ANCHOR HANDLING AND TOWING SYSTEMS
Huisman, the innovative offshore equipment supplier has developed a range of heavy duty anchor handling and towing systems, providing a greater level of safety, simple shipyard installation, higher functionality and DNV compliance.

OUR COMPANY
Huisman is a global specialist in lifting, drilling and subsea solutions. The privately owned company, founded in 1929, has extensive experience in the design and manufacturing of heavy lifting and handling equipment for the world’s leading offshore contractors. In April 2008, Bodewes Winches was taken over by Huisman Equipment, which added to the know-how and experience in the design of heavy duty winch systems.

OUR WORLDWIDE OPERATIONS
With production facilities in the Netherlands, Czech Republic, China and the recently inaugurated a new production facility in Brazil, with various products under construction including AHT winch packages. The complete cycle of design, engineering, production, commissioning and (load) testing of the equipment is done in-house. Having a quay side enables installation, commissioning and load testing of the equipment on board at our premises, thus providing real turnkey delivery and significantly reducing risks for our clients. Over the lifetime of the equipment Huisman offers its clients support through its worldwide service network. We have service centres located in Rotterdam, Houston, Norway, Perth, Singapore and Rio de Janeiro, able to provide on-board services as well as on-distance troubleshooting.
THE “NEW GENERATION” ANCHOR HANDLING AND TOWING SYSTEM
The new Huisman electric driven anchor handling and towing winches have extended functionality. The new configuration uses proven industry concepts such as water cooled clutches and frequency controlled electric motors.

SAFETY FEATURES
To meet the increasing demands of deep water operations, several features are incorporated to safeguard vessel and crew.

SAFETY FEATURES
- Emergency release for controlled fast line pay-out restoring vessel stability
- Pre-set of maximum permissible tension during critical operations
- Flexible and redundant drive system increases uptime
- Compliant with latest rules & recommendations
- Protection against wire rope breakage due to snatch load protection system
EMERGENCY RELEASE FUNCTION
To assure vessel safety during harsh offshore conditions with the risk of dangerous forces jeopardizing the vessel stability, an emergency release function is integrated in the winch drive train. A water-cooled clutch allows instant free running of the winch drums, with the possibility to regain control over the wire or chain when stability is regained. This feature complies with the latest recommendations of the International Maritime Organization (IMO) with regard to response time and residual line tension.

MAXIMIZE PERMISSIBLE LINE TENSION BY TORQUE LIMITER
The winch system can be set to a maximum permissible line tension. This set-point is determined prior to the start of the offshore operation. The set value could depend on for example the line’s loading characteristics. The water-cooled clutch will slip when the pre-set torque value is exceeded and as a result the winch will pay-out wire.

IMPROVED SNATCH LOAD PROTECTION
The water cooled clutch protects the winch system against snatch loads that may occur during anchor handling, towing or ploughing operations. Peak loads are better absorbed by almost a direct link between the drum and water cooled clutch that is subsequently linked to the drive system. Therefore, shock loads are basically directly absorbed by the clutch. Also, the clutch does not have a stroke limitation in case of a snatch load.
OPERATIONAL FEATURES

High speed pay-out
Saving valuable vessel time is achieved in high speed pay-out, where the water-cooled clutch is set to slip in a controlled way.

Accurate winch control
Using high-precision electric drives in combination with direct load measurement in the torque flange, operators are offered full winch control in all operating modes.

Fuel efficient, environmentally friendly
Considerable saves fuel and subsequently emissions. Electric drive systems present up to 30% higher efficiency.

OPERATIONAL FEATURES

- High speed pay-out saving operational time
- Accurate winch control maximizing system performance
- Fuel efficiency and low emissions and lower operational costs
- No vibrations and low noise level
- Less fuel consumption and less maintenance compared to low pressure hydraulics
- Well proven user friendly control interface
EASIER INSTALLATION
Design of the equipment is carried out with low shipyard installation costs and risk in mind. The pinned-type foundation allows for a quick and easy installation sequence without the need for line-up and under grouting of winch supports. The electric drives eliminate requirements for heavy low pressure hydraulic piping, resulting in months of extra installation time.

WINCH RANGE
Our current range of anchor handling and towing winches are DNV and ABS compliant and cover a wide range of line pull. Designs can be tailored to client requirements.
<table>
<thead>
<tr>
<th>Winch Type</th>
<th>Drum type</th>
<th>No.</th>
<th>Pull 1st layer Dynamic Brake 1st layer (mt @ m/min)</th>
<th>Holding 1st layer (mt)</th>
<th>Wire length (m)</th>
<th>Wire size (mm)</th>
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<tr>
<td>200mt AHT winch Double drum, waterfall</td>
<td>Anchor Handling drum</td>
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<td>200 @ 15 50-200 @ 0-200</td>
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