

powerful solutions for the palm oil industry





COMPLETE AND POWERFUL SOLUTIONS FOR THE PALM OIL INDUSTRY

Over the last few decades, Hansen Transmissions has built up solid partnerships with OEM suppliers and end-users in the palm oil industry. Thousands of Hansen gear units from different generations, can be found operating installations in a great number of palm oil mills all over the world. The versatility and durability of these units is well documented: they are used to operate a broad variety of mechanical applications in the palm oil process, such as sterilisation, threshing, digesting, pressing, clarification, and crushing. A palm oil mill includes a whole range of power transmission applications such as digesters, screw presses and kernel expellers. For these and other applications such as capstan, auto-feeders, threshers, conveyors, elevators, airlocks, clarifier stirrers, etc., we manufacture complete drive packages to meet customer specifications. By drawing on the strengths of a variety of product ranges when designing or updating our products, we are able to deliver superior products with top quality performance for the palm oil industry.

| p a l m o i l

■ HANSEN P4 GEAR UNITS

With the Hansen P4 gear units, Hansen Transmissions has remained market leader in the gear unit industry. Thanks to this new range of standardised gear units we have gained an even stronger reputation as the preferred supplier to the palm oil industry, mainly in Indonesia and Malaysia, the largest producers and exporters of palm oil. The P4 gear units, launched in 1993, offer the highest power rating on the market. In full standard execution, they are the perfect drive solution for digesters, screw presses and kernel expellers. Taking into account the severe operating conditions, Hansen Transmissions has included several features and accessories as standard.

■ HIGH EFFICIENCY

Over 700 Hansen P4 gear units are quietly operating diverse installations in palm oil mills. Short delivery times, based on local stockholding, have added to success built on the gear units' high efficiency, low noise levels and ease of maintenance. Most are employed in 22 kW and 30 kW digester drives and on screw presses, calling for trouble-free operation for 16 to 24 hours a day in the post harvest period, under extremes of temperature and humidity.



■ COMPLEMENTARY PRODUCT RANGES

The Hansen S3 range of geared motors caters for a series of drives for feeders and conveying equipment within the mill. They are flexible, powerful, and economical standard drive systems. With a torque of up to 35 % above the market equivalent, the S3 is strong and efficient. This range also exists with integrated digital frequency inverter. Hydrodynamic couplings enable the motors to start under light load conditions, reduce possible shock loads and protect the transmission against overload. Hansen Transmissions also offers electric motors including flameproof motors for operation in hazardous areas.

WHY HANSEN?

- *Hansen matches the drive to the application and offers proven reliability under the most severe conditions.*
- *Basic design rules guarantee maximum stiffness of all gear units components under load.*
- *Carburised and ground gearing of both bevel and helical gears excels in strength, torque capacity, surface durability and low noise performance.*
- *Continuous oil circulation through the bearings ensures a long trouble-free working life for the gear unit.*
- *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 complete oil drainage.*
- *The larger units can be easily inspected and services on the spot thanks to covers above the oil level.*
- *Optimal micro-gear geometry allows for optimised tip relief for smooth gear meshing, no tip-to-root interference, reduced gear friction losses and low noise levels.*
- *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.*