



Certificate No: MNDE/REP/0044/01

**TURBOUSA Inc.**  
3005 SW 2<sup>nd</sup> Avenue, Suite 105  
Fort Lauderdale, FL 33315  
United States of America

has been approved in accordance with the requirements of Lloyd's Register for the application of **thermal spray coatings to marine diesel turbocharger (VTR type) components** using the following process:

**Powder Flame Spraying to Work Instruction No: WI-824-001 rotor shaft ends.**

**Re-machining of Thermal Sprayed rotor shafts to Work Instruction No: WI-824-002**

This approval is subject to compliance with the requirements of Lloyds Register. Each application is to be separately approved by Lloyds Register and carried out to the satisfaction of the Surveyor.

LR will consider thermal spraying for surfacing applications to improve resistance to wear and corrosion, and to restore worn or inaccurately machined parts to original dimensions. Approval is based, however, on the condition that no dependence is placed on the coating for tensile or torsional strength and that machined preparations do not reduce dimensions below Rule requirements.

Each application for thermal spraying of engine crankshafts and main propulsion shafting is to be approved by LR London on a case by case basis.

Lloyd's Register is to be notified of any change of plant, formulation, or quality control routines introduced during the validity of this Certificate.

This Certificate is issued to the above contractor and is valid until the date given below.

Valid until: 14 February 2008  
Date of issue: 15 February 2005

**C D Waylen**  
Surveyor to Lloyd's Register EMEA  
For Lloyd's Register North America, Inc