

IPE – Performance Evaluation Software

for Marine Diesel Engines

- automatic evaluation of current engine performance
- easy collection, management and comparison of engine performance data
- performance graphs and reports show deviation and suggest actions to take
- clearly illustrated commercial calculations that allow to save money by reducing fuel and oil consumption
- ISO corrections
- automatic data transfer from EPM-XP^{plus} or CCM Marine to IPE software

Application:

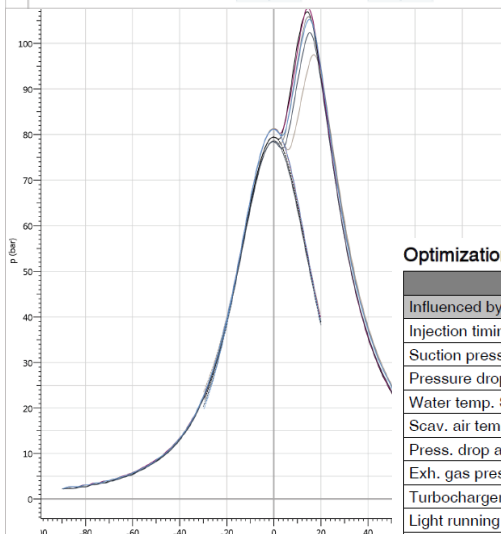
- for two- and four stroke diesel engines

Necessary components:

- EPM-XP^{plus} or CCM Marine



	ISO CORRECTED		MEASURED							
	REF.	CALC.	AVG.	CYL 1	CYL 2	CYL 3	CYL 4	CYL 5	CYL 6	
Firing pressure	barG	116,0	108,0	104,5	107,1	108,0	97,9	106,0	102,7	105,5
pmax deviation	bar			2,6	3,5	-6,6	1,5	-1,8	1,0	
Compression pressure	barG	80,7	81,6	80,1	79,5	81,3	81,4	78,7	78,5	81,2
pcomp deviation	bar			-0,6	1,2	1,3	-1,4	-1,5	1,1	
Mean indicated pressure	barG	12,11		11,92	11,64	11,53	12,18	12,33	11,69	12,13
MIP deviation	bar			-0,28	-0,39	0,26	0,41	-0,23	0,21	
Mean effective press. (MEP)	bar	11,47		11,27						
Power indicated	kW		SUM:	11039	1791	1798	1876	1898	1803	1873
pmax-pcomp pcomp / pscav	-	35,3 34,8		245	35,5					



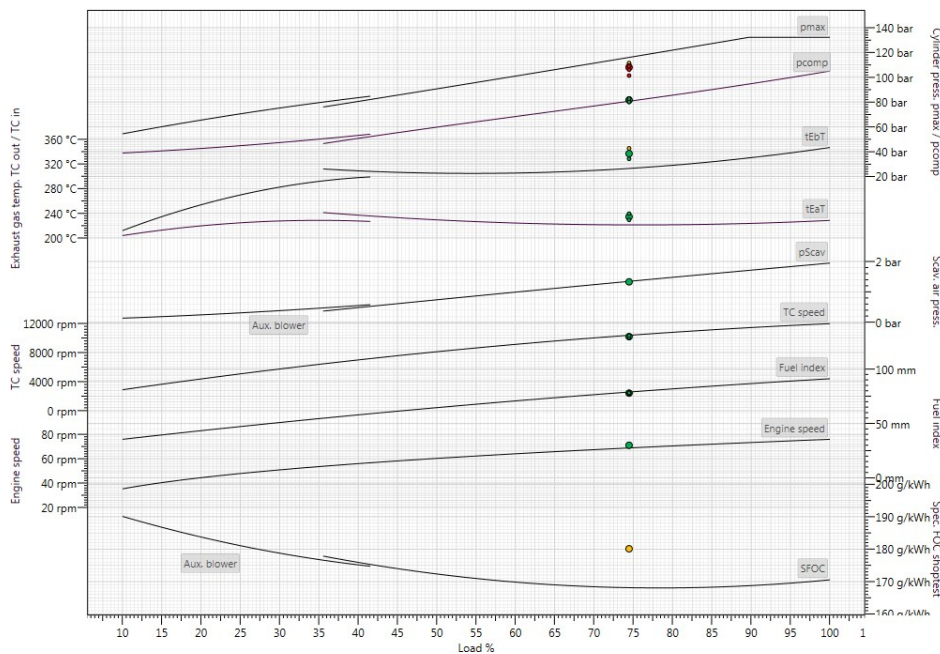
Optimization potential

Influenced by	Potential saving / reduction		
	Fuel	Thermal load	Cylinder lub oil
Injection timing	2,4 g/kWh	3 °C	
Suction pressure			
Pressure drop accross SAC			
Water temp. SAC in (for setpoint 29°C)			
Scav. air temp. SAC out			
Press. drop accross ENGINE			
Exh. gas press. TC out			
Turbocharger efficiency	1,0 g/kWh	10 °C	
Light running (sea margin)			
Fuel oil viscosity ENGINE in			
TOTAL	3,4 g/kWh		0,14 g/kWh
TOTAL (% of current)	1,8 %		
TOTAL (absolute / 1000 run. hrs.)	36 t		1,452 t

IPE - IMES Performance evaluation software for economic engine operation

The new IMES IPE software loads cylinder pressure data from EPM-XP^{plus} or CCM Marine directly. It is designed to facilitate the collection, evaluation, management and comparison of engine performance data for marine diesel engines.

The chief engineer only needs to fill in the required information so the programme can do ISO corrections and compare against new-engine performance benchmarks. Performance graphs and reports give a quick status of an engine and suggest actions take for optimising engine condition. This enables extensive savings by reducing fuel and oil consumption as well as engine repairs caused by inadequately adjusted engines.



Scope of supply

Part no.

IMES IPE software licence for one ship incl. one 2-stroke engine and four 4-stroke engines configured for main engine, incl. updates

IW-8050