Power2® 800-M
Increase power output, save on fuel

Two-stage turbocharging is a key technology in enabling significantly reduced fuel consumption and emissions, in addition to increased engine power density.

For the most advanced medium-speed four-stroke diesel, gas and dual-fuel engines Power2 800-M has been uniquely designed to operate beyond the limitations of single-stage turbocharging.

The new efficiency benchmark
Power2 800-M was designed right from the start to deliver all the benefits of a dedicated two-stage turbocharging solution. Each of its turbocharger stages is specifically developed to work in harmony with one another enabling your required engine optimization to be as efficient and effective as possible. Power2 800-M achieves turbocharging efficiencies of more than 75 percent and provides charge air pressure of up to 12 bar, and that’s a new industry benchmark, making it the most powerful turbocharging system available in the market. This translates to potential for double-digit increases in power output density and six-figure annual fuel savings. At the same time contributing to significantly reduced NOx emissions.

Designed for operators
Since space is at a premium on four-stroke applications, there has been a special focus on making Power2 800-M as compact as possible while delivering highest performance. It is 20 percent more compact compared to a conventional two-stage turbocharging system based on a single-stage design.

Full flexibility and versatility
Power2 800-M offers value beyond the limitations of single-stage turbocharging, to meet the requirements for next generation engine concepts. Selected for the world’s most efficient four-stroke diesel engine, it is also designed for gas and dual-fuel marine and power plant applications. With two frame sizes to choose from Power2 850-M and Power2 845-M, the entire range of the medium bore, medium speed engines is catered for.

Maximized uptime
To ensure highest possible availability of your application, we designed Power2 800-M to be service friendly. Power2 800-M comes with fully extractable cartridge that allows turbocharger overhauls without touching any engine connection, leading to a reduction in overhaul time by 30%.

In addition to the reliability and performance that you get with an ABB Turbocharging solution, Power2 800-M further supports maximized uptime and availability. Our global footprint enables fast-track expert repairs and more than 98 percent spare part availability from our worldwide Service Network for every ABB turbocharger.
02 The new efficiency benchmark for advanced medium-speed engines

Operational benefits:
- Fully covering diesel, gas and dual-fuel operations
- No limitations for HFO applications
- Fuel saving potential beyond 10 g/kWh
- Up to 60 percent lower NOx emissions
- Service friendly design
  - 30 percent reduced overhaul time* due to the extractable cartridge
  - Easier handling, less space required*

Technical benefits:
- Increased power density
- More than 30 bar BMEP
- Pressure ratios up to 12
- Turbocharging efficiency above 75 percent
- No compromises with respect to transient response

* Compared to a conventional two-stage turbocharging system based on single-stage turbocharging design.