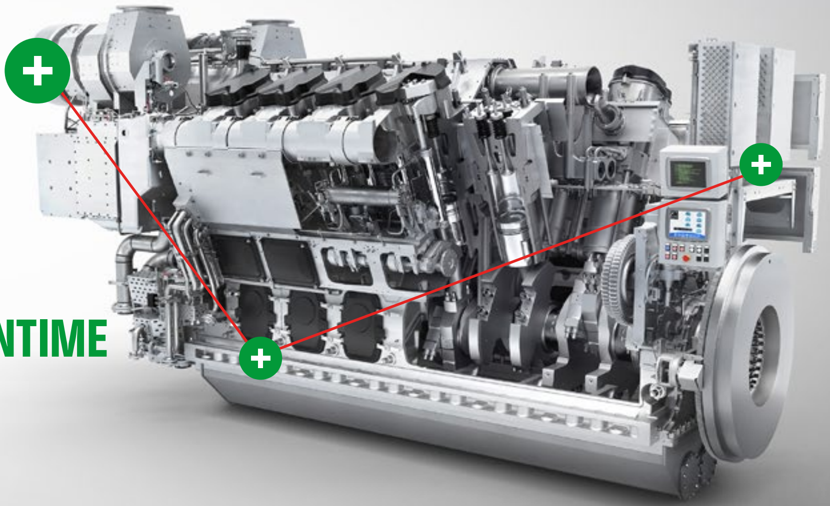
Castrol
SMARTGAINS™

CASTROL SAVES GLOBAL MARINE OPERATOR ESTIMATED $149K IN MAINTENANCE COSTS AND DOWNTIME

How used oil analysis interpretation and technical SmartGains support from Castrol engineers led to reduced lubricant consumption and improved auxiliary engine performance.



THE PROBLEM: FREQUENT FAILURE REPORTS

A global marine vessel operator wanted to reduce carbon and greenhouse gas emissions and looked to support this aim by managing lubricant and equipment efficiency through Used Oil Analysis (UOA) and Scavenge Drain Analysis (SDA). The operator was also experiencing frequent instances of marginal and critical reports. Each failure required 150L of lubricant and at least one hour's technician time. These repeated interventions led to a significant increase in lubricant consumption and unplanned maintenance, along with adverse reliability, availability and maintainability (RAM) statistics.

THE CASTROL SOLUTION: SMARTGAINS LUBRICATION STRATEGY

By working closely with the operator and reviewing their Castrol UOA program as well as Castrol Fleet Optimiser, our engineer identified that auxiliary engines were a fleet-wide 'bad actor', reducing the reliability of mean time between failure (MTBF) statistics for all vessels. Auxiliary engines account for something in the region of $247.5k out of an estimated total $4M lubricant spend – that's around 6.2%. With that in mind, any reduction in consumption and spend would add value. Our engineer developed lubrication solutions that have resulted in a dramatic reduction in the number of marginal/critical (B and C-rated) UOA reports.

THE RESULTS: YEAR-ON-YEAR REDUCTION IN FAILURES

B and C-rated samples fell from 105 in 2017 to 53 in 2019, and again to 42 in 2020. Castrol's SmartGains approach, which includes the client's UOA and SDA programmes, has been assessed at a value of around $149k. With a total lubricant spend of approximately $4M in 2020, this value counts for 3.7%. Where this approach has real merit, however, is in helping our customer to drive their RAM improvement strategy. Moreover, by improving the lubrication management element of maintenance, they can influence and reduce overall maintenance costs as part of their drive to reduce carbon output.

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING. Castrol®

THE FIGURES: SMARTGAINS ACHIEVED

SMARTGAINS AREA	SAVINGS	COST TO CUSTOMER TO IMPLEMENT CHANGE	CREATED VALUE PER YEAR
••• UOA value for 1,438 samples in 2020. Agreement includes up to 1,800 FOC*	1,438 samples @ $60 each	N/A	$86,280
••• SDA value for 568 samples in 2020. Agreement includes up to 600 FOC*	568 samples @ $100 each	N/A	$56,800
••• Technical Services Engineer's time creating Fleet Optimiser Report (Half yearly)	2 x 5 Hours @ $200/hr	N/A	$2,000
••• Reduced number of lube oil Interventions in 2020 resulting in reduced lubricant usage	2020 lube vol & spend = 2.49ML & $4,035k Aux eng lube volume = 150K ltrs Aux eng lube spend 2020 = $247.5k $/L = $1.65 11 x 150L x $1.65/L	N/A	$2,722.50
••• Reduced number of lube oil interventions in 2020 reduces personnel hours required	11 x 1hr x $100	N/A	$1,100
SMARTGAINS Total			**$148,902.50**

*Free of charge includes services that are in scope of priced services.

••• Estimates verified with the customer •• Credible assumptions based on market knowledge • Estimated mitigated costs, risk, or created value.

Based on a case study from a single customer. SmartGain results can vary depending upon the type of equipment used, its maintenance, operating conditions, and any prior lubricant used.

Discover how Castrol could optimize your fleet's performance with our SmartGains methodology.

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