LEC CORA

User Benefits

- Standardized measurement data analysis in combustion concept development as a result of automated assessment
- Easy control via other programs, thus enabling its flexible use in many areas of application (automation, optimization, etc.)
- Individual adaptation of the tool by the developer to the workflow of the customer
- Highly experienced developer competently satisfies customer requirements

Highly flexible software for analyzing the working process of internal cumbustion engines

Broad range of applications

Application example 2
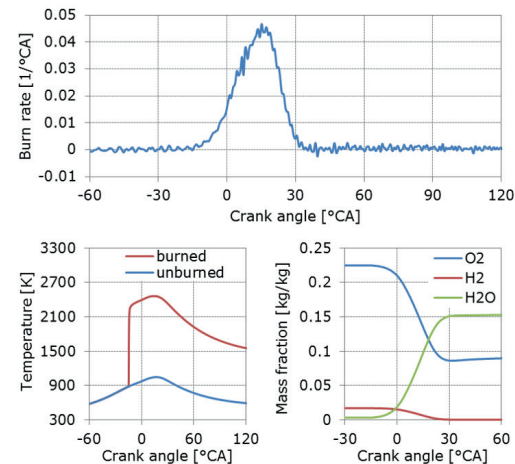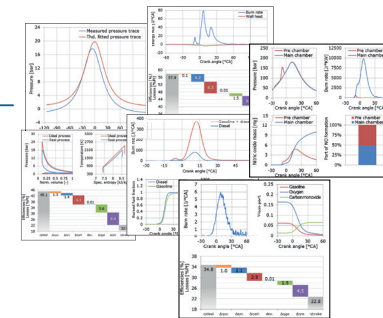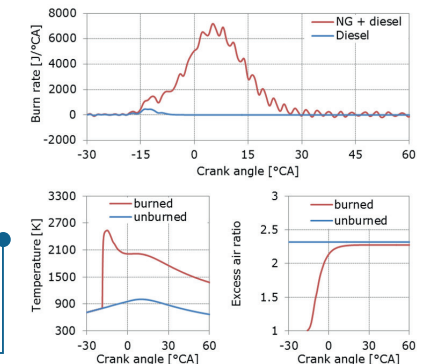**Pressure trace analysis, large-bore dual fuel engine**

LEC CORA

LEC CORA (Combustion Optimization, Research and Analysis) is an innovative software package for analyzing the working process of internal combustion engines.

Thanks to its modular structure and highly flexible input and output, it can be automatically controlled by other programs in a variety of areas of application. The optimized program code and the use of zero-dimensional analysis methods guarantee very short calculation times.

Application example 1
Pressure trace analysis, hydrogen SI passenger car engine

LEC CORA Key Features

⚙ Zero-dimensional analysis of the high pressure cycle of the working process using one and two zone models in combination with different wall heat transfer models and fuels (gasoline, diesel, natural gas, H_2, NH_3, CH_3OH etc.) or fuel combinations (dual fuel) for analysis

⚙ Detailed breakdown of losses using either pressure trace analysis or rate of heat release simulation

⚙ Simulation of NO_x emissions

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