

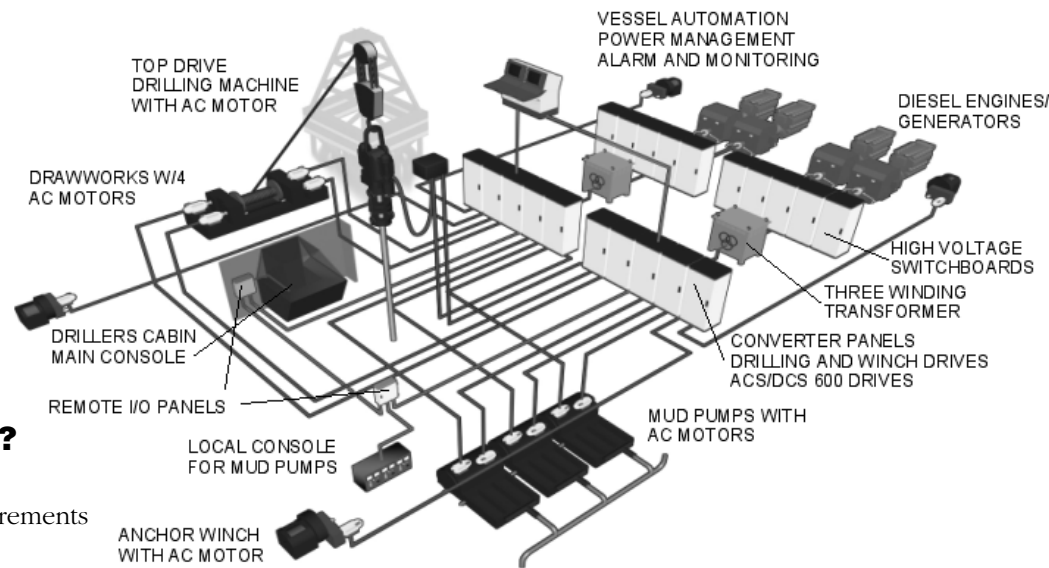


AC Drilling Drive Systems

State of the art solutions for Offshore and Onshore drilling applications

Benefits

- Optimized drilling operations
- Minimum cost of operation
- Increased safety and security
- High system availability
- Considerable energy savings due to high overall efficiency
- Low maintenance costs
- Interface to all major suppliers



What can ABB offer you?

- Modular construction
- Easily adapted to customer requirements
- High efficiency
- Standard or customized solutions
- Efficient engineering
- Well proven technology

ABB has successfully served Drilling Drive Systems customers since the early 70-ties. The breakthrough for AC drilling drives came in 1994 when Shell/Statoil installed ABB's and the world's first AC Drilling Drive at the Troll A Platform. This installation quickly revealed the advantages of AC drilling drives.

ABB's Drilling Drives offer responsive, high-accuracy speed and torque control. It has excellent dynamic characteristics in the entire range from zero to maximum speed. The specially designed AC drilling motor can hold the drillstring stationary at full torque without having to be unloaded using a clutch.

ABB is aware that success can only be achieved through successful customers and focus on solutions that can give our customer competitive advantages in a changing market. Even though our solutions are well proven we take pride in being at the leading edge, and the AC Drilling Drivers are based on state-of-the-art technology. In line with ABB philosophy of being a total partner to our customers we offer a complete portfolio, from field instruments to ERP system, from design and engineering to service and support.

Reliable, compact and flexible

ABB AC Drilling Drives system consists of robust and virtually maintenance free induction motors controlled by a modular, solid state water-cooled frequency converter system.

The Exe proof AC motors need no pressurizing, and air-cooling eliminates pipe systems or heat exchangers. The motors can operate without an eddy current brake

system, reducing weight and saving space.

The common DC bus principle of the converter system means one supply section, reducing cabling cost and space requirements. Expansion is accomplished by connecting new inverters to the DC bus

ABB AC drilling motors

A major advantage of an AC drive is the use of an induction motor. This is the most versatile, reliable and economical type of motor. Our induction Eexe motors are standard frame-size motors specially designed for frequency control and adapted to drilling applications.

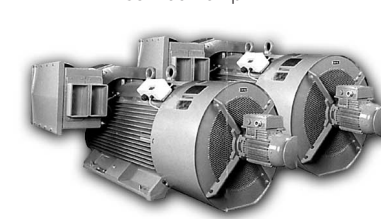
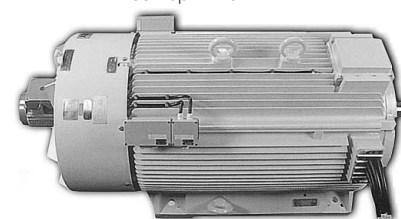


- High efficiency, low noise / vibration
- Simple construction, less maintenance
- Constant torque in full speed range
- Frame size: 350-400-450-500-560
- Output up to 4300kW, 600/660/690V
- Separate mounted ventilator fan, air cooled (no water cooling or air purging system required)
- Water cooling/air cooling,
- CE marking
- ATEX certified

Complete deliveries

- AC/DC Drives, switchgear, power generation & management
- Cabins, chairs, consoles and panels.
- Instrumentation and control systems
- Communication systems
- Studies and engineering
- Installation, commissioning, service and training
- 24-7 worldwide service and logistics

Project/Field	Client	Scope (VSD/Motors/Aux) for :
Troll A GBS Platform	Shell/Statoil	Topdrive Draw Works (2) Mud pumps (4)
Njord ACV 700	Norsk Hydro	Draw Works (2) Top drive (2) Mud Pumps (6) Rotary Table (1)
New Building # 184 ACS 600 Water cooled	Santa Fe International Corp.	Mud Pumps (6) Draw Works (10) ACTIVE HEAVE Top Drives (3) Cement Pumps (2) Grizzly Pumps (2) Anchor Winches (4) Storage Winches (8)
New Building # 185 ACS 600 Water cooled	Santa Fe International Corp.	Mud Pumps (6) Draw Works (10) ACTIVE HEAVE Top Drives (3) Cement Pumps (2) Grizzly Pumps (2) Anchor Winches (4) Storage Winches (8)
Thunder Horse ACS 600 Water cooled	BP/AMOCO	Mud Pumps (6) Draw Works (10) ACTIVE HEAVE Top Drives (2) Cement Pumps (2) Cutting Injection (2)



AC Drilling Drives Systems was preferred for

Project/Field	Client	Delivery
Troll A GBS Platform	Shell/Statoil	1994
Ekofisk 2/4X WHP	Phillips Petroleum Company	1996
Visund	Norsk Hydro	1996/1997
Njord	Norsk Hydro	1997/1998
West Venture	Smedvig Drilling	1997/1998
West Navion	Smedvig Drilling/Statoil	1998
Bingo 9000-1 & 2	Ocean Rig ASA	1998/99
Navis Explorer I	Navis ASA	1999
Saipem 10000	Saipem Spa.	1999
Ringhorne	Exxon/Esso Norge AS	2001
Kviteboen	Statoil	2001
Grane	Norsk Hydro	2001
New Building # 184 & 185	Santa Fe International Corp.	2002/03
THUNDER HORSE	BP/AMOCO	2002
AIOC Phase 1	BP/Sofresid/Eiffel	2003
and several other projects...		

Industries Division

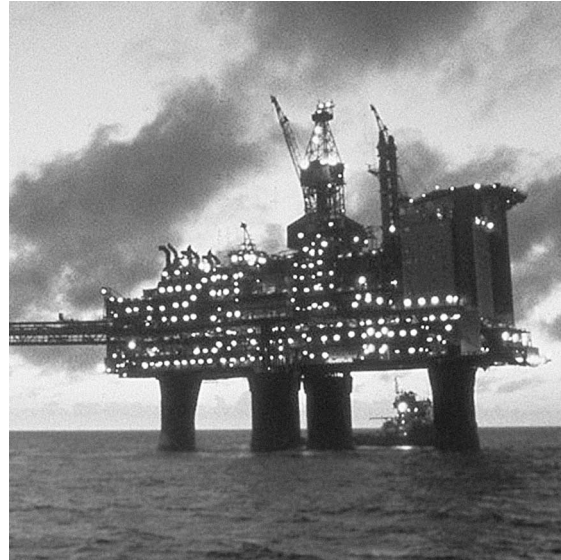


ABB is a global leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. ABB has approximately 152,000 employees in more than 100 countries.



ABB AS
Industries Division
P.O.Box 6540, Rodeløkka
N-0501 OSLO
Tel: +47 22 87 20 00
Fax: +47 22 87 29 00

www.abb.com

ABB Inc.
P.O.Box 42835
Houston, Texas 77242 - 2385
Tel: + 1 713 821 8800
Fax: + 1 713 821 3516

AC Drilling Drive Systems

State of the art solutions for Offshore and Onshore drilling applications



www.reinelt.no r10244

