Hansen Transmissions commits to be a pioneering innovator. The production of high performance gear units stems from an interactive partnership with our clients, the end users and the actively engaged manpower of our global enterprise. Embracing design, manufacturing and customer services, Hansen Transmissions has grown into a world leader in its field. Today, we set standards for both product and working environment, inciting a knowing environment to seize all new and inspiring technologies.





powerful solutions for the pulp & paper and wood handling industry





WOOD HANDLING

This part of the process includes conveyor drives, debarking drum drives, chipper drives and chip reclaimers. All very demanding drives with severe drive conditions. The Hansen gear units meet the requirements for these applications. A vast range of varieties and accessories, such as hollow shafts, cooling/lubrications systems, backstops, motor mounts makes the standard Hansen P4 into a tailor-made unit for all these applications.

PUMP DRIVES.

A newly developed range of single stage gearboxes is especially designed to meet the requirements for vacuum pumps drives, head-box feed pumps and centrifugal pump drives. The gearbox is designed for two mounting positions with the shafts both in horizontal and vertical position. This brings the high speed shaft height more in line with shaft heights in standard IEC electric motors.



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PULP PROCESSING MACHINERY

Cooking -, washing & bleaching - and chemical recovery drives require extra attention. To meet their special requirements, the Hansen gearboxes are designed with horizontal split housings, both for horizontal and vertical drives. In addition, vertical drives are equipped with a "dry well" as standard, eliminating leakage and risk of oil coming into the process. A wide variety of bearing and shaft configurations make the gearboxes suitable for applications with high loads and high shocks on the low speed shafts.

PAPER MACHINERY DRIVES

For applications such as roll drives, dryer section drives and finishing drives Hansen offers complete drive packages including couplings, drive shafts and protection guards. For drying sections torque arm type reducers are also available. The high precision low noise gears meet the requirements for higher speeds and improved product quality. A new developed range of P4 single stage reducers meets the requirements of low ratios and high roll speeds.



RETURN FIBRES PROCESSING

Pulper drives.

Hansen right angle gearboxes especially adapted for the tough pulper drives have proven their superior quality for these applications. Important features here are heavy duty bearing systems on the low speed shaft, labyrinth sealing systems with flingers, oil to water lubrication/cooling system. Features that make the Hansen gearboxes suitable for this tough application.

Dewatering press drives.

Hansen complete drive packages make the installation easy and convenient for these drives. Hansen makes complete drive packages with adjustable motor base, V-belt transmission, protection guard, lubrication and cooling group and low speed coupling. Hansen can also fit and align the electric motor onto the drive package so that customers receive "a ready to install package". For humid atmosphere the complete package will have an adequate end uniform corrosion protection.

WHY HANSEN?

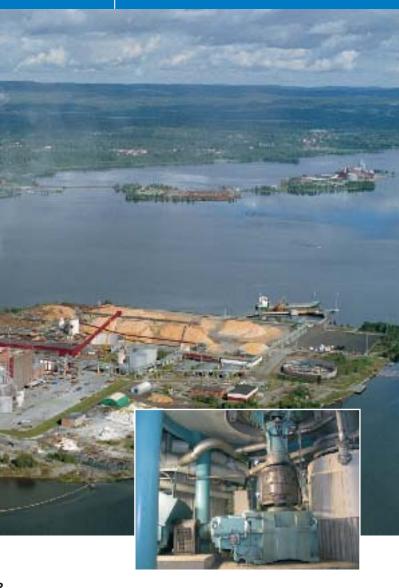
- under the most severe conditions.

- to the mounting feet.
- gear unit with the motor.
- working life for the gear unit.
- complete oil drainage.
- covers above the oil level.
- One-stop-shopping for complete drive package solutions.
- In-depth engineering support and complete documentation before and after the order. • Hansen's global service capability significantly reduces downtime.

COMPLETE AND POWERFUL SOLUTIONS FOR THE **PULP & PAPER AND WOOD** HANDLING INDUSTRY

The pulp and paper industry is characterized by high investments and as a consequence of this, high downtime costs. *Investing in high quality drive components* is vital. Environment conditions are often tough with shocks, high ambient temperatures, humid atmosphere and exposure to chemicals. Unit downtime can have consequences on plant profitability far in excess of the originals equipment costs.

Hansen has a long history of solid partnership with OEM suppliers and end users in the pulp & paper industry. Our products carry the ISO 9001 quality certificate and can be found working under the most severe conditions. They are manufactured by using the latest design and production techniques. Energy efficient, low running costs and low noise levels are always high on the list of customer priorities. Our concern for environmental issues has directly led to incorporating these priorities into the development of our gear products. This has resulted in a complete fine tuned range of drive products for the pulp & paper and wood handling industry.



• Hansen matches the drive to the application and offers proven reliability

- Carburised and ground gearing of both bevel and helical gears excels in strength, torque capacity, surface durability and low noise performance. • Large overhung load capacity of the gear unit.
- The Hansen P4 extended bearing span ensures stronger shaft support. • The housing design ensures smooth transition of forces from the centre bore
- Integrated product features, e.g. rigid lantern housing seamlessly connects the
- Continuous oil circulation through the bearings ensures a long, trouble-free
- Hansen's unique Oil-Lock and Oil-Guard systems offer a maintenance-free sealing on high-speed shaft extensions as a standard.
- The drywell, available on all models, prevents oil leakage on vertical down shafts • The internal construction of the gear unit housing allows for simple and
- The larger units can be easily inspected and serviced on the spot, thanks to