EPM-XP
Electronic Indicator for Diesel Engines
Instrument for Combustion Monitoring

Designed for periodic monitoring of cylinder pressure on diesel engines, the Electronic Indicator EPM-XP can record cylinder pressure values on a maximum of 20 cylinders (option: 160 cylinders) on two-stroke diesel engines operating at speeds of 40 to 300 rpm and on four stroke medium and high speed diesels with rated speeds from 200 to 1500 rpm.

The EPM-XP, more than 1,300 units sold, has proven considerably simpler to operate and far more accurate. After acquisition, recorded data can be downloaded immediately to a PC or notebook via a USB connection. Recorded data can be simply processed by IMES’ visualisation software.

Transmitting the data by Internet makes them available for expert analysis and condition monitoring at a remote location. An optional software upgrade allows power calculation to assist cylinder balancing.
The EPM-XP cylinder pressure indicator is characterised by its high accuracy, reliability and ease of use. Central to the performance of EPM-XP is the proven accuracy, reliability, longevity and cost effectiveness of IMES’ advanced type HTT pressure sensor employing TION thin film technology. More than 40,000 type HTT sensors have been delivered for a range of closed loop control applications.

They are affordable and their robustness and performance has been proven in many applications. As a result, standard effective life is more than 16,000 operating hours on both diesel and gas engines. On this basis we are sure that our sensors offer the best combination of robustness, longevity, reliability, price and above all accuracy available on the market.

With our hand-operated pump and manometer device, IMES provides customers with a quick and straightforward way of investigating apparently anomalous readings as well as achieving compliance with the ISO 9001 requirement for end-user testing of measuring equipment. Due to this no workshop calibration is needed.
IMES Visualisation and data processing software

IMES’ visualisation and data processing software is used to process acquired values and to display the derived information. The resulting files can be transmitted by Internet to the engine builder and shipowner for separate, independent evaluation. The standard software allows to calculate compression pressure on 2-stroke engines automatically.

With the EPM-XP hardware dongle further evaluations can be activated. This enables to calculate IPOWER and IMEP by using a mathematical algorithm.

EPM-XP connected via USB cable to notebook for quick data download and for charging 9 V block battery
with trending function

The advanced trending function is a useful tool to compare measurement data at the same engine output to find deviations in combustion process for preventive maintenance on engine. The analysis can be made by comparing the results to other measurements, mean values and configured limit lines (optimal range). Measurements made in long term indicate clearly the trends of the engine parameters, which will help to predict emerging failures.
The new IMES IPE software loads cylinder pressure data from EPM-XP directly. It is designed to facilitate the collection, evaluation, management and comparison of engine performance data for marine diesel engines. You only need to fill in the required information so the program 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.
Extensive savings due to professional evaluation

IMES IPE offers an automatic evaluation of current engine performance. Performance graphs and reports show deviation and suggest actions to take for optimising engine adjustment.

Furthermore the report gives an overview about potential savings. Fuel and lube oil can be reduced up to 2%. This means savings about 20,000,00 USD in two months.
We deliver worldwide!

Professional support worldwide due to our global sales organisation.

www.imes.de/sales-team.html