



Our highly experienced and trained staff are available around the clock

# Four-stroke Applications

BWSC Panama S.A. is rapidly becoming the preferred service provider to operators in the Canal and greater Caribbean.

Our staffed craftsmen, specialists and engineers can troubleshoot and repair virtually all four-stroke engine makes and types (both inline and V-shaped engines, 6-18 cylinders).

Our office and fully equipped workshop is conveniently located in Panama City. We are also located, so we can render on-shore and off-shore services as well as step-in services to supplement a vessel's engine room staff when needed.



**Four-stroke engine service**

- Scheduled service intervals in accordance with the engine's OEM recommendations including:
  - Intermediate component services, inspection and control check
  - Major overhaul services, including component replacement, rotation and restoration
  - Condition based services
  - Pre-docking survey and recommendations
- Unplanned break-down services including:
  - Piston/cylinder liner replacement
  - In-situ cylinder liner honing
  - Replacement of rotating cylinder heads
  - Fuel oil injection valve overhaul and testing
  - Buffer piston services
  - Fuel oil pump overhaul and replacement
  - Oil mist detector service
  - Bearing shells replacement (big-end, small-end and main)
  - Governor replacement
  - Trouble shooting

**Workshop services of rotating component**

BWSC Panama S.A. will be able to assist with the classification of components, such as preparing parts for upcoming inspection by class surveyors:

- Rotation of cylinder heads including:
  - Valve cone machining
  - Valve seat machining
  - Valve inserts replacement
- Cylinder liner honing, cleaning and preservation
- Rotating piston service and preservation
- Rotation of fuel oil injectors – overhaul, parts replacement and preservation
- Rotation of fuel oil pumps – overhaul, parts replacement and preservation
- Turbocharger overhaul, including cleaning, balancing and preservation
- Charge air cooler inserts – cleaning, pressure testing and preservation

BWSC Panama S.A. is just a phone-call away: +507 388 4478.

**About BWSC**

*Headquartered near Copenhagen, Denmark, BWSC provides specialized consultancy, engineering, installation, operation and maintenance services at power plants and green energy facilities worldwide.*

*Forty years of experience with energy infrastructure, a diverse staff of seasoned experts, full technology independence and our big-picture approach make us uniquely able to help customers define their ambitions and reach them through expert design and continuous improvement of their facilities.*

# BWSC

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