

Dual-fuel conversions

ME-GI

An Everllence B&W ME-GI retrofit allows your vessel to operate on both traditional fuel oils and LNG, providing significant benefits in terms of fuel flexibility, emissions reduction, and regulatory compliance.

For shipowners and operators to stay competitive, it's vital to find the optimal balance between operational cost savings, environmental compliance, and the ability to adopt cleaner fuels without the need to invest in an entirely new fleet.

An Everllence B&W ME-GI retrofit is the process of upgrading an Everllence B&W ME-C series engine to an Everllence B&W ME-GI dual-fuel engine. The process involves a one-time capital investment. Balancing this with the competitiveness of LNG as a bunker fuel makes it a practical and cost-effective way to maximize asset value.

The retrofit process converts your engine to dual-fuel functionality, allowing it to switch between LNG and traditional fuel oils. This gives you the ability to optimize fuel selection based on availability, cost, and regulatory requirements.

The modular, 'dual-fuel ready' design of Everllence B&W engines allows for future retrofits to operate on ammonia or other e-fuels. This adaptability provides an ideal pathway to meet environmental targets, such as achieving net-zero carbon emissions by 2050.

Everllence B&W ME-GI engines maintain their high power output and low fuel consumption across both LNG and fuel oil operations. Your engine rating will remain unchanged and will not trigger a MARPOL Annex VI Tier upgrade. If needed, however, derating and/or power limitations can be included.

Everllence PrimeServ handles everything, including:

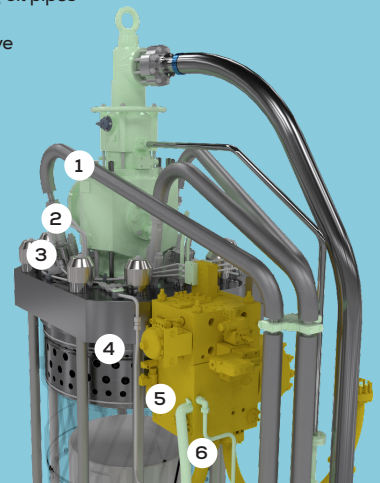
- Research & development
- Engineering
- Procurement

LNG FUEL



Natural gas is a hydrocarbon gas mixture consisting primarily of methane and higher hydrocarbons like ethane and propane. Transforming natural gas into LNG gives it a significantly smaller volume for export and storage making it an effective, cleaner-burning fuel that can be used for marine propulsion.

- 1 High pressure pipe to pilot injection valve
- 2 Control & sealing oil pipes
- 3 Gas injection valve
- 4 Gas channel in cylinder head
- 5 Gas block
- 6 Double-walled bi-directional pipe



- Delivery
- Installation consultancy
- Test & commissioning consultancy
- Engine recertification
- Project management

We issue full installation documentation during the process, which only requires a minimal drydock period and operational downtime.

Everllence

PrimeServ

ME-GI retrofit

Get greater fuel flexibility with lower emissions

Key benefits

- Refined Everllence B&W engine design with over 4 million running hours
- Flexible operation using fuel oils or LNG/methane
- Significant improvement in overall emission reduction
- Proven concept with several conversions completed successfully
- Compatible with digital connectivity services, such as Everllence PrimeServ ASSIST
- Approx. 190 LNG bunkering ports exist worldwide, with 80 in development

Applicability

The Everllence B&W ME-GI two-stroke retrofit solution is available for most Everllence B&W ME-C engines. This solution is typically installed on LNG carriers, PCTCs, VLCCs, tankers, container vessels, bulk carriers, and car carriers.

Scope of supply

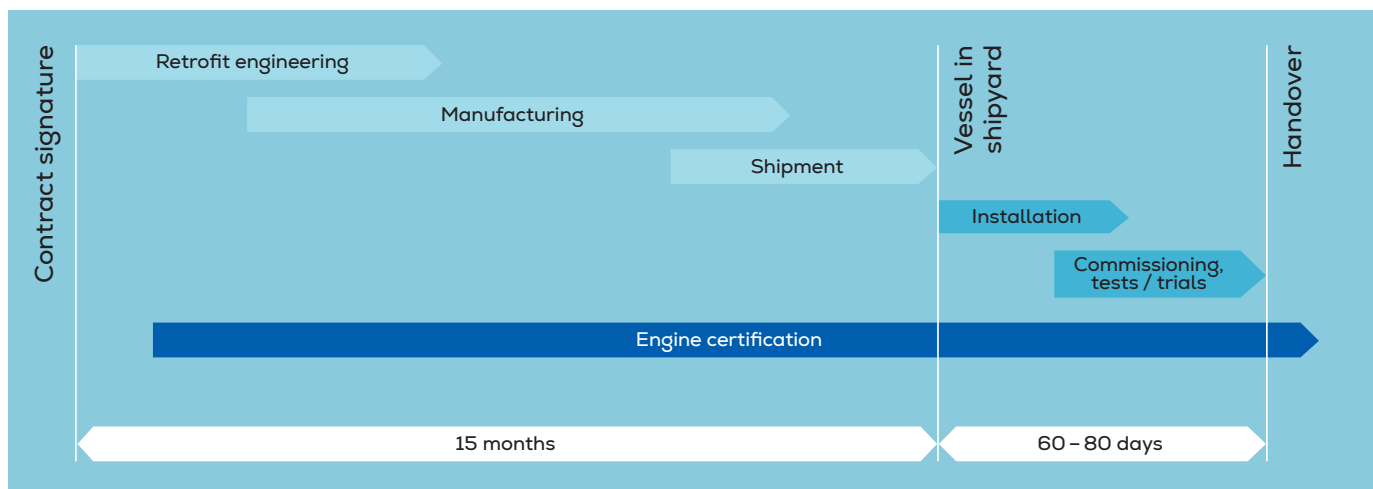
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Main modifications

- Cylinder covers with exhaust valves, fuel and GI injectors
- GI control blocks and adaptor blocks
- GI chain pipes (double-wall pipes)
- Sealing oil system
- New Everllence ME-GI control system
- Fuel valve and exhaust valve actuators
- Updated pipe and cable arrangements
- Gas valve train (GVT)
- PVU (Pump Vaporiser Unit)

Installation process



More information

Contact your local Everllence PrimeServ office for more information about the product and how the upgrade can improve your specific engine.

Everllence PrimeServ

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