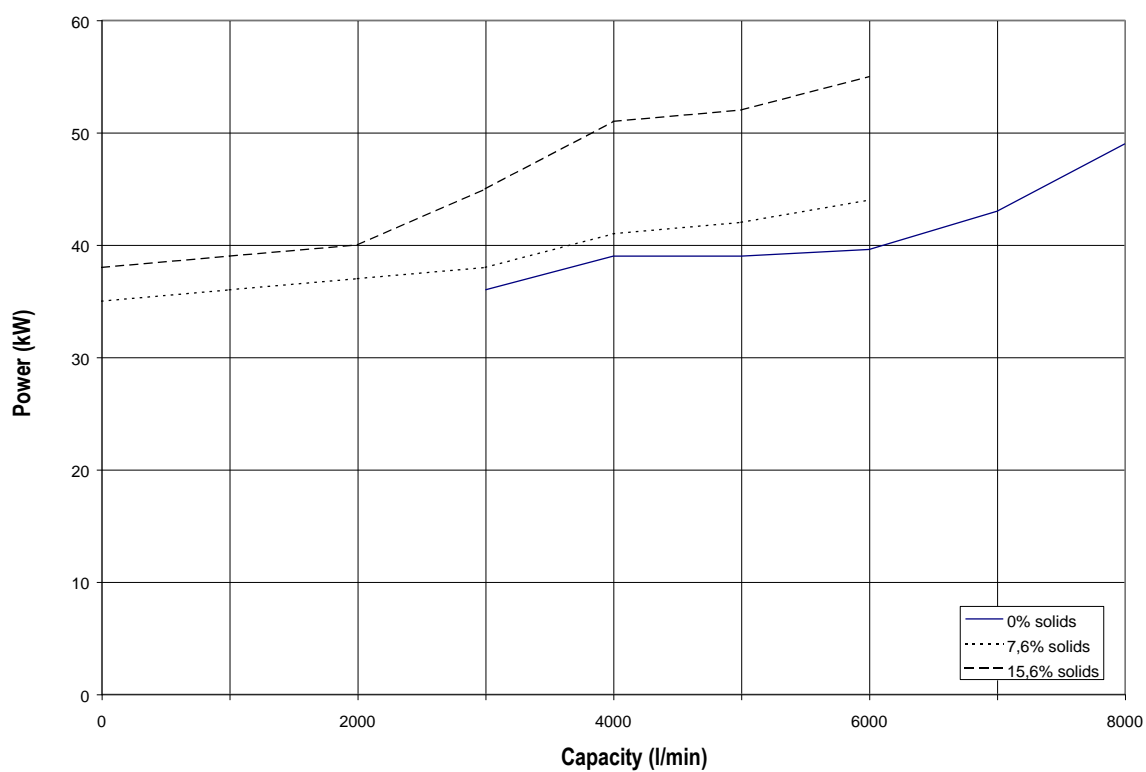
*Depending on the type of excavator, adaptations of the hydraulic/electric system may be required.*

Conver dredge pumps are supplied with a rainbow nozzle as shown on the photo.

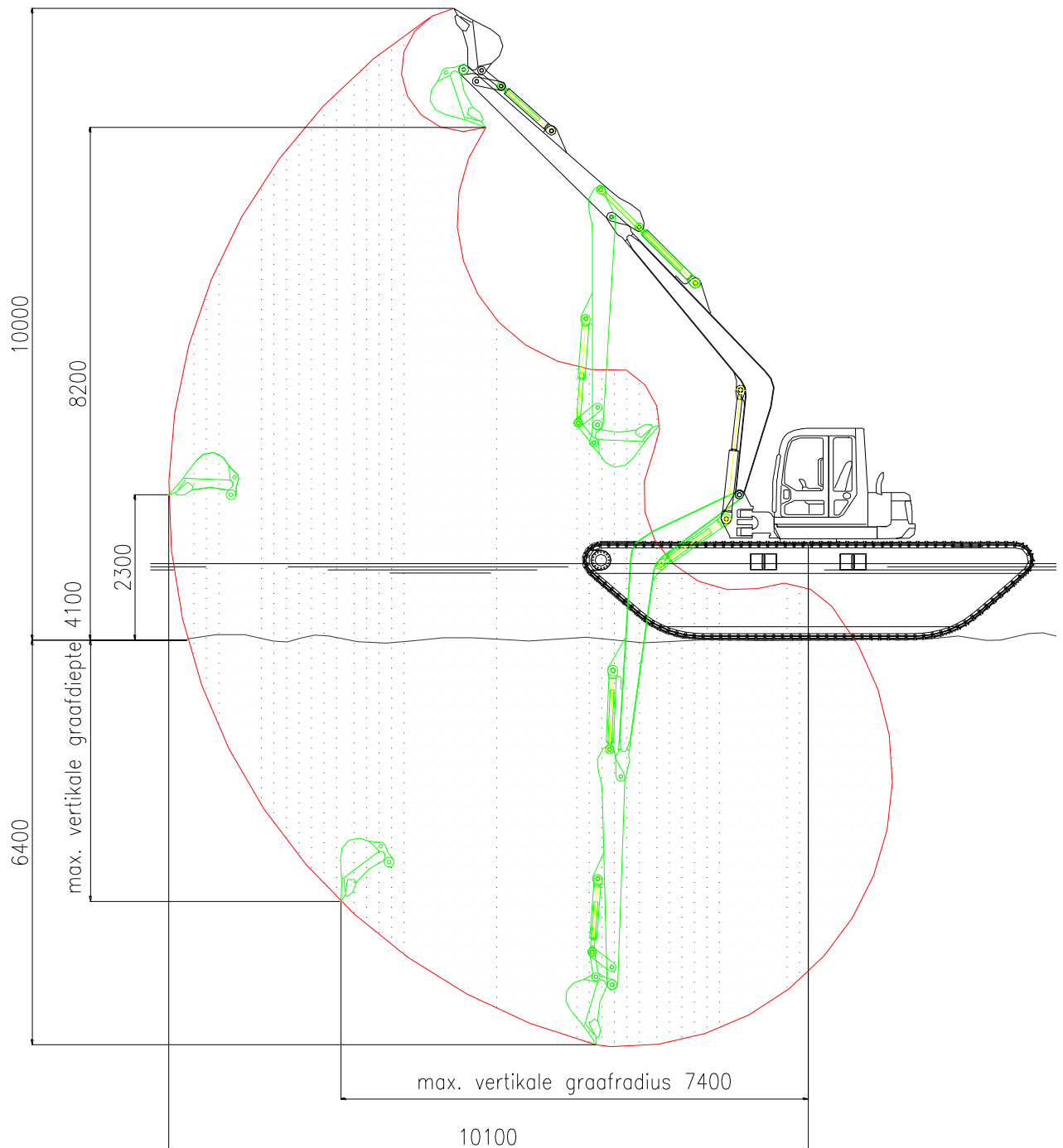
If sediments have to be transported over greater distances, discharge pipes and hoses can be supplied as option. Supports for a flexible discharge pipe alongside of the arm can be provided on request (see below photo).



## Pump characteristics DP150.6



## WORKING DIAGRAM





## SUMMARY TAKEUCHI TB285LSA C MIDI EXCAVATOR



4TNV98T Yanmar engine, 4 - valves per cylinder, turbocharged, 74 hp, Tier 3, low emissions and low noise.

Very spacious ROPS / FOPS cab with heater and radio with fingertip control and additional aux jack.

Deluxe chair, adjustable in weight.

Automatic climate control.

Flashing light and additional support in the cabin.

Sunroof with adjustable sunshade.

Board computer with display, with features including: setting modes and regulate the flow of additional functions.

Fuel economy standard fashion (fuel-saving mode).

Load-sensing axial piston pumps.

One press on the right joystick and the engine goes to a minimal level.

Auxiliary hydraulic functions with proportional control controllable from board computer.

Several functions (working simultaneously) both operate while driving straight forward is possible.

Cylinder cushion in boom, arm and slewing cylinder.

Security valve in boom and dipper cylinders, adjustable load detection.

Refueling pump.

Two speeds. Second set to speed joystick.

Lockable fuel cap.

## PRICES

**Conver C700 Amphitrax** amphibious pontoon set,  
as described in enclosed specifications.

Takeuchi TB285LSA hydraulic excavator (brand new), excl. standard undercarriage, but incl.

- hydraulic conversion of hydrostatic drive system and controls.
- medium flow function for mowing bucket.
- CW10 quick coupling system.

Additional high flow function for dredge pump

Lengthened boom and dipper (2x 1,50m)

Side pontoon set (approx. 6,5x1,2x1,0m)

Sputpoles (support depth 5m)

Set of thrusters, incl. mechanical and hydraulic quick coupling system

### Optional attachments:

Digger bucket CB080

Dredging bucket CB150-perforated

Uprooter CUR200

Weedrake CWR225

Mowing bucket MXL300

Extension frames

Dredgepump DP150.6 \*

*\* high flow attachment function required.*

## TERMS AND CONDITIONS

Prices	: Nett, excl. VAT (0%)
Currency	: EUR (euros)
Validity	: 3 months from date
Delivery	: EXW Giessen (Incoterms2000)
Time of delivery	: In consultation, depending on the moment of order
Payment	: 50% at moment of order, 50% before shipment
Warranty	: 12 months on production errors and material faults, on new components only.
Terms	: All our quotations, all orders placed with us and all contracts concluded with us are subject to the METAALUNIECONDITIONS, filed with the registrar of the District Court of Rotterdam.