

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 corrections

	ISO CORRECTED		MEASURED BY EPM-XP/CCM												
	REF	ISO	AVG	Cyl 1	Cyl 2	Cyl 3	Cyl 4	Cyl 5	Cyl 6	Cyl 7	Cyl 8	Cyl 9	Cyl 10	Cyl 11	Cyl 12
	Maximum pressure	85.84	86.07	86.07	85.50	88.31	86.82	87.26	89.15	89.78	87.48	88.45	82.73	84.27	82.19
Maximum pressure deviation				-0.56	2.24	0.75	1.20	3.09	3.71	1.41	2.38	-3.33	-1.79	-3.87	-5.21
Compression pressure	74.83	75.78	75.24	74.88	76.34	75.14	76.02	75.44	75.11	76.39	74.99	73.73	74.87	74.61	75.32
Compression pressure deviation				-0.36	1.11	-0.09	0.78	0.20	-0.13	1.15	-0.25	-1.51	-0.37	-0.63	0.08
Mean indicated pressure	10.09		9.01	9.14	9.13	9.20	8.76	8.93	8.89	9.44	9.45	9.08	9.37	8.36	8.37
Mean indicated pressure deviation				0.13	0.12	0.19	-0.25	-0.08	-0.12	0.43	0.44	0.07	0.36	-0.65	-0.64
Power indicated			24486.10	2071.43	2067.19	2080.98	1984.67	2022.38	2012.91	2138.76	2135.37	2056.82	2123.43	1895.54	1896.61
Load balance deviation				1.52	1.31	1.98	-2.74	-0.89	-1.35	4.82	4.65	0.80	4.06	-7.10	-7.05
Mean effective pressure (MEP)	9.01		8.04												
Pmax - Pcomp	11.01	10.89	10.83	10.63	11.97	11.68	11.25	13.72	14.67	11.09	13.46	9.01	9.41	7.58	5.54
Pcomp / Pscav	35.39	34.90	34.65	34.49	35.16	34.61	35.01	34.74	34.59	35.18	34.54	33.97	34.49	34.37	34.69

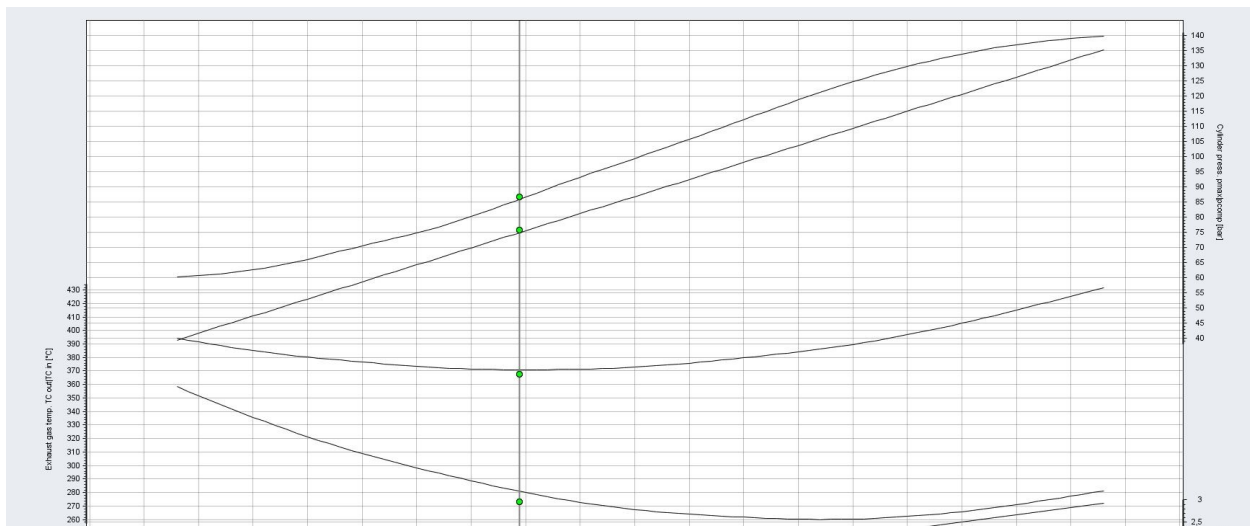
Saving potential

Theoretical savings				
Influence	SFOC saving potential	Daily fuel saving potential	Daily CO2 saving potential	Daily SOx saving potential
Water temp COOLER in	0,3 g/kWh	157,4 kg/d	346,3 kg/d	9,0 kg/d
Exh gas pressure TC out	0,0 g/kWh	24,5 kg/d	53,9 kg/d	1,4 kg/d
Maximum pressure ENGINE				
Pressure engine room				
Pressure drop across COOLER	0,8 g/kWh	419,2 kg/d	922,7 kg/d	23,9 kg/d
Suction pressure	0,2 g/kWh	94,5 kg/d	208,1 kg/d	5,4 kg/d

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

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

Part no.

W-8050