AJP MARINE

IN PARTNERSHIP WITH NEMOY

MARINE TWO-STROKE ENGINES

MAIN ENGINE INSPECTION

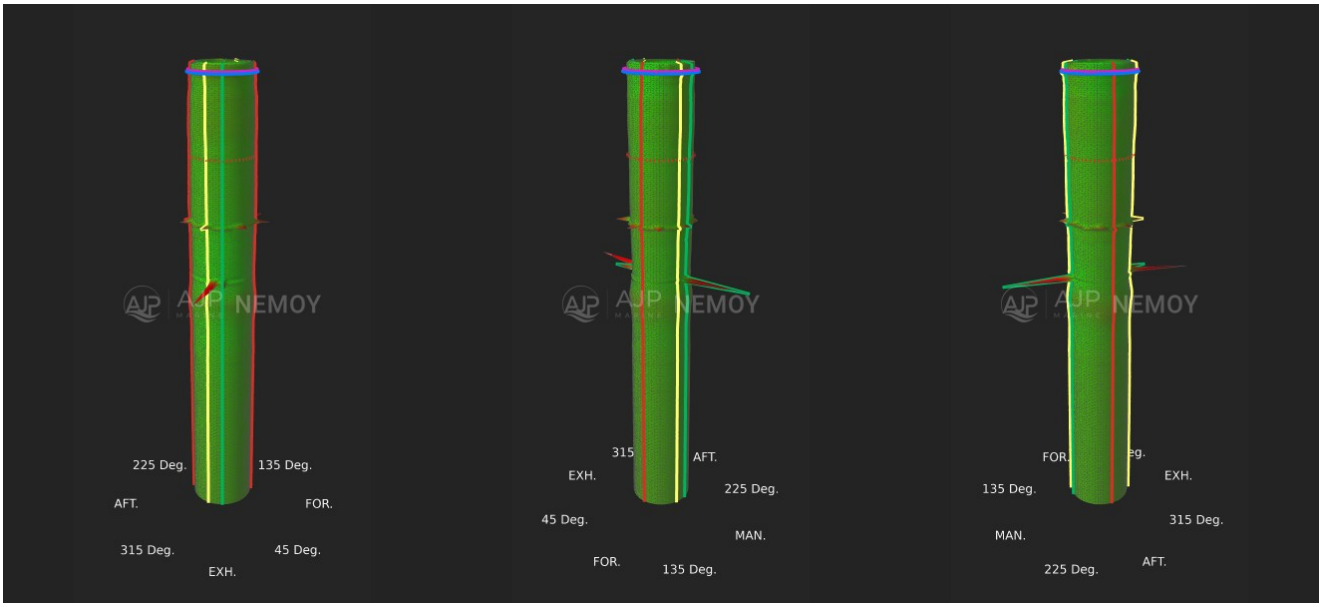
Onboard condition assessment without vessel immobilisation.

AJP Marine, in partnership with Nemoy Orbiter, combines 3D cylinder liner measurement, internal photographic inspection and piston ring measurements. Results support maintenance planning and comparison between cylinders.

400–980 mm
Cylinder bore range

20,000+
Measurement points per cylinder

10–30 min
Inspection per liner*



Measured liner geometry · Three views of the same cylinder liner.

ATTENDANCE IN PORT OR AT ANCHORAGE

Access through scavenge ports, without cylinder-cover removal where the engine configuration permits.

Engine families: MAN B&W / Everllence B&W, WinGD, Sulzer / Wärtsilä RT and UEC (Mitsubishi / Japan Engine Corporation).

* Inspection time depends on the selected package. Total attendance includes preparation and access arrangements. Compatibility is confirmed for the engine model, dimensions, access and scope.

INSPECTION SCOPE / CYLINDER LINERS

LINER MEASUREMENT AND INTERNAL INSPECTION

OMEGA 3D SCAN / 3D LDM

More than 20,000 measurement points per cylinder record the internal liner geometry around its circumference and along the inspected height.

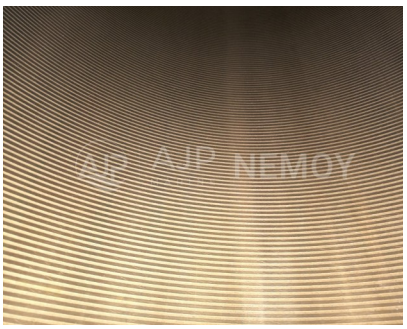
DIAMETER & WEAR
Profiles show dimensional variation along the liner.

OVALITY
Sections show the distribution around the circumference.

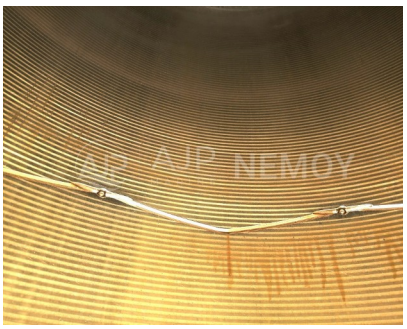
3D VIEWS
Measured geometry supports comparison between cylinders.

OMEGA VLI / INTERNAL LINER PHOTOGRAPHS

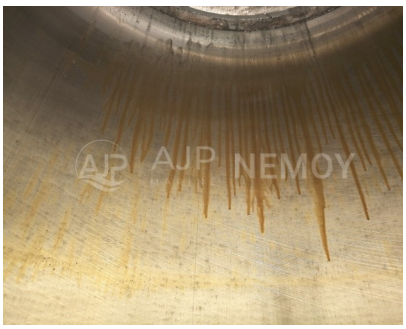
Borescope photographs at different heights and orientations complement the dimensional measurements. Records identify the cylinder and viewing position for technical assessment and follow-up.



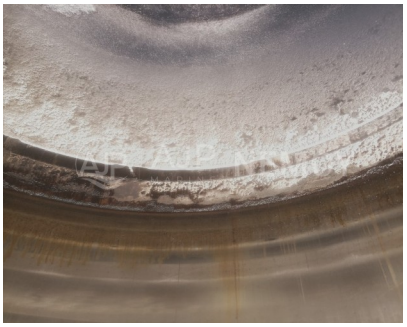
01 Above scavenge port



02 1/3 lubrication



03 1/8 lubrication



04 Main wear section



05 Cylinder cover

FIVE VERTICAL POSITIONS

The sequence progresses upwards, from above the scavenge port to the cylinder cover.

Dimensional measurements and surface photographs are considered together to document liner condition and support maintenance planning.

INSPECTION SCOPE / PISTONS & RINGS

PISTON AND RING INSPECTION

SATURN VRA / PHOTOGRAPHIC INSPECTION

Photographic inspection records the visible condition of the piston crown and piston rings through the available scavenge port access. Views from different positions provide a record for assessment and maintenance follow-up.



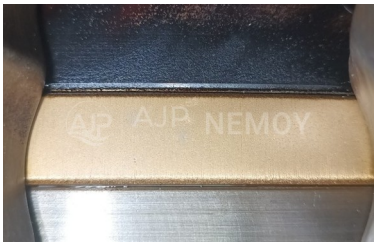
Piston ring pack



Ring 1 detail



Ring 2 detail



Ring 3 detail

PRG-CT / PISTON RING MEASUREMENTS

Clearance and coating measurements complement the photographic inspection.

PRG · RING GROOVE CLEARANCE

Clearance between the piston ring and its groove.

CT · COATING THICKNESS

Thickness of the piston ring coating.

Measured values are recorded for assessment against applicable manufacturer limits. The selected package defines the inspection methods included.

PORTS AND ATTENDANCE

BRAZIL AND SOUTH AMERICA

Based in Rio Grande, Brazil, with an operational back-office in São Paulo. Vessel attendance is planned around port calls, access arrangements and the agreed inspection scope.



○ MAIN OFFICE · RIO GRANDE ■ OPERATIONAL BACK-OFFICE · SÃO PAULO

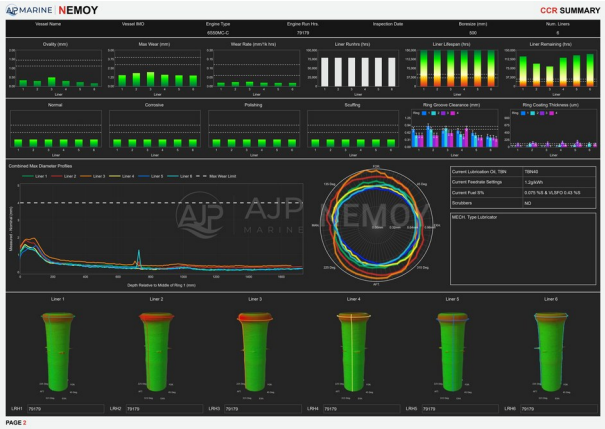
Selected ports are shown as geographical references. Availability and access are confirmed for each enquiry. Other ports and worldwide attendance on request.

Port locations: NGA World Port Index and port authorities. Map: Natural Earth (public domain).

INSPECTION RESULTS

INSIDE THE INSPECTION REPORT

Measurements, photographs and findings are organised by engine and cylinder. Selected pages below show how results are presented for condition assessment and maintenance planning.



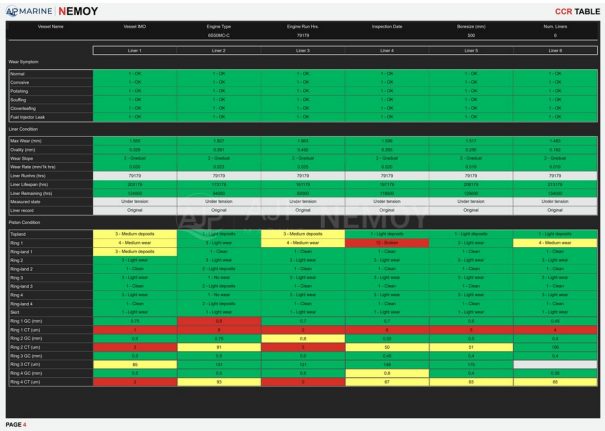
ENGINE OVERVIEW

Cylinder comparison and principal measurements.



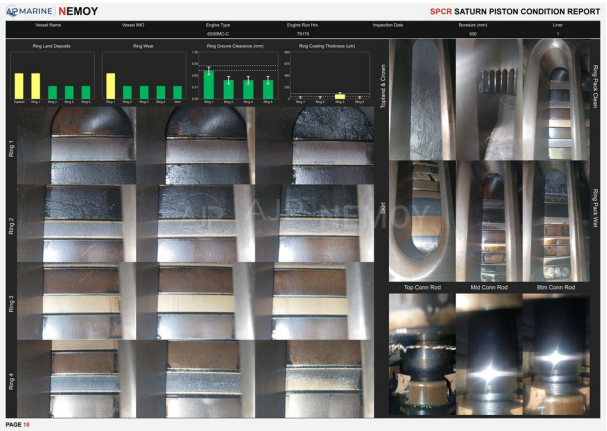
3D LINER MEASUREMENTS

Profiles, polar sections and three-dimensional views.



CONDITION & MEASUREMENTS

Consolidated liner, piston and ring measurements.



PISTON & RING RECORDS

Photographs, ring details and measurement charts.

The report also includes technical comments and VLI photographic records, according to the agreed scope and available data.

Explore all six report previews online

AJP MARINE

Main office: Rio Grande, Brazil · Port of Rio Grande
Operational back-office: São Paulo, Brazil

Serving South America · Worldwide attendance on request

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Service details · Watch the inspection video

Video & report previews