

ASIA PACIFIC: EXCLUSIVE: Singapore bunker supply chain clarifies 'limitation of MFMs' P&I club report

 [bunkerspot.com/asia/44401-asia-pacific-exclusive-singapore-bunker-supply-chain-clarifies-limitation-of-mfms-p-i-club-report](https://www.bunkerspot.com/asia/44401-asia-pacific-exclusive-singapore-bunker-supply-chain-clarifies-limitation-of-mfms-p-i-club-report)

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Experts involved in the Singapore MFM technical committee, and representatives of the equipment manufacturer, consultancy, barge operator and industry association segments respond to a well-known P&I club's recent article on mass flowmeter bunkering operations at Singapore.

Members of Singapore's bunkering community question the accuracy of a report by protection and indemnity (P&I) club Gard on 'discrepancies' of mass flowmeter (MFM) bunkering operations at the republic.

The report, [as earlier covered by Bunkerspot](#), indicated some Singapore-registered bunkering tankers siphoning fuel back to their cargo tanks with the Maritime and Port Authority of Singapore (MPA) suspending several barges for an investigation in connection with the above.

'The earlier Gard report gives the impression that such discrepancies are rather rampant in Singapore's bunkering industry, which is far from the fact,' says Desmond Chong, General Manager of Sinanju Tankers Holdings.

'Sinanju, as with other bunker suppliers here, have built up a reputation of being steadfast in carrying out our operations with utmost integrity, reliability and safety.'

'We advocate the use of MFM and remain highly committed in helping to raise Singapore's bunkering standards in terms of advancement, increased productivity and higher efficiency.'

The similar report further recorded 24 cases of discrepancies over the last six months since the official start of MFM bunkering operations at Singapore in 2017 – attributing errors to the receiving vessel's bunker tanker calibration and of the MFM's flow rate measurement.

The Singapore Technical Reference for Bunker Mass Flow Metering (TR48:2015) is a complete document that covers all aspects of MFM bunkering from setup, testing and approval to bunkering operations, says industry pioneer and expert Seah Khen Hee, instrumental in setting up the principles, requirements and procedures of TR48:2015.

'All MPA-approved MFM systems installed on bunker tankers here have gone through a very comprehensive and rigorous process to get approval for custody transfer operations in accordance with TR48:2015, in particular Clause 6 [metrology requirements] and Clause 7 [system integrity requirements],' he notes.

The accuracy and reliability of MFM systems is backed by Ingo Knudsen, Regional Business Development Manager at MFM manufacturer Endress+Hauser which has participated in the development of TR48:2015.

'Some people are thinking whether the accuracy of the system could be maintained for the long term,' he says.

'So far we have one mass flowmeter operating for 10 years installed on board a cruise liner that undergoes bunkering operations every week – the device is still on spec even till today.'

TR48:2015 covers the scope of Traceability, System Integrity and Metering Operations – says Darrick Pang, Managing Director at Singapore-based MFM consultancy Metcore International and bunker surveyor firm Metcore Inspection Services.

'The whole MFM system was calibrated and tested under bunkering conditions to ensure that the overall expanded uncertainty falls within 0.5%.' he explains.

'That is why the Singapore MFM-equipped bunker tanker is subjected to tests that not only include measurement repeatability but meter traceability, crew competency and system integrity to ensure conformity of both the tankers and meter with the requirements [TR48:2015].'

Pang believes that it is not only accuracy that is an important factor, further to this, continued periodic monitoring of MFM on both system integrity and metering operations on Singapore-registered bunker tankers, is a key topic of discussion for the future.

Singapore's MPA started conducting spot checks on all MFM bunkering tankers since the start of 2017 to ensure system integrity; these checks are conducted regardless of the bunker tanker being in operations or not – the routine inspection was how the port authority found irregularities with several bunker tankers in March, says industry veteran Simon Neo.

Bunkerspot understands that the discrepancies in the report, where shipowners claimed a loss of 6.79 to 57.24 metric tonnes (mt) in 24 cases, ranged between 0.6 to 2.3%.

'There is no basis to the claim. Shipowners using 0.6 to 2.3% tolerance as discrepancy for lodging a dispute represents an incorrect understanding of legal metrology,' states Seah Khen Hee.

'MFM systems under TR48:2015 have metrological traceability to the International Prototype of the Kilogram (IPK) and should there be any reason to dispute the MFM figure, the dispute resolution involves only checking whether the approved MFM system meets Clause 6 and Clause 7 of the TR48:2015.'

Overall, the Gard report may be a result of a general market misconception by shipowners who believe any Singapore MFM bunker delivery with discrepancy of more than 0.5% to be a valid case for dispute, observes Simon Neo, a former Chairman of International Bunker Industry Association (IBIA).

'0.5% is the error tolerance of the MFM system which bunker tankers are subjected to during the testing phase for approval under TR48:2015,' clarifies Neo.

'This 0.5% is not for quantity dispute, the percentage for quantity dispute has never been specified all along and it has always been a commercial settlement between the buyer and seller. Historically this has been the case all along.

'Gard represents shipowners. Did they launch an investigation into all this alleged disputes or was the complaints officially lodged with the concerned port authority? Also, how accurate was the receiving vessel's tanks in terms of calibrations?

'Basically, we are back to the traditional argument of final quantity binding based on the bunker tanker. Quantity received by the receiving vessel is always for ship owners reference only. This is practised world wide and in every port that the vessel takes bunkers from.'

The above feature article is part of a full story covered on Bunkerspot magazine where stakeholders share finer details of MFM bunker disputes, current bunker delivery trends, the future direction of TR48:2015, changes in business culture and more at the world's top bunkering port.

[GLOBAL: Gard flags up mass flow meter 'discrepancies' at Singapore](#)