



## Certificate

Mr.

Oleg Sergeev

of

000 "MTU RUS"

attended from Nov 19, 2014 to Nov 21, 2014 successfully a fulltime-course 4000 S2/L (Phase4 MMC V3)

## Course contents

Explanation of engine wiring and sensors
generator design and function
main and busbar basics
B&R X20 - Replacement of electrical components
PMM- Power measurement module
Generator adjustments
Handling with oscilloscope
Calibration of electronic engine components

Practical work:

Spark plug, pickup measurement, electrical troubleshooting Replacement of electrical components e.g. generator (diode, varistor), CPU

Instructor:

Thomas Lindner

Senior Manager Training Center

Augsburg, Nov 21, 2014