



David Brown Santasalo



DAWNTHRIVE LTD.

Cement  
Chemicals  
Defence  
Fibre, paper & tissue  
Food & beverage  
Marine & port operations  
Metals  
Mining & minerals  
Oil & gas  
Panelboard  
Power generation  
Rail  
Rubber  
Sugar  
Water & wastewater

Mechanical power transmission  
solutions for industrial applications

## Mechanical power transmissions solutions provider for heavy-duty industrial applications

David Brown Santasalo combines more than 285 years of gear engineering experience and knowledge. With more than 1,100 employees, 7 major manufacturing & service plants, 15 service centres and 7 sales offices across 6 continents, the business is ideally equipped to serve its growing customer base in commodities, marine, defence, power, industrial and consumer end markets.

As a full scope supplier, David Brown Santasalo can deliver complete drive trains on a turnkey project basis.

From design and engineering, to manufacturing, installation and full lifecycle services, David Brown Santasalo is a true partner supporting your business every step of the way.

- Project management for new and rebuilt gear units
- Dimensioning and selection of components
- Layout engineering of gear units, couplings, guards and foundation accessories
- Manufacturing of gear units
- Product testing
- Installation and commissioning services
- Full lifecycle service support

## Proven products and services

David Brown Santasalo's long record of reliable gear unit performance demonstrates our high standard of engineering and manufacturing expertise. Comprehensive manufacturing facilities are in operation in 7 locations worldwide including state-of-the-art facilities in UK, Finland, India, Canada, China, Australia and South Africa, and every gear unit manufactured is subject to strict quality standards. Components are meticulously inspected for material quality and dimensional accuracy and key manufacturing processes are performed in-house to ensure consistent quality across all stages of production.

David Brown Santasalo engineers work in close cooperation with customers to ensure the right solution is provided to suit the requirements of every application. From customising our standard products to designing fully customised products, David Brown Santasalo has the expertise to meet the most challenging power transmission needs.



**State-of-the-art ISO 9001 manufacturing facilities worldwide**

# Serving critical industries globally with our extensive product portfolio

David Brown Santasalo designs and manufactures both modular, standardised gear units and application-specific, customised gearbox solutions for heavy duty applications from its seven manufacturing facilities around the world.

The David Brown Santasalo modular gear series includes helical and bevel-helical and planetary gear units, which are distinguished by high rates of reliability and supported by an extensive lifecycle service programme. Our custom gearbox capability allows us to provide effective solutions for the most arduous and safety-critical applications, across a wide range of industries where failure is not an option.

From nuclear submarines & battle tanks to paper mills, rubber plants, coal mines, thermal power stations, port handling operations and oil & gas platforms, David Brown Santasalo provides customers worldwide with reliable solutions that have been proven time and time again



**Cement**

- Conveyor drives
- Roller press drives
- Roller mill drives
- Ball mill drives
- Kiln drives



**Chemicals**

- Mixer drives
- Sludge press drives
- Pump drives



**Defence**

- Marine propulsion
- Crossdrive transmissions
- Final drives
- Power take off drives
- Transfer gearboxes
- Elevation and traverse drives
- Torque sharing drives
- Gearbox control systems



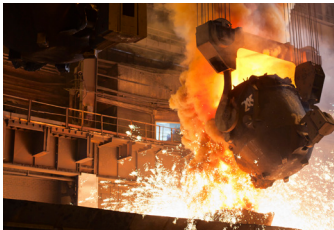
**Fibre, pulp & paper**

- Wood handling applications
- Chemical and mechanical pulping
- Chemical recovery
- Fibre recycling
- Stock preparation
- Tissue machinery applications
- Paper/board machinery applications



**Marine & port operations**

- Jacking gear systems
- Winch drives
- Crane drives
- Commercial vessel propulsion



**Metals**

- Conveyor drives
- Pelletiser drives
- Kiln drives
- Furnace tilt drives
- Ladle drives
- Crane drives
- Bar straightening
- Roller stand drives
- Mill drives
- Roller table drives



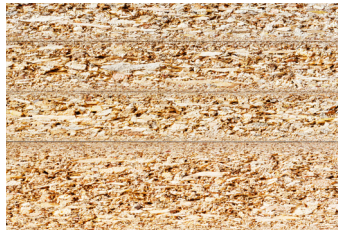
**Mining & Minerals**

- Grinding applications
- Bulk material handling
- Slurry handling
- Pyro processing
- Compaction



**Oil & gas**

- Pump applications
- Compressor applications
- Jacking, winching and crane gearboxes
- API613 / AGMA6011 gear systems
- API617 gear systems



**Panelboard**

- Calender drives
- Dryer drives
- Roller press drives



**Power generation**

- Grinding applications
- Material handling applications
- Sedimentation handling applications
- AGMA6011 parallel shaft gear systems
- Main water turbine drives



**Rail**

- Commuter trains: EMU and Metro vehicles
- High speed rail
- Light rail and tram applications



**Rubber**

- Mixer drives
- Extruder drives
- Mill drives
- Calender drives
- Conveyor drives



**Sugar, food & beverage**

- Extraction processes
- Processing applications
- Refining applications
- Material handling
- Drying process



**Water & wastewater**

- Mixer drives
- Sludge press drives
- Pump drives

## Application-based solutions

Calling on nearly three centuries of industrial gearbox experience, David Brown Santasalo designs, develops, and manufactures a range of industry-specific power transmission solutions. Our experienced design engineers ensure each product is designed, manufactured and installed to meet the arduous requirements of critical applications in many industries.

Recognised as gearbox experts around the globe, we work in close cooperation with many industrial OEMs and end users, often working in tandem to support the design of their own products.

These partnerships give us a deep understanding of the markets we operate in and ensure our products are perfectly matched to the requirements of our industrial customers – no matter how demanding.

### Case study: Mining

Maximum performance is just one factor when choosing a conveyor gearbox for a mine site. When the mine operates 24 hours per day in a residential area, it is key that all equipment performs with minimum noise.

David Brown Santasalo has engineered and delivered more than 70 application-optimised conveyor drives to meet Port Waratah's strict, ultra-low noise requirements and the increasing trend for low noise gear units was a key factor in the development of the CX conveyor drive series. As a result each gearbox in the range features low noise characteristics as standard and two have already been supplied to Port Waratah, meeting strict acceptance criteria and performing successfully to this day.



### Case study: Paper

When a leading high quality packaging paper manufacturer needed to increase capacity of its board and paper machine from 500m/min to 600m/min, David Brown Santasalo stepped in to engineer a solution that would improve performance. A new mechanical drive system was designed by expert engineers, including gears, coupling, and safety guards as well as a centralised lubrication system. The drive system's layout was re-engineered to feature 13 drive points to add value and ensure maximum, long-term performance. The result was added value for the customer and a drive system that would need their needs for higher capacity.



## Expert service regardless of the brand

David Brown Santasalo is the service provider of choice for many of the world's leading industrial companies. With more than 285 years of combined gear unit design and manufacturing expertise, we understand how to maintain and service the most difficult, process-critical gear units to ensure optimal results and life extension, regardless of the brand. Our global service network means we're close to you, providing support and technical expertise where and when you need it.

Services offered include:

- Repairs/rebuilds
- Upgrades
- Emergency Service
- Replacement units
- Re-engineering
- Testing
- Roll gearbox load testing
- Field service (open and closed gearing)
- Bore scope analysis
- Installation
- Training
- Spare parts management

All of the above services can be offered on third party gear units.



**DAWNTHRIVE LTD.**

**Dawnthrive Ltd.  
Acting for David Brown Santasalo**

**United Kingdom Office:**

Unit 7 Westlink  
Cupernham Lane  
Romsey  
Hampshire  
SO51 7AA  
T: +44 1794 830352

**Pakistan Office:**

Plot 8, Block 4  
Works Cooperative Housing Society  
Gulistan-e-Jauhar  
Karachi  
75290  
T: +92.21.34011626-28

pk@dawnthrive.com  
www.dawnthrive.com

GearWatch Condition  
Monitoring:



[www.dbsantasalo.com](http://www.dbsantasalo.com)

Revision date: April 2021. The information contained in this catalogue has been obtained through sources deemed reliable but cannot be guaranteed as to its accuracy. Any information of special interest should be obtained through independent verification and consulted with a David Brown Santasalo representative. In the interest of continuous development, David Brown Santasalo reserves the right to alter designs and specifications without prior notice. Your David Brown Santasalo representative should be consulted prior to product selection and use. Terms and conditions apply. Contact your local David Brown Santasalo representative for details and to check eligibility.