08/2006

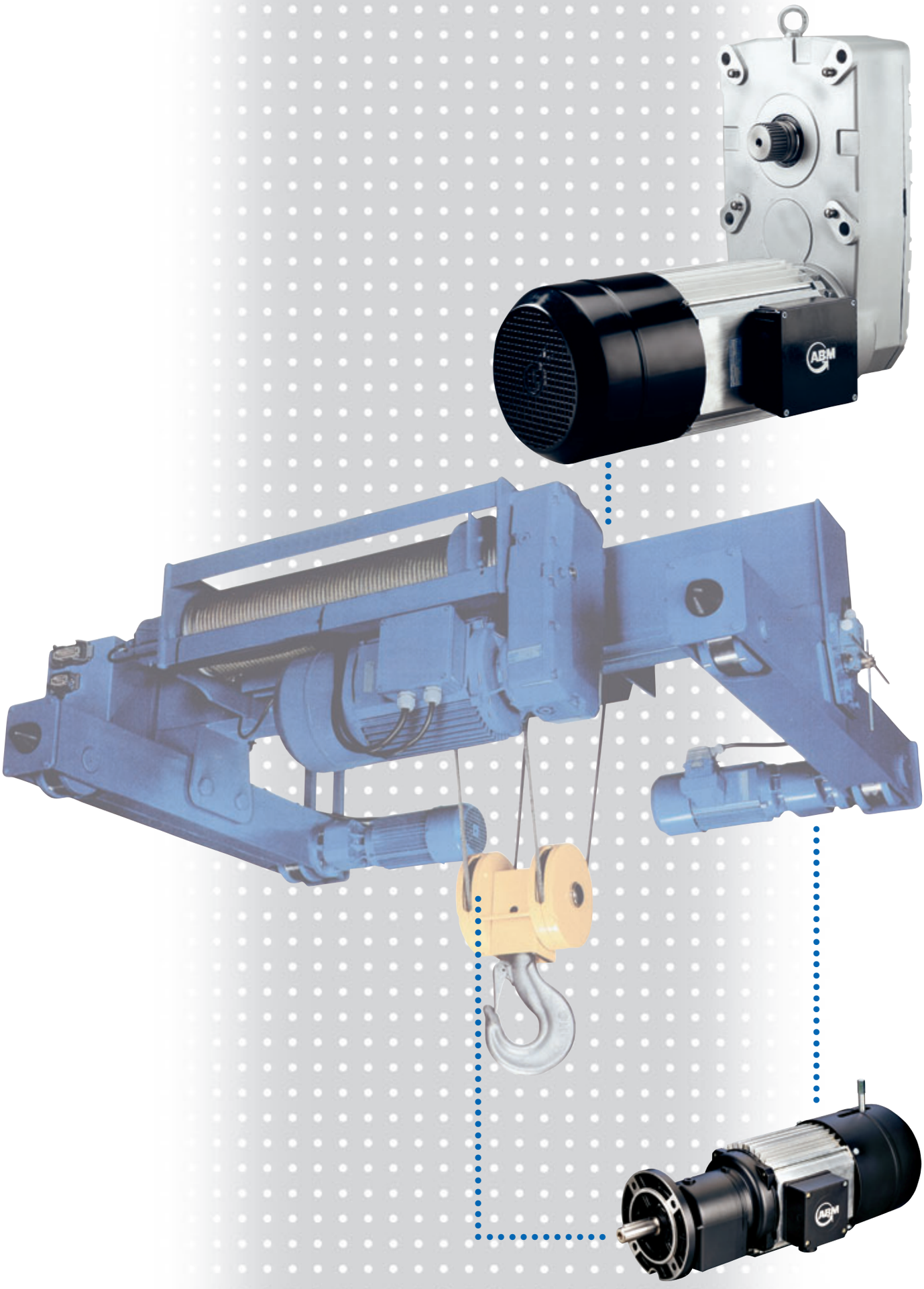
DRIVE TECHNOLOGY

for cranes and hoists

We put ideas into gear.

ABM Greiffenberger Antriebstechnik

DRIVE TECHNOLOGY for cranes and hoists



ABM Drives for Crane and Lifting Technology

Lifting and conveying of loads require powerful and reliable drives. Harsh environments and unfavorable conditions such as low power supply or aggressive surroundings should not have an impact on proper operation. ABM's units are designed to withstand these conditions and to meet or exceed the highest expectations for more than 25 years. Travel and hoist units benefit from ABM's vast experience and are consequently optimised for top quality and usage, improving the competitive edge of our customers. Conformity with relevant standards, such as CE, VDE, DIN, UL / CSA, CCC etc., allow simple registration and approval of a crane system.

The Three Product Lines of Crane Travel Drives

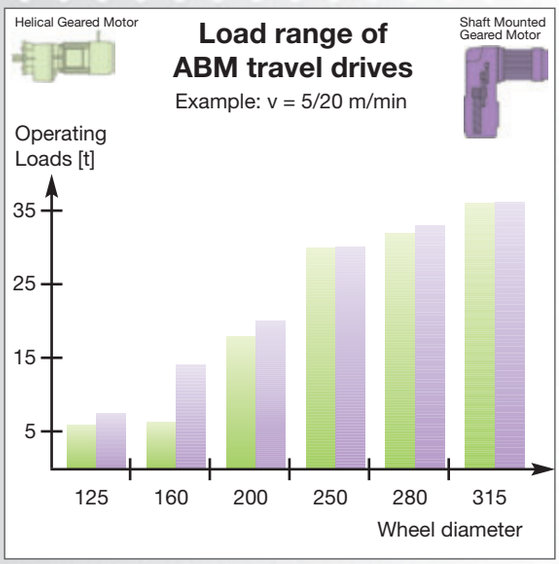
ABM travel drives are available as helical or shaft mounted geared motors. Depending on the application, travel drives are offered in three product lines, differentiated in drive characteristic and usage:

- *ECO-LINE*
- *PROFI-LINE*
- *AUTOMATION-LINE*

All drive systems represent compact units consisting of gearbox, motor and brake.

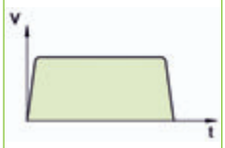
This offers the following advantages to the user:

- Robust, high quality drive unit
- Reliable soft start
- Minimised swinging motions of hanging loads
- Soft braking
- Precise positioning
- Very low maintenance
- Integrated safety brakes with minimal wear
- Versatile mounting options
- Long life
- Low weight
- Highly corrosion-resistant



ECO-LINE

drive characteristic



The **ECO-LINE** is operating in single speed and applies to travel operations of lifted loads with a satisfactory stopping precision.

Technical features:

- Aluminum housing
- Special rotor for soft start
- Fly wheel with bearings on both sides
- Minimal wear brake

Applications:

- Transport of long goods
- Handling and storage of I-beams

PROFI-LINE

drive characteristic

The **PROFI-LINE** is operating in two speeds with higher demands on positioning of lifted loads. Maximum output is available any time.

Technical features:

- Aluminum housing
- Special rotor for soft start
- Fly wheel with bearings on both sides
- Special 8/2-pole winding characteristics
- Minimal switching impulse
- Wear reduces brake

Applications:

- Minimised swing in transport of sheet metal and coils
- Handling of containers

AUTOMATION-LINE

drive characteristic

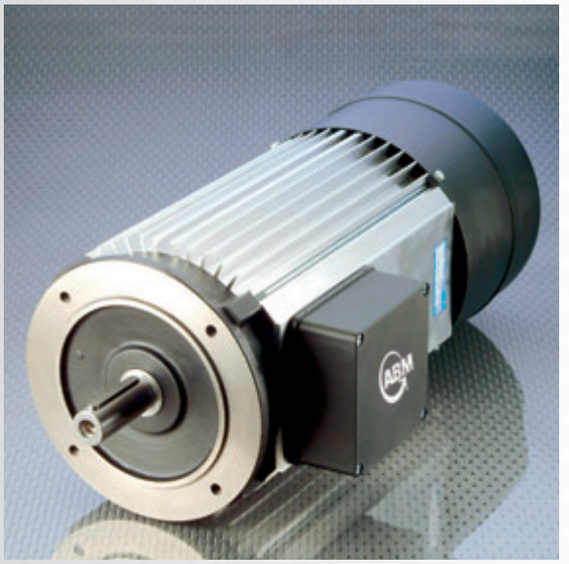
The **AUTOMATION-LINE** is operating in variable speeds for maximum demands for movement and positioning of lifted loads. Optimum speed, minimised swinging motion and sensitive positioning are combined to minimize cycle times.

Technical features:

- Aluminum housing
- Variable drive speeds
- Special long life winding insulation
- Dynamic motor characteristic
- Minimal wear brake
- Adjustable acceleration and deceleration ramps

Applications:

- Delicate assembly operations
- Handling and transport of glass
- Precise positioning of cast tools
- Warehouse operations



ABM Hoist Motors

Special features:

- High start and stall torque
- Soft and safe acceleration
- High power density
- Long lifetime

Technical features:

- Specification according to FEM, HMI, etc.
- Low start current
- Quiet operation
- Dynamic acceleration characteristic
- Optimised switching properties for 2-speed motors
- Double-surface safety brake
- Upgraded insulation for inverter operation

ABM Hoist Units

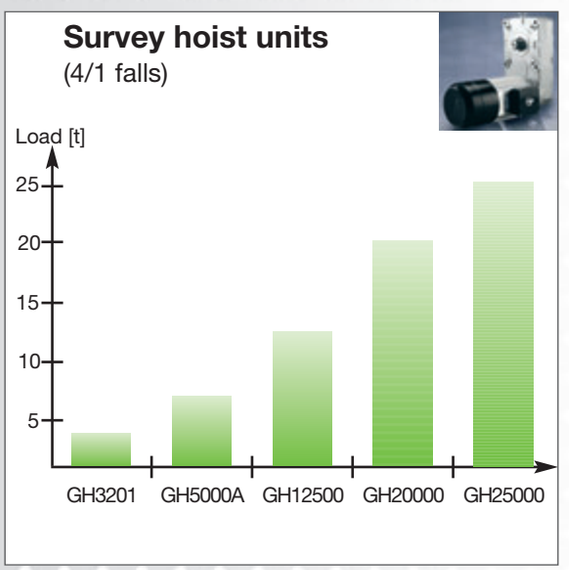
The ABM range of hoist units offers specifically geared motors with brakes for direct drive of rope drums in five sizes. The hoist unit design is based on FEM calculations for standard lifting gear allowing safe and reliable lifting of loads from 3.2 to 25 tons in 4/1 falls.

Advantages for the user:

- Compact and heavy duty drive units
- Large axis base for assembly in U-design
- Direct mounting of rope drums
- Available in lifting speeds of 4 / 5 / 6.3 and 8 m/min (4/1 falls)
- Low weight of drive unit
- Easy to mount

Technical features:

- Motor housing and gearbox made of aluminum
- Common interfaces for hoist units
- Low-noise gearing design
- Lifetime lubrication
- Double-surface brake



ABM Brakes

For hoist motors and units brakes are generally designed as double-surface safety brakes and offer the following advantages:

- Reliable operation and high cycle frequency
- Minimal wear / long life time
  (1 Million cycles without adjustment)
- Automatic braking in case of power loss
- Safe braking by minimized load swinging
- Asbestos-free brake pads
- Stroke limitator for wear indication