USTAC AUTOLINE

A better way to fish

50 years of experience in developing, producing, testing, and maintaining reliable and efficient equipment for our customers - when quality counts

Mustad Autoline Systems automated longline equipment for demersal fisheries

Mustad Autoline develops and supplies automated longline equipment to the world's line fishing fleet

Mustad Autoline is the world's leading supplier of automated longline systems and serves more than 90% of the demersal autoline fishing fleets. For over five decades since our founding in the 1970's, Mustad Autoline has continuously developed new and innovative solutions enabling fleets to bring more fish to market.

We support and promote all sustainable fisheries

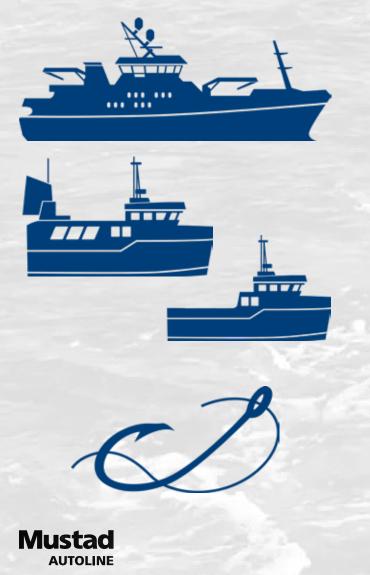
Longlining is Mustad Autoline's core business and as a company we support all sustainable fisheries, the resources of the ocean are after all the most sustainable protein source in the world. We intend to use our expertise, knowledge and technology to promote sustainable fisheries on a global scale.

The features of Mustad Autoline machines and technology

A Mustad Autoline system stores the hooks and line on magazines. The size and quantity of the magazines vary depending on the vessel's size and needs. After the buoy line and anchor have been deployed, the swivelline and hooks are pulled through the automatic baiting machine at a rate dependent on the vessel's speed. The most advanced baiting machine can deploy up to 6 hooks per second at a baiting percentage averaging 95 – 97%.

After soaking time the hauling process begins. The hooks and line are pulled over a roller where a crewmember helps the fish come on board, checking gear and controlling the hauling speed. Subsequently the hooks and line continue through the hook cleaner and line hauler before being passed in the HookSeparator to be loaded onto the magazines. The crew will then make sure that the hooks and line are properly hung and stored. At this time snoods, hooks and swivels are replaced as needed. The gear is now ready to be set again.

The hauling process takes 80 – 85% of the time while the baiting and setting process is much faster using an autobaiting system.



Our customers

The Mustad Autoline System is delivered to the world's most modern and efficient freezer longliners. Customized for vessels with the ability to set and haul up to 80 000 hooks per day.

With our latest developments, Mustad Autoline continues to be the leading choice for longliners worldwide.

Flexible solutions

We carry a wide range of models and can fit efficient and flexible solutions on vessels ranging from approx. 33ft in shore vessels to 200ft freezer longliners with hook capacity ranging from 3,000 hooks to 80,000 respectively.

Contact us for free advice

We tailor solutions adapted to your vessel and draw proposals for deck arrangements for free. Please contact us for further information. mail@mustadautoline.com

Purpose made hooks for Mustad Autoline Systems

Mustad EZ baiter and Circle hooks are strictly made to Mustad Autolines specifications for optimal performance with our systems.

Precision baiting, sharpness, strength, flexibility and corrosion resistance are key factors in making the best suited hooks for Autolining.

Mustad Autoline distributes hooks for commercial fishing produced by O. Mustad & Son AS.

MUSTAD AUTOLINE SYSTEMS

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Service and training

Consumables

- discover the benefits:

more quality fish to market optimal productivity stable and durable operations precise and adjustable bait consumption strong service and support team developed and manufactured in Norway with care for the environment

- A better way to fish!



24-25

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AUTOLINE

All-electric technology for autolining

Designed for better operational capabilities and a climate-neutral future

Introducing the new Mustad Autoline E-Line System, our new line of all-electric components for autolining. Developed and manufactured in Norway. Duly tested in actual operation.

V. ii

Discover the benefits

Intelligent interaction Less energy consumption Less noise pollution Increased productivity More quality fish to market Improved operational capabilities Stable and durable operations Strong service and support team Developed and manufactured in Norway

With care for the environment

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Mustad C



Control cabinet

Intelligent interaction

All components are connected and synchronized to ensure continuous and optimal operations of the system

PLC based control system

- Live data monitoring to bridge control of temperature, load, error warning etc.
- Data connected to a Mustad Autoline Technician to enable review of any errors or issues that may arise
- Predictive maintenance will be possible based on machine learning on accumulated data
- Data diagnostics to provide accurate reasons to why a part malfunctions

Adaptive control system

The autonomous reaction to the vessel's movements results in more accurate tension control and tighter lines when hauling even in rough sea

- Lower risk of losing fish when hauling
- Lower risk of breakage and wear and tear of the line

Time and space saving installation compared to current system

With consideration for the environment

No hydraulic oil

No hydraulic oil reduce risk of contamination Zero hydraulic vibration – less noise pollution - Good for hearing health and safety -Less interference with external environ-

ment

Reduced energy consumption – less carbon footprint

Effect comparison hydraulic versus electric hauling unit shows a remarkably reduction of energy consumption. Up to 60% with load and 90% with no load compared to current system.

- A better way to fish



Precision baiting and high baiting percentage is key to success!



AutoBaiters Precision baiting

The Mustad Autoline baiting machines automatically cuts the bait at a preset size and baits the hooks with precision.

The baitfish is placed on a spiked conveyor chain that feeds bait into the machine. When the hook is pulled through the machine, the knife is triggered and a piece of bait is cut at a pre-set size (26mm – 32mm). The hook penetrates the bait twice before it is shot over the stern.

The Mustad Autoline baiting machines are designed to work with both manual, hydraulic and electric MagPacker systems for storage of hooks and line.

It requires little space thanks to the compact design, and includes an integrated waste collector.

The machine can operate with circle hooks from size 12/0 to 14/0 - both offset and straight, and EZ/J-hooks ranging from size 12/0 to 15/0.

MA BM 6000 - SuperBaiter

"Performance without compromise". Each detail is designed to make the baiting process even more accurate at high speed and still simple to operate. The MA BM 6000 SuperBaiter automatically cuts the bait at a pre-set size and baits the hooks consistently at a speed of up to 360 hooks per minute.

Key Features

Setting speed	up to 6 hooks /sec
Weight	380kg (838 lbs)
Power supply	Servo electric
Height	Adjustable 1550 - 2300 mm
With	1519 + 973 mm
Length	1807 mm

Service controller Sinamics System

- Touch panel with easy operation, error codes shows in the display
- "Heavy Duty" function for increased knife force
- Possibility to pre-program baiting of every second hook up to every tenth hook

The baiting machine can be supplied with Mustad LineSetter and Mustad LineController.

Upgrade of old SuperBaiter is possible. Please contact us for further information.

MA BM 3000 - AutoBaiter

Designed to work with both manual and hydraulic MagPacker, Cross ship rails and HandyMag storage system. It requires little space thanks to the compact design.

Key Features

Setting speed Weight Oil flow Power supply Height With Length 3 - 4 hooks/sec 140 kg / 311 lbs Rate 16/28 l/min Hydraulic Adjustable 1600-1800 mm 770 mm 1370 mm



The main function of the HookSeparator is to separate the hooks from the main line and guide them onto the storage magazines. The operation is done automatically during the hauling prosess when the line is hauled onboard. The HookSeparator is also a slack taker keeping tension on the line coming from the main hauler. Delivered with optional waterjets to clean the hooks and line. In addition, the vibration on the swivels caused by the water jet will also ease the un-twisting of snoods from the mainline to ensure maximum hook catch rate. designed to work with all Mustad Autoline storage systems.

MA HS 2020 E-Line

Key Features Weight Height Hauling Power Hauling Speed Sheave Diameter Power Supply Hook type

250 kg / 551 lbs Adjustable 1950 - 2250 mm Adjustable 0-100 m/min 328 ft/min Outer diam. 440 mm All-electric Universa

300 kg / 660 lbs Adjustable

Hydraulic 1910 mm

Universal

0-100 m/min 328 ft/min

Outer diam. 440 mm

16 l / min / 4,2 gl / min

MA HS 2000-03

Key Features Weight Hauling Power Hauling Speed Sheave Diameter Oil Flow Rate Power Supply Height Hook type

MA HS 2000-02

Key Features Weight Hauling Power Hauling Speed Sheave Diameter Oil Flow Rate Hook type Power Supply Height Hook type

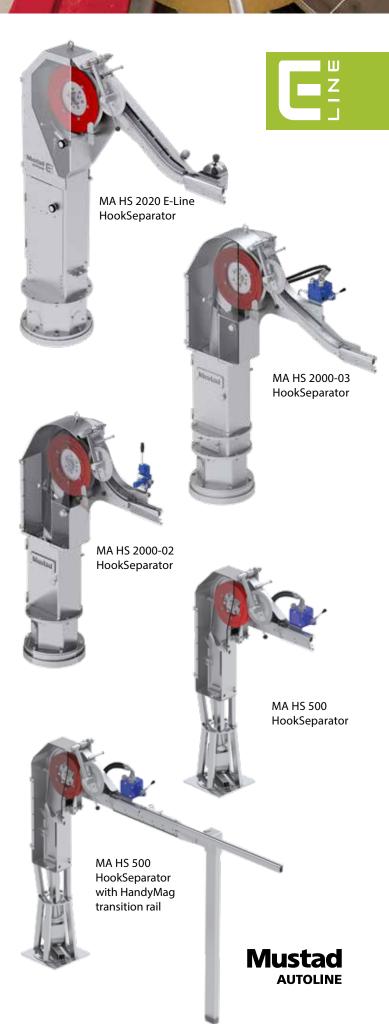
300 kg / 660 lbs Adjustable 0-100 m /min 328 ft/min Outer diam. 440 mm 16 l / min / 4,2 gl / min Universal Hydraulic 1760mm Universal

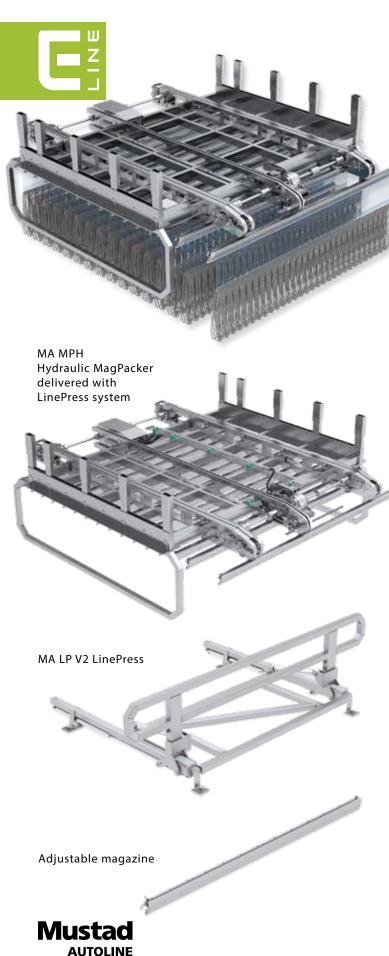
MA HS 500

A light weight HookSeparator for automatic re-racking of hooks and line. Designed to work with the Mustad Autoline Coastal System and works perfectly with both manual MagPacker and HandyMag storage magazines.

Key Features

Weight Hauling Power Hauling Speed Sheave Diameter Oil Flow Rate Power Supply Line diameter Hook type 120 kg / 265 lbs Adjustable Recommended 0-60 m/min Outer diam.315 mm 16 l / min Hydraulic 5,5 mm - 9 mm EZ/J-hooks 11/0 - 12/0, EZ 40 000





Storage of hooks and line Magpacker

Compact and functional storage of magazines loaded with hooks and line, tailored to available space on board the vessel.

MA MP xx Electric MagPacker system

The new generation MagPacker is an all-electric driven systme for automatic handling and storage of magazines with hooks and line. Made of heavy-duty stainless steel and designed to reduce manual labour and increase safety and efficiency on board.

MA MPH - Hydraulic MagPacker system

The hydraulic operated MagPacker system for automatic handling and storage of hooks and line is made of heavy-duty stainless steel and is designed to reduce manual labour and increase safety and efficiency. To ensure compact storage of lines a LinePress system is standard equipment on a MA MPH MagPacker storage system.

Key Features

Weight example (approx.) without valves

1950 kg / 4300 lbs 2050 kg / 4519 lbs 2150 kg / 4740 lbs Lenght of magazines - incl. 20 empty magazines/ 3 m
- incl. 20 empty magazines/ 3,5 m
- incl. 20 empty magazines/ 4 m
3 - 3,5 - 4 m

MA LP V2 - LinePress

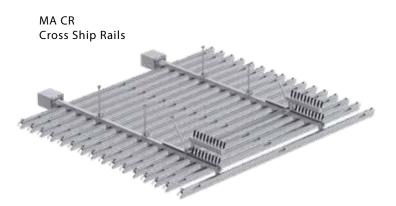
The hydraulic MagPacker system is delivered with a line press as standard equipment. The line press keeps the rest of the line in place when setting and hauling to give room for the hooks and line sliding on the front magazine. Also, the line press act as a security installation to prevent great movements of the heavy line during bad weather.

Storage magazines

The magazines are made of aluminium and stainless steel, with complete sliding rails, inspection slits and hatches for simple mounting of hooks and snoods. The adjustable magazines can easily be adapted to different hook types and sizes by adjusting the top rail.

Key Features Weight of each magazine 7,1 kg/ per meter Lenght 2 - 2,5 - 3 - 3,5 - 4 m

curity installation to preven during bad weather.





MA HM 150 HandyMag storage rack



MA CR - Cross ship rails

Robust cross ship rails with magazine trolleys designed for manual handling and storage of magazines with hooks and line. the magazines are mounted to trolleys in transverse tracks and are pushed manualy to setting or hauling position.

Delivered with 110 < = 7mm ,125 < = 9 mm ,160 < = 11mm distance between the magazines.

Key Features

Weight examples of clamps, profile rails and magazines:8 mag. á 3.5 m270 kg16 mag. á 3.5 m535 kgLength of magazines2 - 2,5 - 3 - 3,5 - 4 m

MA MPM - Manual MagPacker

Designed especially with regards to safety and functionality on board. The MagPacker is a strong stainless steel rack keeping the heavy magazines loaded with hooks and line in place.

The magazines are moved in position for setting or hauling by a simple hand maneuver. Empty magazines are pushed into a temporary storage position above the rack awaiting hauling operation.

Delivered with 110 < = 7mm ,125 < = 9 mm ,160 < = 11mm distance between the magazines.

Key Features

Weight example Length of magazines 220 kg / 489 lbs (incl. 10 empty magazines/3m) 2 - 2,5 - 3 - 3,5 - 4 m

MA HM 150 - HandyMag storage rack

The Mustad Autoline HandyMag storage rack is designed to fit on smaller vessels, from approx. 30 feet and above. The storage unit is flexible and is tailored according to the space available on board. Standard length of magazine is 1m (40 inch.)

HandyMag storage magazines are customized to fit the following hook types: Mustad EZ baiter (J-hooks) 11/0 - 14/0, Mustad #40 000 (semi circle / semi EZ/J-hook) and Mustad Circle hook 12/0-15/0 both offset and straight.

Key Features Weight of rack

Lenght of magazines

85 kg / 187 lbs (incl. 10 empty magazines/1m) 1 m

Number of hooks per meter Please note that quantity of hooks stated in quotes is an estima Quantity per meter will always depend on thickness, age and qual of the hooks and line. Consequently these given numbers are



MA HH 3200 with RotoCleaner



Hauling stations

An autoline vessel spends about 80% of the time on hauling the line. Efficient hauling is key to increased profit.

MA HH 4000 E-LINE All-electric hauler

Our premium all-electric hauling station is equiped with a PLC based adaptive control system. Intelligent interaction provides responsive and accurate tension control. The instantaneous reaction to the vessel's movements allows even smoother hauling of the line and may reduce loss of large fish during the hauling process and lowers the risk of breakage and wear and tear of the line.

The large diameter of the sheaves provides good grip of the line and is yet another measure to reduce wear and tear of both sheaves and lines.

Key Fetures

F

Weight	1110 kg / 2447 lbs
Length	2020 mm (incl. HookCleaner)
Width	1306 mm
Height	1500 - 1800 mm (adjustable)
Hauling Power	2000 kg / 4400 lbs
Hauling Speed	150 m/min / 500 ft/min
Sheave Diameter	700 mm
Power Supply	Electric synchronous servo motor
Power demand	32 amp / 36KW

MA HH 3200 - SuperHauler

Our premium hydraulic line hauler. The large sheaves reduce wear and tear on the line while also significantly improving grip of the line. The hauler is directly powered by a radial piston motor with a stainless steel shaft.

Key Features

Weight	1099 kg / 2423 lbs
Length	1883 mm (incl. HookCleaner)
Width	1434/1233 mm (with/without LineRetriv-
er)	
Height	2327 - 1827 mm (adjustable)
Hauling Power	1700 kg / 3750 lbs
Hauling Speed	150 m/min / 500 ft/min
Sheave Diameter	600 mm
Oil Flow Rate	100 l/min / 26,4 gal/min
Power Supply	Hydraulic

The recommended solution is a complete hauling station with SuperHauler H3200, RotoCleaner, LineRetriever and computerized LineController.

The hauling unit can also be supplied as a stand-alone unit, and controlled manually by a valve at the rail.

With a LineController system the skipper takes control of the hauling process and is able to monitor the power and speed of the hauler from a touchscreen in the wheelhouse. The LineRe-triever is synchronized with the line hauler and keeps constant tension on the line.









MA HV 50 Rail mounted hauler

MA HV 200

A robust hauler delivered with rail roller and optional hook cleaner. A set of magnets guides the hooks to the back of the sheaves., an appreciated safety benefit.

The rail roller, with Ø 219,1 / 9" and roller bearing, can be adjusted in an angle up to 120°. The rail roller section is hinged, and may be tilted inward when not in use.

Key Features

Weight Height/ lenght x width Hauling Power Hauling Speed Sheave Diameter Oil Flow Rate Power Supply Line diameter Hook cleaner Approx. 430 kg / 948 lbs 1650 - 1740 mm / 2570 x 1980 mm 550 kg / 1213 lbs (720 kg / 1587 lbs max.) 123 m / min 400 mm outer diam. 54 l / min Hydraulic 3,5 - 11,5 mm 4 rotating brushes or 3x3 fixed brushes

MA HV 100

A light hauler developed as part of the Mustad Autoline Coastal System. Can also be used as a stand-alone hauling unit. Devliered complete with hook cleaner and railroller. The rail roller comprise three separate rolls: L400 x Ø60mm. It is hinged, and may be tilted inward when not in use.

Key Features

Weight Height / lenght Hauling Power

Hauling Speed Sheave Diameter Oil Flow Rate Power Supply Line diameter Alternativ hook cleaners 240 - 310 kg / 529 - 683 lbs 1650 - 1770 mm / 2480 - 1980 mm 495kg / 1091lbs (normal) (660 kg / 1455 lbs max.) 123 m/min 400 mm outer diam. 43 l / min. Hydraulic 5,5 - 9,5 m 4 rotating brushes or 2 rotating brushes or 2x2 fixed brushes

MA HV 50

A compact rail mounted hauler suited to the hand baiting market, but is also compatible with Mustad Autoline systems.

Key Features

Weight Height / lenght Hauling Speed Sheave Diameter Oil Flow Rate Power Supply Line diameter Hook cleaner 200 kg / 440 lbs 805 mm from rail / 2028 mm up to 130m /min at 431 /min 400 mm outer diam. 43 l /min Hydraulic up to 7,5 mm multi & mono 2 rotating brushes or 2 fixed brushes

A better way to fish



MA HCE 400 E-LINE RotoCleaner with 4x rotating brushes





MA HC 200 RotoCleaner with 2x rotating brushes





MA HC 100 HookCleaner with 6x fixed brushes





HookCleaners

Optimal cleaning of hooks and line increases the productivity, the life span of the hooks and line and improves the functionality of the hook separator.

When hauling the line the hooks and line pass through an integrated "fish-releaser" and are further pulled through and cleaned by brushes combined with water jets before the hooks are separated from the line in the HookSeparator.

Our hook cleaners can easily be fitted to most haulers, be low or high pressure.

MA HCE 400 E-LINE All-electric RotoCleaner

Our premium all-electric RotoCleaner is designed to work in perfect interaction with our Mustad Autoline E-Line system and PLC based adaptive control system.

Each of the four brushes is driven by an independent electric motor with external bearings to ensure reliable operation. The new design makes it easy to change brushes even during operation. In addition, the brushes are longer and move vertically to utilize the entire brush which extends the service life of each brush.

Power Supply Electric synchronous servo motor

MA HC 200 RotoCleaner

The hooks and line pass through an integrated "fish-releaser" and are cleaned by four rotating brushes combined with water jets. Hydraulic motors are synchronised with both main hauler and hook separator, stopping and starting accordingly. The hook cleaner is opened and closed by a hydraulic piston controlled by a strategically placed valve. Hydraulic power is supplied from the same power source serving the hook separator and line retriever.

The RotoCleaner operates smoothly to as low as 20 rpm on the brushes. This prevents unnecessary wear on both the line and the brushes.

Key Features Weight Oil Flow Rate Power Supply MA HC 200 160 kg / 353 lbs 2 l/min (0.5 gl/min) Hydr. 12,5 ccm, 2 pcs MA HC 100 150 kg / 330 lbs

MA HC 100 Standard HookCleaner

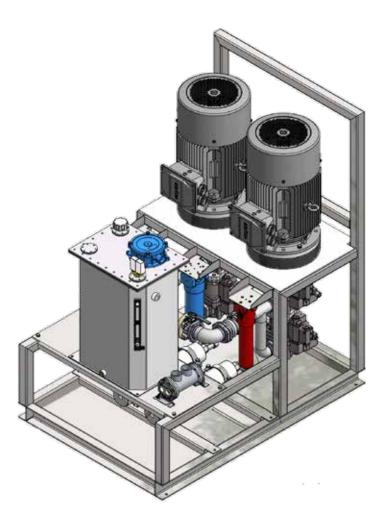
The hooks and line pass through an integrated "fish releaser" and are cleaned by six fixed brushes combined with water jets. The brushes can be turned in four directions, and the brush spacing is adjustable. This unit is equipped with an open and closing mechanism with automatic locking function.





Optional monitor in a sealed enclosure installed close to the baiting machine.

A touch screen is placed in the wheelhouse.



LineController - Hydraulics

The LineController is a computer-based control and data storage system designed for autolining with hydraulic system. The system consists of software, sensors, hardware and touch screen monitors for easy operation. The system can also be operated by tablets via Teamviewer.

Power supply: 230V (115V/ups and power adapter)

Following data is automatically stored in the LineController:

- Trip number
- Baiting percentageCatch
- Number of lines Setting time
- Catch rate per hook
- Hauling time
- Depth
- Number of hooks set Position GPS

Dependant on internet access you can also:

- Receive support by a Mustad Autoline technician
- Receive remote troubleshooting

The system has the capacity to monitor up to two Autoline H3200 hauling stations and one baiting machine, SuperBaiter or Mark III.

Expandable system

LineController is available in either baiting or hauling versions or as a full version that combines the two and adds database functionality. Data regarding position, depth plot, number of hooks, baiting percentage and more will be stored automatically in the database. You can at any time upgrade from baiting or hauling version to the full version of LineController.

Mustad Autoline HPU 30KW

HPU, Hydraulic Power Unit, is the heart of the Mustad Autoline Hydraulic system. A so called parallel system is a more robust solution compared to a serial system where the components are set up in a line. Our HPU is 2x30 kW.

Reduced oil consumption

The cyclone tank separates air from oil, halves the need of buffer oil and lower the oil consumption compared to a traditional tank. Sensors are measuring the water content in the oil, and warns if the level exceeds a pre-defined limit.

Optimal temperature during operation

A flow control on the water cooler adjusts the temperature and keeps stable temperature during operation.

Filter guard

Filter status, and warning when the filter should be replaced can be integrated in the LineController system.

Noise cancelling

Features for vibration cancelling are available to reduce noise pollution.





- Live information Intelligent interaction Tighter lines when hauling
- Increased productivity
- More quality fish to market

PLC Controller system E-Line

The PLC-based control center of Mustad Autoline E-Line system is designed for optimal operations and surveillance of the system onboard.

Live data available through an app



Flexible and stable system

The control system is based on PLC (Programmable logic controller) technology, and is gathered in one cabinet onboard. The system creates a network to the machines and collects data from the different electric servo drives. There are no limits to the number of HMI-touch screens or PCs to be connected. If a PC or an HMI panel stops working, the PLC will continue to work and another unit can continue the operations.

Intelligent interaction

The baiting macine, the magpacker, the hook separator and the hauling unit are all connected and synchronized through the control system to ensure continuous and optimal operations. The line retriever adjusts the speed to the hauling speed, or the hauling unit may stop if the hook separator stops and a warning is displayed on the bridge.

Live information and predictive maintenance

Important information such as error codes, temperatures, hauling speed, hauling power, baiting percentage etc. is displayed through an app and allows those who get access, like the engineers, shipowners and Mustad Autoline service technicians to monitor the system.

The program leverages the data collection to make it possible to predict and uncover when a worn part should be replaced or an equipment failure might occur so that maintenance can be implemented. A warning comes in cases of major irregularities and necessary adjustments can be made immediately.

Tighter lines when hauling

The adaptive control system and immeidate response time allows an autonomous reaction to the vessel's movements, an important feature for accurate tension control and tighter lines when hauling even in rough sea.

1200 mm

Control cabi



PLC Controller system Coastal

Avoid line breaches and increase hauling efficiency. The control system monitors and controls the accurate baiting percentage, line pull and speed and works perfect with a Mustad Autoline coastal system.

Live data available - take control and get the most out of your system

Essential information such as the hauling speed, the hauling power and the baiting percentage are displayed and gives an exact picture and full control of the operations.

Compact and flexible system

The system is based on PLC technology (Programmable Logic Control). It is a compact unit collecting and processing data received from pulse and speed sensors in the setting and hauling units.

The basic package consists of:

- Cabinet/IP65 with PLC
- HMI touch display
- On/off Switch
- Termal switch
- Heating element
- Safety switch (2x6A)
- Terminal

Key Features:

- Power supply
 - 230VAC or 24VDC Size of cabinet 280 mm x 380 mm x 130 mm
- Cabinet standard
- IP65

The PLC Control System is connected to the control valves for the meassurement of both speed and pressure.

The Cabinet IP65 (International Standard) can be placed on deck or inside the wheelhouse.

The display in the basic package is mounted on the cabinet. it is possible to connect several monitors to the system. Ordered as an option.

The Mustad Autoline hauling stations HV100 and HV200 have both got a built-in speed sensor to be connected directly to the PLC controller system via a junction box. The Mustad Autoline baitingmachin has built-in sensors for calculation of the baiting percentage.

The PLC Control System is tailor made for the Mustad Autoline systems but is also compatible with other hydraulique haulig systems.

Expandable system

You may at any time upgrade and get more valuable information from your Controller system.

- Number of hooks set
- Number of fish cought
- Additional monitors



Example of deck arrangement of a Mustad Autoline E-Line system on board a freezer longliner

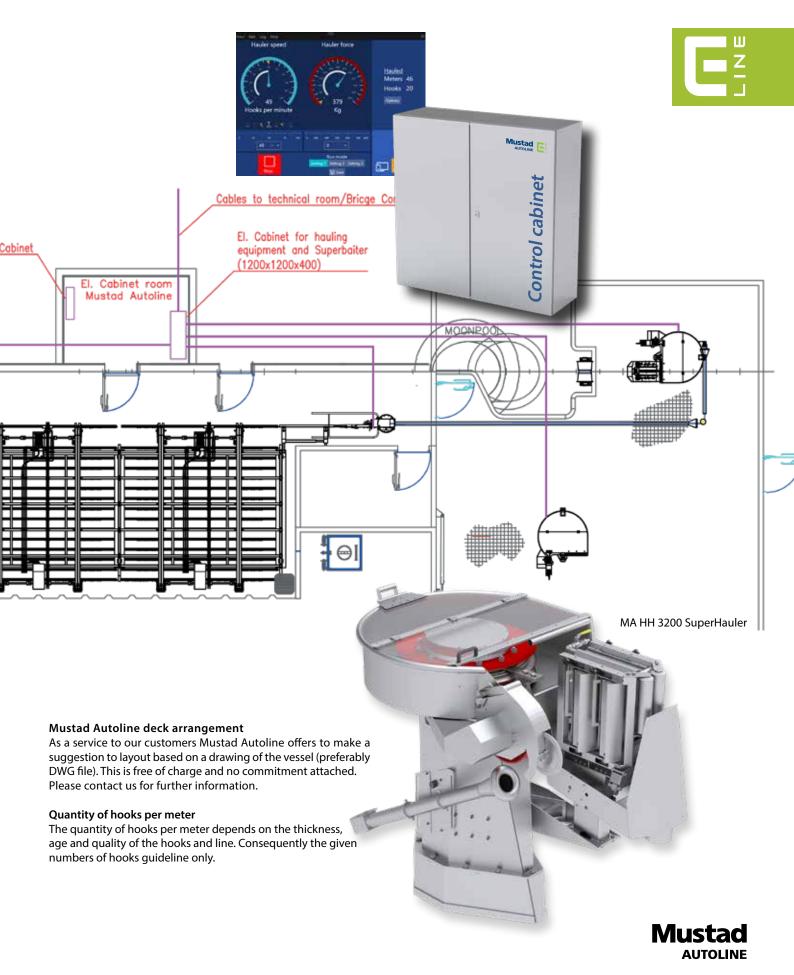
MA MPH E-LINE MagPacker storage system for hooks and line - on the drawing are 48 magazines carrying approx. 50 000 hooks

MA HS 2020 E-Line HookSeparator

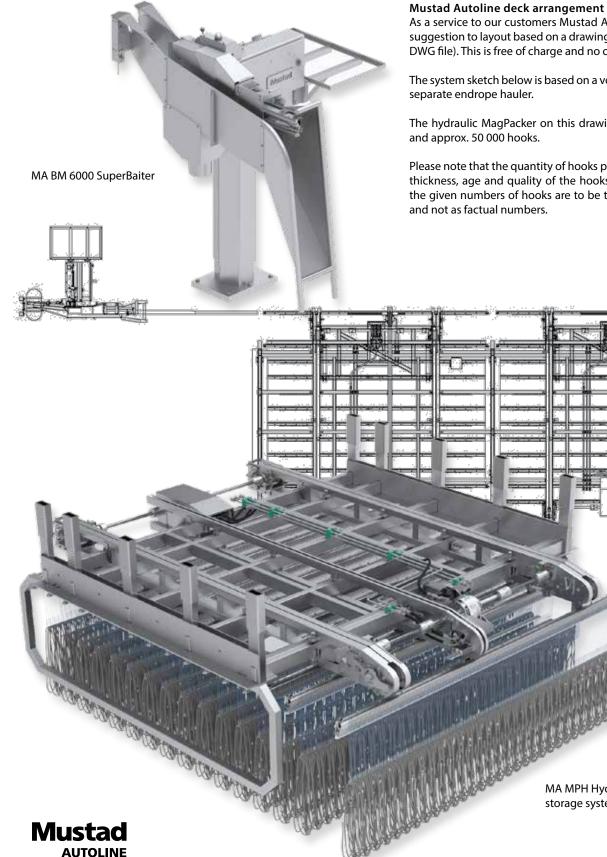
MagPacker



MA BM 6000 SuperBaiter



Example of deck arrangement of a Mustad Autoline hydraulic system on board a freezer longliner



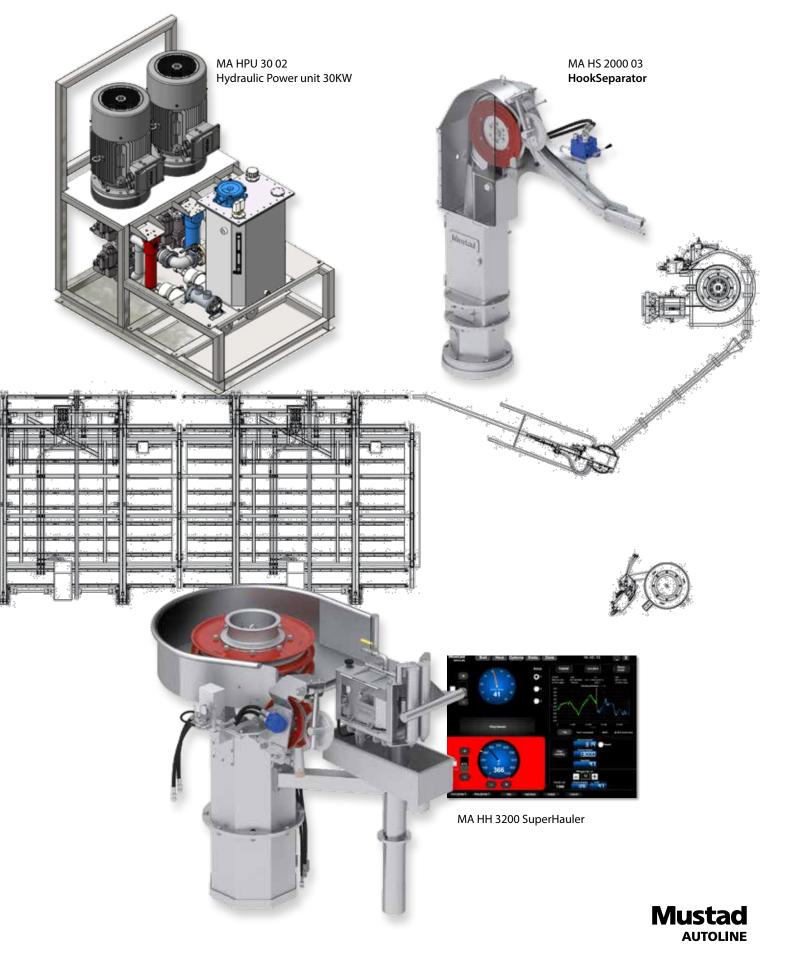
As a service to our customers Mustad Autoline offers to make a suggestion to layout based on a drawing of the vessel (preferably DWG file). This is free of charge and no commitment attached.

The system sketch below is based on a vessel with moonpool and

The hydraulic MagPacker on this drawing carries 48 magazines

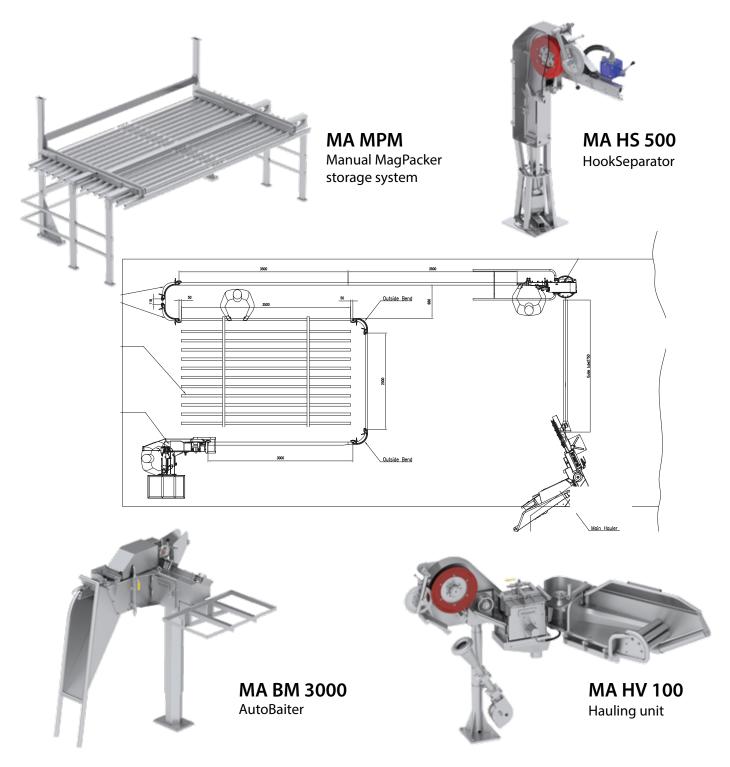
Please note that the quantity of hooks per meter depends on the thickness, age and quality of the hooks and line. Consequently the given numbers of hooks are to be taken as a guideline only

> MA MPH Hydraulic MagPacker storage system for hooks and line



Examples of typical deck arrangements on coastal vessels

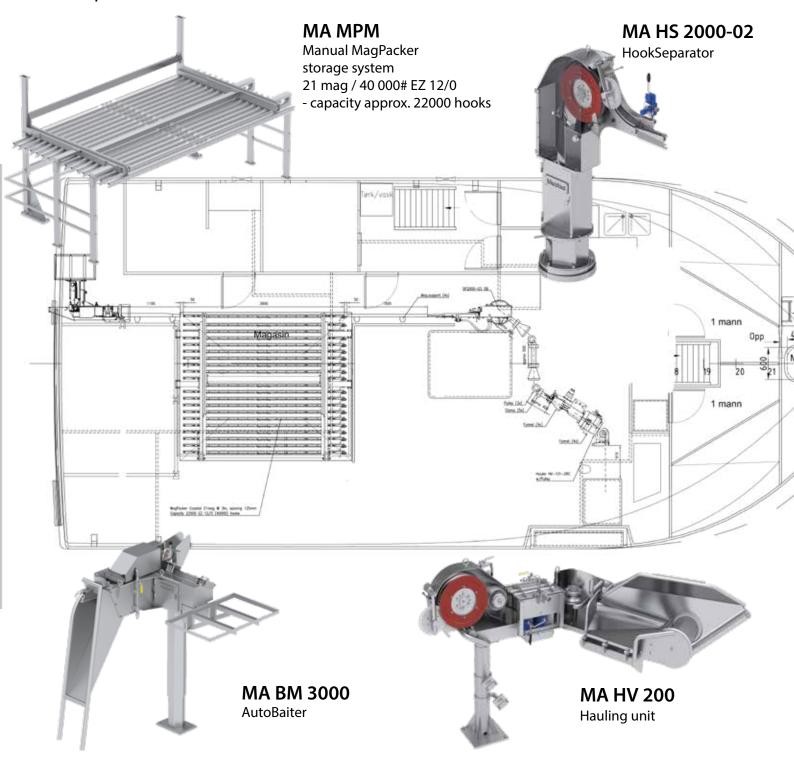
Example 1 < 15 000 hooks





AUTOLINE

Example 2 > 15 000 hooks



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Mustad Autoline HandyMag storage system

MA HM 150 HandyMag storage system is designed to fit on smaller vessels, from approx. 33 feet. With focus on the functionality on board, the system is convenient, easy to operate, and requires limited space. The storage rack is made of stainless steel and aluminum, and is tailored to space available on board the vessel.

The HandyMag system is customized to fit hook types Mustad EZ baiter/J-hook 12/0, Mustad #40 000 and Mustad circle hooks with and without offset. The standard lenght of magazine is 1m (40 inch.)

Operational function

The hooks and line are stored on magazines, and the magazines with standard lenght of 1 m, are kept in storage bins, racks or similar. For setting the line the magazines are manually retrieved for setting, and mounted as an extention to the baiting machine (fig. 1 AutoBaiter with HandyMag) When the magazine is empty, it is replaced by a new magazine with hooks and line from the storage unit. The empty magazines are restored in the storage unit.

For hauling the gear, empty magazines are mounted in hauling position as an extention to the transition rail on the hook separator (fig. 2. hook separator with Coastal HandyMag)

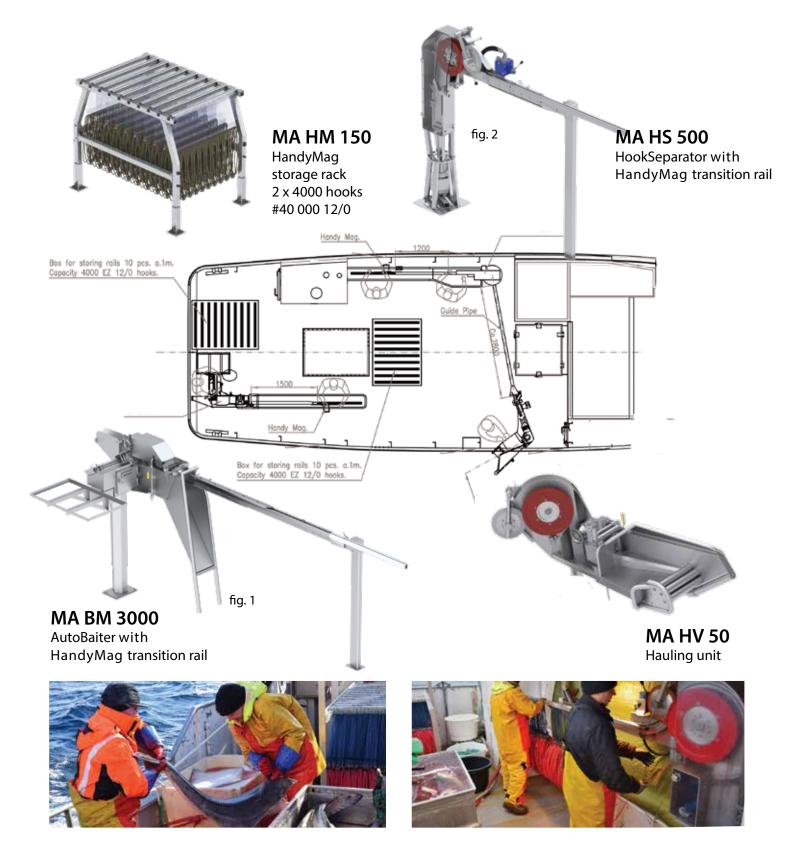
There is an Inspection window and hatches for repair and replacement of damaged hooks on the transition rail between the the hook separator and the magazine.







Example of deck arrangement with HandyMag system





Consumables designed for Mustad Autoline Systems

The rigors of ocean fishing demand special tools. Generations of fisherman have relied on the strength and quality of Mustad hooks.

Purpose made hooks for Mustad Autoline Systems

Mustad EZ baiter and Circle hooks are strictly made to Mustad Autolines specifications for optimal performance with our systems. All hooks are perfectly shaped and made of strong high carbon steel in order to succeed where others fail. Precision baiting, sharpness, strength, flexibility and corrosion resistance are key factors in making the best suited hooks for Autolining.

Mustad Autoline distributes hooks for commercial fishing produced by O. Mustad & Son AS.

Mustad 40 000 DT

The Mustad 40 000 DT hook is a semi-circle semi EZ hook where the size 12/0 is as strong as a regular 15/0 circle hook. The hooks are forged and the smaller diameter means more hooks per magazine. Due to a unique tempering process this hook is very stong and keeps the shape. The hook breaks rather than bends if stretched. The 40 000 hook is the preferred hook by most of our customers fishing for cod, tusk and ling.

Mustad 40 001 DT

New 14/0 semi Circle and semi J-hook with 15/0 wire. This is a large version of the 40 000 hook (not forged) designed for optimal catch of toothfish, halibut and black cod among others. The properties of this hook is a good combination of strength while also bending slightly when stretched.

Shape	Art. no	Description	Size
\bigcirc	39975DT	EZ baiter hook	12/0 - 15/0
C	39979DT	EZ baiter hook, Quick snap	13/0
	40000DT	EZ baiter Circle hook, extra strong,forged,	12/0
	40001DT	EZ baiter Circle hook, extra strong,	14/0
C	39953DT	Circle hook	14/0
\bigcirc	39961DT	Circle hook	14/0
C	39964DT	Circle hook, kirbed, point curved in	13/0
C	39965DT	Handbaiting, Circle hook	10/0 - 16/0
5	34184DT	Handbaiting, jig hooks, forged, extra long shank	5/0 - 7/0
\bigcirc	39878DT	Handbaiting,	11/0
C	72950DT	Handbaiting,	5/0 - 7/0



Snooded hooks

Mustad Autoline offers a range of snooded hooks designed for optimal performance with our systems.

Industrial sewing

Our special industrial sewing of loops give a consistent length on all snoods and is proven to be stronger than a regular knot. The gangions also pass smoother through the system.

Twisted polyester gangions

The twisted gangions are made of polyester yarns and can be made with plain ends, sewed loops or knotted ends. The ready snoods are impregnated.

Hooks and gangions are also available as separate items.

Braided nylon gangions

This high quality braided nylon combined with the industrial sewing of the loop has stood to the test to be a strong and durable product preferred by more and more Autoliners.



Article no.	Hook	Hook	Dimension	Description Snood	Gangion material
	ref.	size	Gangion		
45417	39975DT	13/0	2,5 mm (16) -23"	Standard EZ J-hook, sewed loops, impregn. blue	Twisted polyester
45418	39975DT	14/0	3 mm (20) - 23"	Standard EZ J-hook, sewed loop, impregn. blue	Twisted polyester
45409	39975DT	15/0	3 mm (20) - 23"	Standard J-hook, no loop	Twisted polyester
36610	39961DT	14/0	3 mm (20) - 14,5"	Circle hook, sewed loop one side, knotted one side	Braided nylon, white
36549	39961DT	14/0	3 mm (20)-12"	Circle hook, sewed loop, blue	Braided nylon
36551	39997DT	13/0	3 mm (20)-12"	sewed loop	Twisted polyester
36565	40000DT	12/0	3 mm (20)-12"	Semi circle, semi J-hook, sewed loop, blue	Braided nylon
45216	40000DT	12/0	2,5mm	Semi Circle semi J-hook, sewed loop, impregn. white	Twisted polyester
37771	40001DT	14/0	3 mm (20) - 23"	Semi Circle semi J-hook, sewed loop, white (47 cm)	Twisted polyester
	40001DT	14/0	3 mm (20)-12"	Semi Circle semi J-hook, sewed loop (cap b.)	Twisted polyester
Customized				Customized snood is available upon request (minimum quantities required)	





Service and training by Mustad Autoline

Proper and preventative maintenance is key to long-term and stable operations of your system. Small adjustments or replacement of a worn part can be crucial to efficiency and affect the bottom line.

Mustad Autoline service team holds 50 years of experience and are always ready to meet you and provide first class service to your Mustad Autoline System. Whether you need advice or just want to discuss technical matters, our team is there for you. We strive to keep close communication with our customers to share knowledge and experience. This way we continue to develop our products to the customers needs and demands.

In addition to our staff based in Norway, we have a strong network of service partners all over the world. For further information or queries do not hesitate in contact us at service@mustadautoline.com



Mustad Autoline Training Courses

Maximize the effectiveness of your system with a Mustad Autoline Training Courses together with our expert technicians at Mustad Autoline you will increase your skills and be trained to:

Perform maintenance of your system

Mustad AUTOLINE

- Evaluate and replace worn parts
- Spot and assess worn parts
- - Get the latest updates on new solutions and upgrade

Contact our Service department at service@mustadautoline.com for further information.



Hallgeir Hatlelid and Eskil Espeseth Service Technicians Mustad Autoline

Mats Strande Service Manager

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