

# AssoTrencher IV Mk12

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Mechanical Trencher



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## Mechanical Trencher

AssoTrencher IV' sits at the top of trenchers range and has currently undergone its twelfth upgrade. Its long track record has proven its worth as durable, efficient and long-lasting hard soil and rock trenching machine.

The AssoTrencher IV 12<sup>th</sup> upgrade is designed to cover the need for Post Lay Burial of products in hard seabed with increased production rates and assurance on the burial depth of the cable with the use of a powerful eductor suction system.

The design of the vehicle has incorporated all the advantages found in the previous arrangements of the Assotrencher family and in practice combines the ability to load heavy products (incl. bundled) with small to no slack in bottom-loading configuration, ensures trench cleaning with the use of its two eductor suction systems keeping this way the effectiveness of achieving the burial depth in hard/mixed soil conditions.



## Specifications

	<i>Trenching Configuration</i>	<i>Backfilling Configuration</i>
<b>Max. Length</b>	<b>12.6m</b>	<b>14.6m</b>
<b>Max. Breadth</b>	<b>6.0m</b>	<b>7.4m</b>
<b>Max. Weight</b>	<b>60Te</b>	<b>75Te</b>
<b>Max. Height</b>		<b>7.5m</b>
<b>Depth rating</b>		<b>800m</b>
<b>Cutting Chain Max. Soil Shear Strength</b>		<b>3Mpa</b>
<b>Cutting Wheel Max. Soil Shear Strength</b>		<b>50+MPa</b>
<b>Cutting Chain Max. Trench Depth</b>		<b>2.30m</b>
<b>Cutting Wheel Max. Trench Depth</b>		<b>1.25m</b>
<b>Max. Seafloor Gradient</b>		<b>±15deg</b> (pitch & roll)
<b>Max. Product Diameter</b>		<b>300mm</b>
<b>Total Power</b>		<b>1.560kW</b>
<b>Max. Sea State</b>		<b>Hs 3.0m</b>

## Key Features

- 1.56MW of installed power
- 2.30m cutting chain trench depth capability
- 1.25m cutting wheel trench depth capability
- Wide variety of accessories including:
  - Rear eductor system
  - Mid-eductor system
  - Mouldboards & backfilling eductor
- In-house design
- Fast trenching rates
- Dead-sub automatic release of product
- Power Management System for optimal performance
- Intelligent VFD controls through in house PDU
- Post Lay Burial with minimal slack requirement of laid product
- AHC launching capability
- Assured cable depth in various soil conditions with the use of eductor system
- Combination of jetting/trenching techniques
- Wide soil range capability

## Performance

The vehicle has, in total, 6 x 260kW = 1560kW output, out of which multiple configurations can be selected depending upon project requirements. A typical configuration can be seen below:

- 2x260kW / 3.3kV electric motors driving the trenching tool
- 3x260kW / 3.3kV electric motors driving the three HP water pumps
- 1x260kW / 3.3kV motor driving the hydraulic pumps for the thrusters, the vehicle tracks and the auxiliary hydraulic circuits



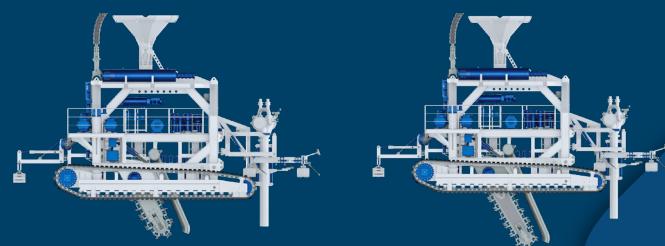
## Trenching System

- 600mm-wide cutting chain (project configurable) fitted in the middle of the vehicle
- 450mm-wide cutting wheel (project configurable) fitted in the middle of the vehicle
- Bottom loading system with monitoring to allow for safe handling of product
- Eductor suction system fitted on the back of the vehicle to remove backfill material
- Eductor suction system fitted on the trenching tool to remove backfill material
- Mouldboards fitted on the back of the vehicle to achieve designated cable cover
- Backfilling eductor for assisting purposes in mouldboards operation



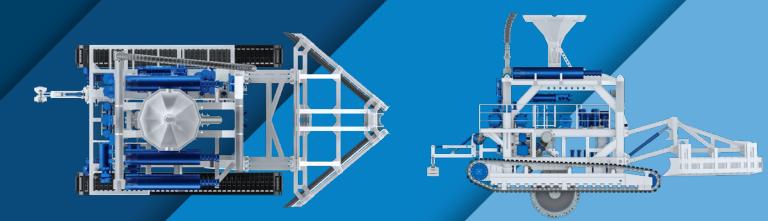
## Sensor Equipment

- Up to 16 x low light cameras
- Up to 16 x LED high intensity fully dimmable lights
- Up to 7 x electric pan/tilt units
- Up to 3 x imaging or profiling sonar
- Up to 3 x Blueview 2D Multi-beam sonar
- 1 x Valeport minilPS sensor
- 1x CSL TOGS/NAV FOG, Octans or Lodestar
- Cable Tracker TSS 350/440 available
- Various cable cutters available



## Vehicle Features

- In house design trenching tool for max efficiency
- In house design hydraulic system
- In house design of water pumps & distribution system
- In house design of electrical power-distribution
- In house design of cameras, lights & telemetry architecture
- In house design of control system
- Deep burial at hard/mixed soil conditions and bedrock
- Wide variety of tracks to ensure best traction/ground pressure ratio
- Supported by the new ASSO design PDUs to allow frequency control on all subsea motors and power management
- Dead-sub auto release system



## Membership - Accreditations



## Disclaimer

The specification details are illustrative for marketing purposes only. Actual equipment may be different as a result of product improvement or other reasons. Specific interface and performance information should be reconfirmed at time of order placement. Specifications are subject to change without any prior notification.

## Contact Information

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