

World Class Winches

reliable, dependable and uncomplicated



For rough missions in tough climates



The Swedish heritage of high quality, high-tech and heavy duty

Welcome to Sepson – We are a responsible supplier of reliable, dependable and uncomplicated vehicle-mounted winches.

Sepson is always in the forefront with competent and innovative development of world class winches and systems for civilian and military users all over the world. The Swedish company, founded in 1900, has for a long time had a market leading position in hydraulic vehicle-mounted winches.

From the frozen tundra north of the Arctic Circle to the dusty deserts of the Australian outback, Sepson's winches perform pulling work with safety and reliability under all conditions. The winches are used on rescue and recovery vehicles, cargo trucks, trailers and heavy equipment transporters, armoured fighting vehicles, off road vehicles, tractors, loaders and earthmovers, fire engines, high tension line stringing rigs and many other applications. In common for these vehicles are that they operate with urgent matters in extremely tough conditions.

The reliability is our responsibility

Any recovery or loading operation is often an emergency situation. The winches must work quickly and efficient without any interruption. This is what Sepson winches do every time, every day around the world. All our winches are tested with new and advanced test equipment to continuously check all vital components. Winches from Sepson are designed to provide a minimal need of maintenance and repairs can be done without special tools. We offer service on site and can arrange customized training of World Class Winches operators.



Competent characteristics and innovative features

During over a century we have developed a number of unique features for our winches and our engineers at the R&D department are everyday developing and testing features for the next century. Many of our old innovations are nowadays standard features among winch manufactures around the world. With our growing competence and experience we will remain on the forefront of innovative solutions that improve reliable, dependable and uncomplicated winches. Our integrated spooling attachment Sepmatic™ and the constant pulling force system Forcematic™ are two examples of why Sepson makes better winches – We make World Class Winches.



the foundation for all our winches sepduration

Sepduration – The foundation for all our winches

The winches in the Sepduration product range represent the foundation on which all other Sepson products are built. The robust construction combined with careful and deliberate design provides both ease of assembly and mounting on every kind of vehicle. The compact design with small footprint is also a deciding feature that makes manufactures worldwide chose our winches for vehicles of all sizes and for all critical purposes, both military and commercial. The basic design characteristics that distinguish all Sepson winches from others have become integrated components of the Sepduration range.



Planetary drive permanently lubricated with grease in an enclosed gear case.

Pulling forces in the interval of 38–450 kN.

Wire rope drums in nodular cast iron for added strength and structural integrity.

Free spooling by detaching drum from gear drive to allow easy pulling of rope by hand.

Unique 2-speed feature controlled by hydraulic valve system.

Spring applied multidisc brakes released by hydraulic control.

Optimal drum to wire rope diameter ratio (min 10:1) for extended rope life.



Thales Australia



Empl Fahrzeugwerk Ges.m.b.H

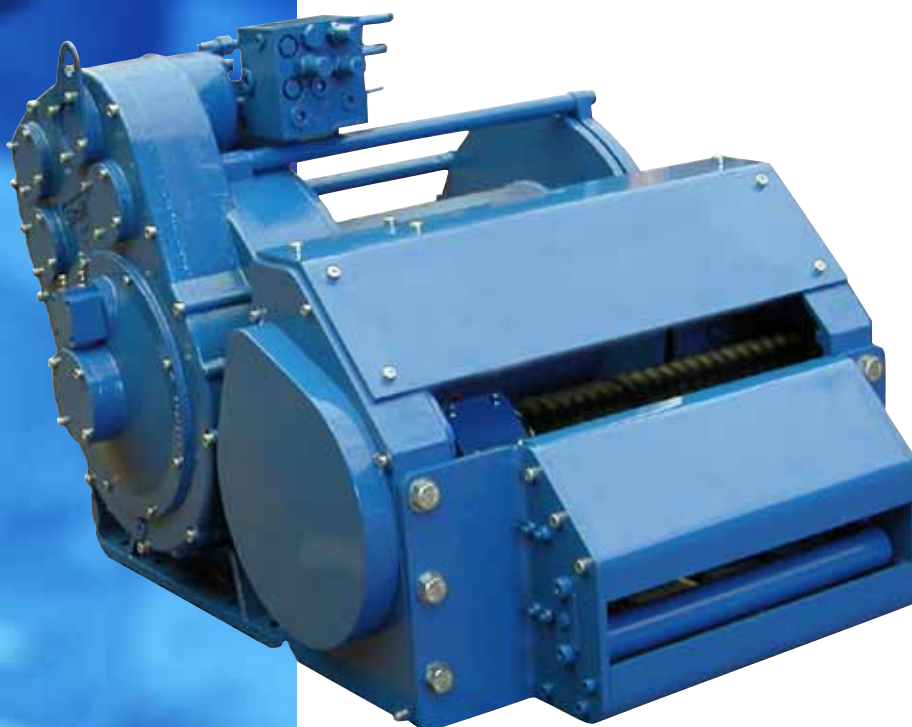


Boniface Engineering Ltd

integrated spooling system sepmatic

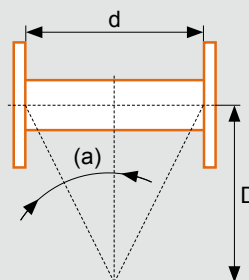
Sepmatic – Integrated spooling system

With Sepmatic, we have upgraded a number of Sepdurance winches with the unique Sepson integrated spooling attachment. It eliminates nesting, significantly increases the rope life, reduces operating costs and improves safety. Five different Sepdurance winches can be upgraded to Sepmatic status by adding the spooling attachment while they maintain their own characteristics and performance. Their capacity is between 50–450 kN and will substantially improve the speed and performance of the winching operation under the most difficult conditions. The spooling attachment is driven by a cog wheel mounted on the side of the drum itself without adding proprietary parts. This is another typical example of Sepson design which combines efficiency with simplicity.



AN EXAMPLE OF THE ADVANTAGES OF SEPMATIC

TO PERFORM EFFECTIVELY, AN ORDINARY WINCH NEEDS TO HAVE THE FIRST FIXED POINT ON THE ROPE IN A DISTANCE (D) OF TEN TIMES THE WIDTH OF THE DRUM (d). IN OTHER WORDS; THE FLEET ANGLE (a) SHOULD NOT BE MORE THAN (2°) TO OBTAIN AN ACCEPTABLE SPOOLING. OTHERWISE THE RISK FOR NESTING WILL BE OBVIOUS. IN ANY WAY THE WEAR AND TEAR OF THE ROPE WILL BE SEVERE. BY USING THE SEPMATIC SPOOLING SYSTEM, LOADS (i.e. THE FIRST FIXED POINT) CAN BE HANDLED IN A SHORTER ROPE DISTANCE AND THE LIFETIME OF THE ROPE WILL RISE DRAMATICALLY. THE WORK WILL BE SAFER AND MORE EFFICIENT. NOT THE LEAST IN AN ECONOMIC WAY.



Empl Fahrzeugwerk Ges.m.b.H



Empl Fahrzeugwerk Ges.m.b.H



Pojazdy Specjalistyczne Zbigniew Szczęśniak Sp. z o.o

Forcematic – Constant pulling force

Forcematic adds our unique computerized control system which maintains a constant pulling force regardless of the rope's layer on the drum and is a major step towards improving safety and efficiency. The Forcematic pulling force is continuously monitored by the winch's own control system and can be preset by the consequent force required to pull this weight. The Sepson Forcematic force control system is a major contributor to safe and secure operation. The constant pulling force allows the maximum utilization of the drum's capacity since the rope's diameter can be adapted to the constant rather than the variable force which normally results from the difference between pulling from the top layer down to the bottom layer on the drum.

AN EXAMPLE OF THE ADVANTAGES WITH FORCEMATIC

A STANDARD SEP DURANCE H200 PULLS 150 kN ON THE TOP ROPE LAYER AND 200 kN ON THE BOTTOM ROPE LAYER OF THE DRUM. BY ADDING FORCEMATIC CONSTANT PULLING WINCH SYSTEM THE PULLING FORCE WILL BE THE SAME FOR THE WHOLE DRUM. FURTHERMORE THE REQUIRED Ø24 MM WIRE, WITH THE DRUM CAPACITY OF 60 METERS, CAN BE REPLACED WITH 90 METERS OF Ø18 MM WIRE. THE WINCH GAINS A LARGER OPERATION RANGE WITH A SMOOTHER WIRE DIMENSION.





Patria Oy

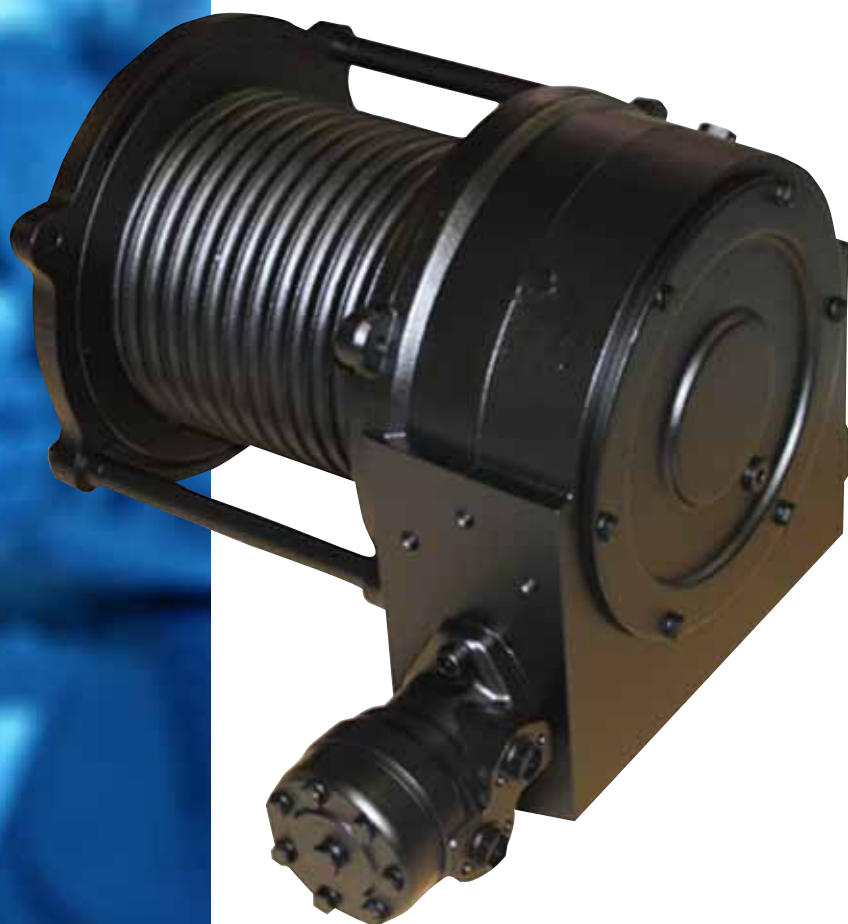


ST Kinetics

RELIABLE, DEPENDABLE AND UNCOMPLICATED
WORLD CLASS WINCHES

Sepgain – Worm gear with free spooling drum

Our hydraulic worm gear winches have been the workhorse of many applications for as long as we have made winches. They provide the essential, basic and economic pulling force whenever you don't need the speed and versatility of the planetary gear. Sepgain are worm gear driven winches which handles loads of 40–100 kN with wire rope lengths from 7–40 meters. As for every reliable, dependable and uncomplicated Sepson winch, the Sepgain winches also have a free spooling drum.





Saurus - Sammutin Oy



JOAB Recycling AB



NMT Oy



Geesinknorba

Our experience and competence at your service

Since our winches' reliability is our responsibility, we are very accurate when the winches leave our factory to enter the real world.

We provide high quality on-site installation, maintenance and training services for our customers. All of our staff is experienced, well trained, highly motivated and customer focused.

Even in your own development projects our experience and competence can be helpful. The earlier we are allowed to join your project, the better we can perform the development and engineering of the winches. We ensure that the engineering in CAD drawings really works in real life situations. From initial contact to final system commissioning you will find us thoroughly professional, with the personal touch and a responsible to find the most efficient and economic solution.

The Sepson Test Rig hydraulic winches

Sepson has a unique test rig for hydraulic winches. We use the rig to ensure the quality and function of our winches. It is also used for external development projects testing new engineering solutions. The test rig has a braking winch with rope sheaves and a load cell. The rig has its own hydraulic system, is computer controlled and is fully automatic so the winch can be tested over a long period in a life time test. The system tests the following parameters:

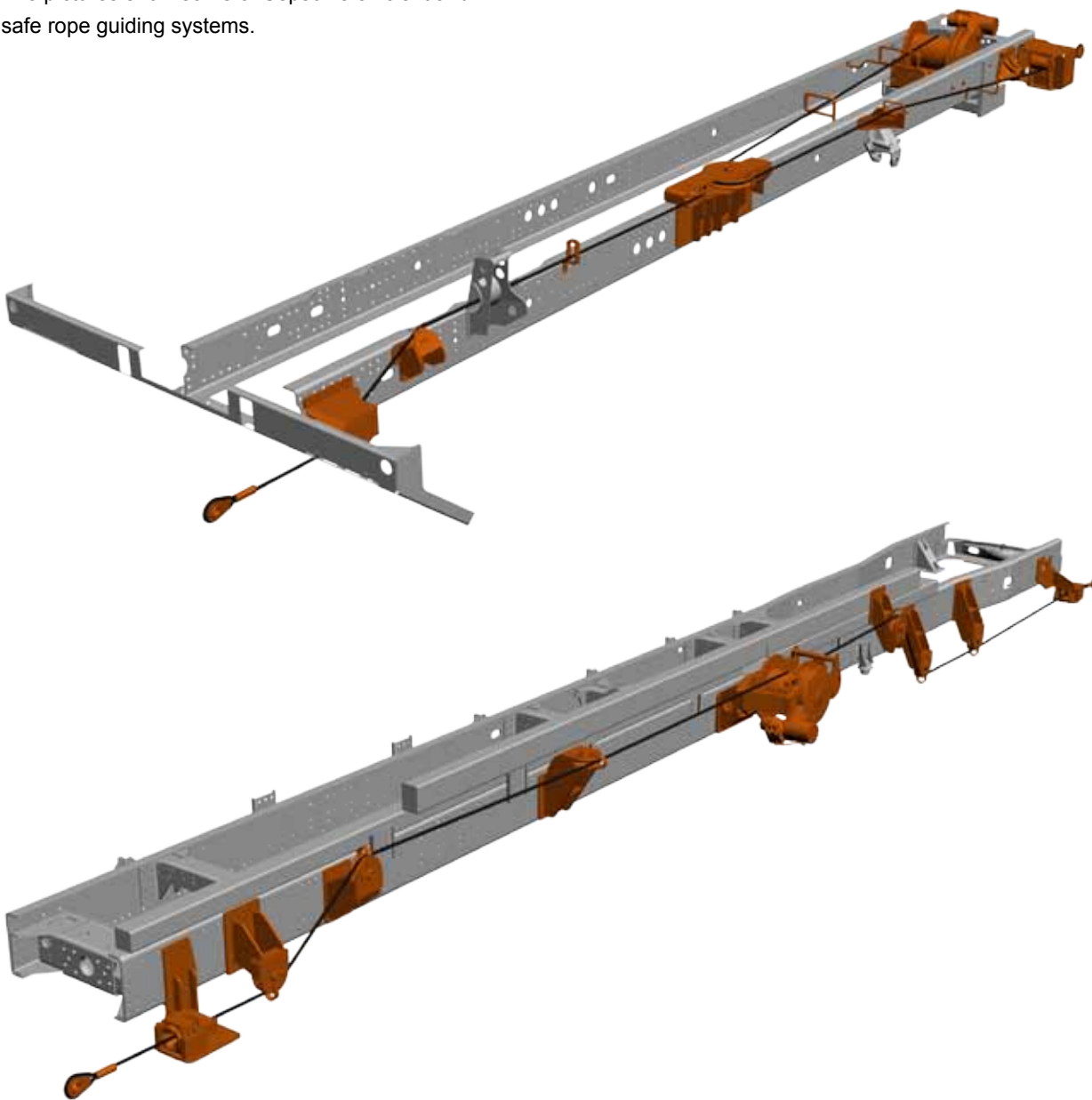
- Maximum pulling force
- Maximum pull at maximum rope speed
- Oil flow
- Oil temperature
- Rope speed



From oil pump to rope end

Our designers and engineers are at all times available to assist the vehicle manufacturer, body builder and users in installation and mounting of our winches. From the wet kit and placement of the valves to the rope guiding system and mounting on the vehicle, our competence can ensure maximum efficiency and minimum maintenance.

The pictures show some of Sepson's efficient and safe rope guiding systems.



Sepson's constant pull force – Now available for all our winches

Sepson constant force solution means that the winch has the same maximum traction on all rope layers. This means greater security in the salvage work and the opportunity for the use of a longer rope. The system is entirely internal and does not affect other control systems of the winch. Turn your winch into a constant pull winch by using this unique feature.

How it works

The load cell mounted in the rope path sends signals to a control unit with hydraulic valves that controls the winch motor so it can obtain a constant force. It's a cost effective and an easy to install solution that gives your winch the constant pull force feature.

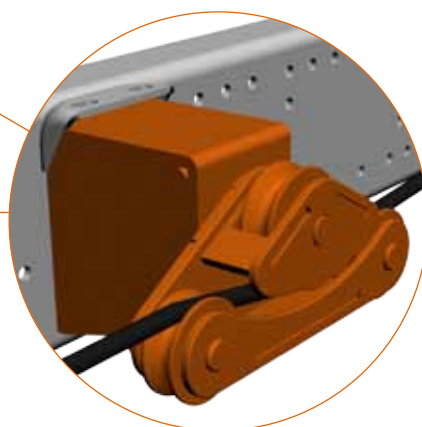
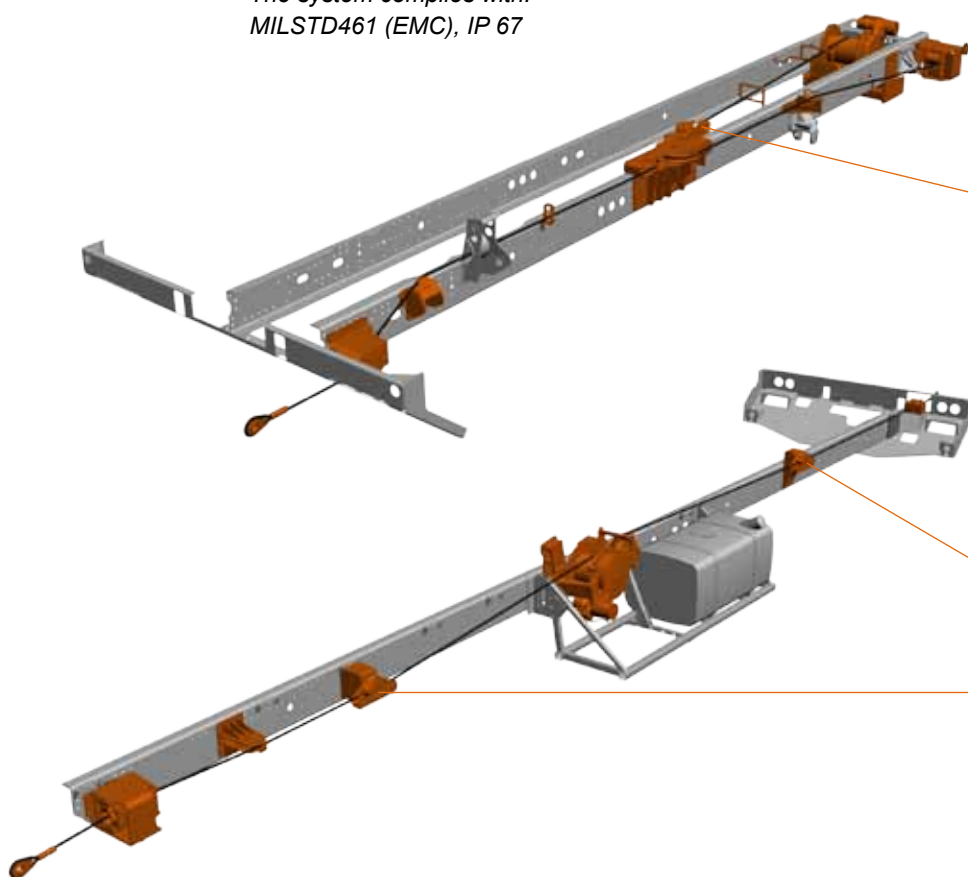
*The system complies with:
MILSTD461 (EMC), IP 67*



Load cell



Control unit



Sepson's LoadReader

– See the load in the rope

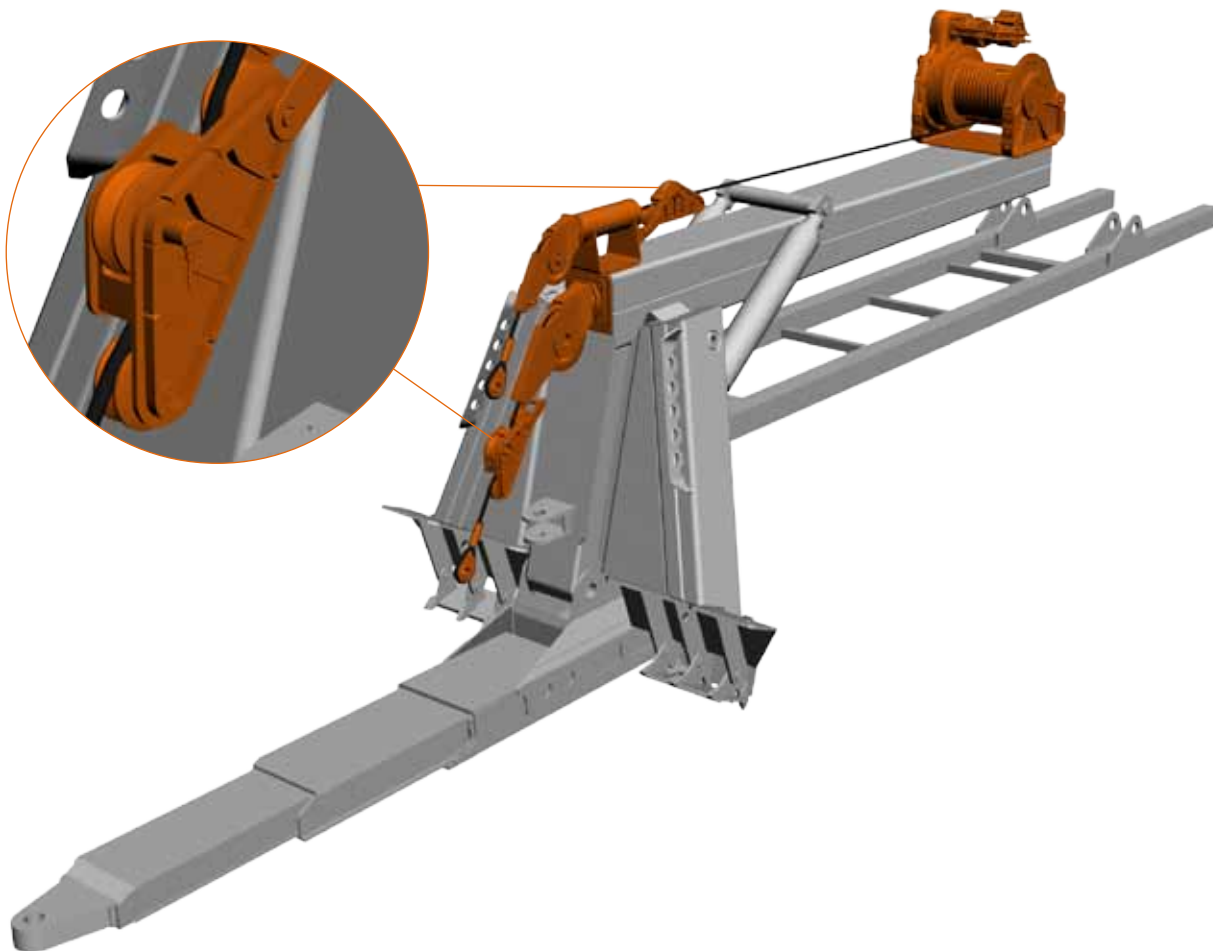
Sepson's new unique feature makes salvage work safer. With Sepson's LoadReader, the tension in the rope continuously is visible and the users can adapt to the generated force and work more efficient. The risk of overloading the attachment points on the recovery object is minimized. The LoadReader helps users to avoid unwanted situations in the salvation work to occur.

How it works

The LoadReader contains of a load cell connected to the winch. The load cell communicates the load to a control unit that trough a radio transmitter continuously sends the current load to the handheld display.



Handheld display



World Class Winches – An overview. For more details visit our website: www.sepson.se

Sepdurance

Sepdurance are planetary gear driven drum winches with pulling forces of up to 450 kN. The winches have high efficiency and are permanently lubricated, which contributes to long life and trouble free operation. The heat generated is very low, even during extensive use.



Sepdurance 100F



Sepdurance H100S



Sepdurance H100S



Sepdurance H150



Sepdurance H200



Sepdurance H200



Sepdurance H200



Sepdurance H200



Sepdurance H300



Sepdurance H300



Sepdurance H38



Sepdurance H38



Sepdurance H400



Sepdurance H50



Sepdurance H60



Sepdurance H80

Sepmatic

Sepmatic winches are upgraded Sepdurance winches with an integrated rope spooling attachment. The spooling attachment spreads the rope evenly over the rope drum on all rope layers and eliminates the risk for bird nesting. The spooling attachment makes the winching operation safer and minimises the risk for rope damage.



Sepmatic H150



Sepmatic H100



Sepmatic H200



Sepmatic H400



Sepmatic H80

Forcematic

Forcematic winches are Sepmatic winches with a constant maximum pulling force on all rope layers. This feature is controlled by a load pin in the rope path and an industrial plc. The maximum allowed pulling force can be set from mission to mission but cannot be higher than the maximum pulling force set by Sepson.



Forcematic H150



Forcematic H400

Sepgain

Sepgain are worm gear driven winches which handles loads of 40–100 kN. They provide essential and basic pulling force when the speed or versatility of a planet gear drive not is needed. As for every reliable, dependable and uncomplicated Sepson winch, the Sepgain winches also have a free spooling drum.



Sepgain H40



Sepgain H40



Sepgain H40



Sepgain H70

Accessories

Sepson has a wide range of accessories and components for winch installations.

Snatch Blocks

100 kN
150 kN
300 kN
600 kN
800 kN



Remote Controls

Mini

Cabel Remote Control



Midi (MILSTD 461F available)

Cable or Radio Control or Combined



Maxi (MILSTD 461F available)

Cable or Radio Control or Combined to control all systems



Radio

Radio remote control



World Class Winches around the World

Our winches are in use around the world and installed on vehicles from several manufacturers and builders of special vehicles.



Our heritage gives us experience and competence

The master smith Sars Erik Petterson founded Sepson in 1900 in the deep forest of Dalarna, in the middle of Sweden. He was known as a responsible and competent innovator. He made high quality tools and handling equipment for the surrounding forestry industry, where pulling and lifting heavy logs and timber are key activities. Through the old tradition of skilled workmanship this part of Sweden has become a centre of industrial activity. The combination of the handcraft tradition, high technology research and development, and the care for the natural environment is the hallmark of Swedish

business and Sepson. Today Sepson manufactures reliable, dependable and uncomplicated vehicles-mounted winches with EN ISO 9001 certified quality system. Still we have our production plant in Dalarna, in the small town of Vansbro, where women and men continues to take pride in their skills and craftsmanship that have been passed from generation to generation. Please feel welcome to visit us and get to know us in our modern plant where tradition and the future blend in a perfect way.



ISO 9001



ISO 14001

Sepson develops, manufactures and supplies vehicle-mounted winches and systems for military and civilian markets. Sepson is well known all over the globe for top Swedish quality. Our product development focuses on quality and safety based on our extensive experience and advanced technical skills. A Sepson winch is reliable and simple to use. You can depend on it working when you need it. We help with installation and make sure that each product and system works reliably in its user environment.

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