An example of innovation in industrial automation
DEIC, the single point of contact
Automation
The hidden technology that moves the world

- Expansion of the oil&gas market due to:
  - New production methods
  - Growth in distribution channels

- Great interest for innovation in the rotating machines area and to their control systems

- Automation can be the key factor to keep this business competitive, thanks to:
  - Energy Efficiency
  - Integrated Automation
  - Safety Systems
Traditional control solution for rotating equipments
A fragmented architecture
Lesson Learnt
From Traditional Solution....
Lesson Learnt
…to an Integrated Solution
The single point of contact: DEIC Driver & driven Equipment Integrated Control

- One device that unifies:
  - Process and machine control
  - System protections and safety
  - Monitoring and diagnostic
  - Advanced control and optimization

- Hardware and software certified by TÜV Rheinland

- Compatible with all the main ABB and 3° party DCS and automation systems

- Reduced footprint, suitable for space relevant applications such as FPSO (Floating Production Storage and Offloading) or FLNG (Floating Liquified Natural Gas)
DEIC
Drive & driven equipment integrated control system

**DEIC-700**
- Small machines
- Not critical applications
- Stand-alone

**DEIC-800**
- Medium-Large size machines
- DCS-level monitoring features

**DEIC-900**
- Medium-Large size machines
- Can provide safety functions (ESD)
The single point of contact: DEIC Drive and driven machines

- Electrical driver (DOL & VSD)
- Compressors, blowers & fans
- Turbines (Gas & Steam)
- Pumps (Centrifugal & Alternative)
Where to find a DEIC

Oil&Gas

Water

Power

Utilities
The traditional Anti-Surge control systems protect the compressor from unstable operation, limiting its operating range.

This approach limits the maximum efficiency reachable.

The brand new Anti-Surge control system featuring the SPEED™ technology, takes advantage of several ABB patents to grant:

- Earlier Surge detection
- Surge onset suppression thanks to the use of electrical Variable Speed Drives
- This technology grants a higher safety margin thanks to the use of the VSD togheter with the anti surge valve, and enhances the compressor performance by enlarging the operating range.
Power and productivity for a better world™