

HYDMOS Industriteknik AB

Hydraulik och elektronik i system

Hydraulic systems designed and manufactured for various equipment at the sawmill:

Sink boxes:

Sorting planks in various categories, up to 60 boxes.

Complete delivery of hydraulics; cylinders, valve manifolds, tubes, hoses, fittings and power pack.

Significant features: Reliable, multi functional, easy to install.



Hydraulics for over 1000 boxes supplied over the years

Planer feeders (feeding tables):

Number of rolls driven by hydraulics is 4 – 8. Our feeders are reversible, i.e. easy to clean in case of malfunction of the planer.



Capacity up to 500 m/min, low energy consumption, low power losses in the hydraulics.

About 200 units supplied over the years. Complete delivery of power pack, hoses, valves and well proven hydraulic motors for the rollers.

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Stackers:

Stackers with capacity up to 12 layers a minute with or without stickers



Mostly in conjunction with sink boxes (sort line)

Tilts



Lifting capacity two packs. Tilts in 12 seconds.

Pack & Wrap



Clamps and wraps in 20 seconds

Positioners



Precise cutting (+/-1 mm) 60 bits/minute

Miscellaneous

Bundling, conveyer lifts, conveyers, elevators

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Roster Drive for smooth and precise regulation

Cylinder with transducer



Control Valve

Control System



Hydro Station

Hydraulic systems for big presses



Complete delivery of design, hydro station, valves, cylinders and accessories with smart function of the pump system to minimize power consumption and need for cooling. This system controls all the cylinders individually by position, ensuring that the press closes evenly. The large cylinders are single acting and forced down by gravity by the first part of the stroke.

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Supply of hydraulic components

Hydmos supplies components for hydraulic systems such as cylinders, pumps and valves with its accessories. We design our manifolds ourselves.

Cylinders:



Valves:



Manifolds:



Pumps:



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Common problems by end users and how they are solved:

Sink boxes:

When using standard hydraulics for sink boxes, it is very usual you only can operate them in one or the other direction at the time, i.e. a number can go down, or a number can go up. In our systems several sink boxes can go up or down simultaneously, independent of each other. Further more, when going down we use a special technique to reduce the oil consumption from the pump, allowing more pockets to go down at the same time with still a minor pump.

Planer feeders:

When using hydraulics to drive planer feeder it is important that the wheels nearest the planer adopts to the speed of the planer but still that the rear wheels can spin with high speed enabling the board to “catch up” with the previous without big energy losses. Over the years Hydmos has developed such systems and sold well over 200 systems. Hydmos has also found the most durable hydraulic motor on the market for this application, a special version of Danfoss motor.

Stackers:

Over the years Hydmos has sold a great number of hydraulic systems for stackers. In the early days the carrier was driven hydraulically but modern versions have electric drive of the carrier. However, the up and down of the carrier is still hydraulic, and were applicable, the sticker magazine is hydraulically operated. The most common problem with stackers is the cycle rate. Over the years we have designed system, all hydraulic, to achieve a cycle rate of 12 layers a minute. For that you need to have precise hydraulics and know how.

Tilts:

To achieve a good cycle rate of the tilt you need to know how to control the movement of the big mass. Over the years Hydmos has learned to do that so there will be no standing still in the equipment from fallen boards due to unprecise movements.

Roster Drives:

By driving a roster it is important to be able to run at a large range of speed, from extremely slow to quite fast, i.e. 1 cycle to 60 cycles a minute to prevent piling up at low speeds. Having valves capable of handling the big flow at high speeds makes it difficult or impossible to handle low speeds. Hydmos has developed a system consisting of precis hydraulics in combination with an electric speed control detecting any change in speed of the cylinders due to sudden increased load, keeping the speed constant and low independent of what loads other cylinders in the system are exposed to. This results in that every cylinder in the system is moving, even at extremely low speeds even if another cylinder suddenly is facing a low load and therefore will run with low pressure.

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Tailor made and adoption of hydraulics

We are also able to tailor make hydraulic solutions and adaptations, to improve or develop specific hydraulic functions your chain of production.

Hydmos supplies hydraulic systems for new equipment as well as hydraulic systems for older systems for upgrading and/or refurbishing in all the fields above.

Prices

Price is an important part of the decision equation.....but more so from an observational stand point and **not a destination**.

For the real question of price is found in " What does it cost not to reach the shores of excellence in hydraulic function in your (or your customers) production?"

Why Hydmos Industriteknik AB?

For all machine owners and users it is essential that the equipment is reliable and has a very long mean time before failure. To achieve that, every buyer of such equipment needs to ensure that the manufacturer and his sub suppliers can fulfil these demands.

Hydmos has been in the hydraulic business since 1984 and have been supplying hydraulics to the wood industry since 1989. Over the years we have supplied hydraulics for over 1000 sink pockets, elevators, stacking machines, planer feeders, packing and wrapping etc. The reason for being in the business so long is that the end user can relay on our products. This is achieved by good design (which comes from the long experience) and back up of the best components. Hydmos uses only world wide known brands such as Parker, SUN and Hydac. This is for two reasons, good quality products and, not the least important, good availability all over the world so that the components are easily accessible for the end user.

Further more it is important that the sub supplier, who is the specialist, can give good service to his customer, the machine manufacturer and to the end user. Hydmos has become, to many of its customers, the "hydraulic department" of that company to whom they turn to with hydraulic issues. That is our niche, to provide excellent service in combination with long time experience and skills.

By choosing a hydraulic system from Hydmos in practice it means having the same hydraulic standard as modern Scandinavian Sawmills. Further more, as specialist not only in the manufacturing of complete hydraulic systems but no less in its practical function, starting from its design, integration to its installation. Therefore it is important for the end customer to ask for, and make it relevant, that the guarantee on functionality is issued by the right technical partner.

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Next step

In order to give you a relevant and good quotation we need information about the following:

- Hydraulic schematic (if you have)
- A brief description of the machine/equipment with its functions
- Sequence of the functions in the machine
- Cycle rate of the machine (if applicable)
- When it comes to improvements of older systems we need to know what presents functions and performance is and what you want to achieve
- For replacing older components, please specify what is present and if you are looking for an improvement
- If you need a technical diagnose of your hydraulic system we can do that through our partners

We are looking forward to hear from you.

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