

# NOVETERM®600

**Stainless steel pre-insulated  
exhaust systems for internal  
combustion engines**



## INTRODUCTION

In close collaboration with JEREMIAS, NOVETEC has designed NOVETERM®600, a light weight, easy to handle modular twin wall exhaust system, especially for internal combustion engines for marine applications as well as (emergency) generator sets.

This system, with standard 50mm high density insulation, has many advantages compared to conventional mild steel pipework with separate insulation with aluminium cladding:

- low weight, easy to handle
- complete manufactured from stainless steel for a long lifetime
- easy installation, no special tooling required
- No on site welding
- No vibrations to the building due to high density insulation



**Jeremias**®

**The Jeremias Group has more than 40 years experience in the flue and chimney production.**

**The headquarters are situated in Germany, while Jeremias Spain is producing the NOVETERM®600 system exclusively for Novetec.**

**Jeremias is one of the world's leading manufacturers of flue and chimney systems for the exhaust of gases and ventilation, covering all kind of domestic, commercial and industrial applications. Jeremias' product range includes: 60 different CE certified systems covering commercial and domestic applications complemented by freestanding industrial steel chimneys up to 3 meter diameter.**

NOVETERM®600

## **TECHNICAL SPECIFICATION:**

### **Connection**

The connection between the NOVETERM®600 components is conical and metal. This guarantees a fast and easy installation (no flanges, no gaskets) and ensures tightness for all temperatures. The metal joint is the best connection for a tight long-life. Joint security is protected by a locking band.

### **Ease of handling**

NOVETERM®600 for ease of handling and therefore quick installation times is designed to be used as an alternative to conventional heavy gauge welded steel. By comparison to these other materials, it is more easily and economically installed. NOVETERM600 is available in 14 standard-sizes between 80mm and 600mm internal diameter. Larger diameters are available up to 1000mm.

### **Insulation quality**

NOVETERM®600 twin wall insulated system uses rigid mineral wool with high density (120kg/m<sup>3</sup>). Standard thickness is 50mm, other thicknesses are available on request. The special insulation quality and the homogeneity ensure low surface temperatures of pipe and also maintains the exhaust gas temperatures while enabling the ease of installation. The insulating material between the inner and outer walls is pressed very tightly. Because of this construction the heat transfer to the outer casing is greatly reduced as there is no metal contact (thermal bridge) between the inner gas carrying pipe and the outer wall. NOVETERM has excellent acoustic properties (no break out noise) due to the density of the insulation.



NOVETERM®600

### **Temperature**

NOVETERM®600 is suitable for a continuous exhaustgas operating temperature of 600°C, (in accordance to EN 1856-1) using different kinds of stainless steel and insulation temperatures up to 1050°C can be achieved.

### **Pressure**

NOVETERM®600 is certified up to 5000 Pa for positive pressure (in accordance to EN 1856-1) and suitable up to 15000 Pa. It has been successfully tested for negative pressure of 3000 Pa.

### **Material**

The inner liner, which has contact with the exhaust gas, is manufactured of stainless steel 1.4571 (316Ti) / 1.4404 (316L).

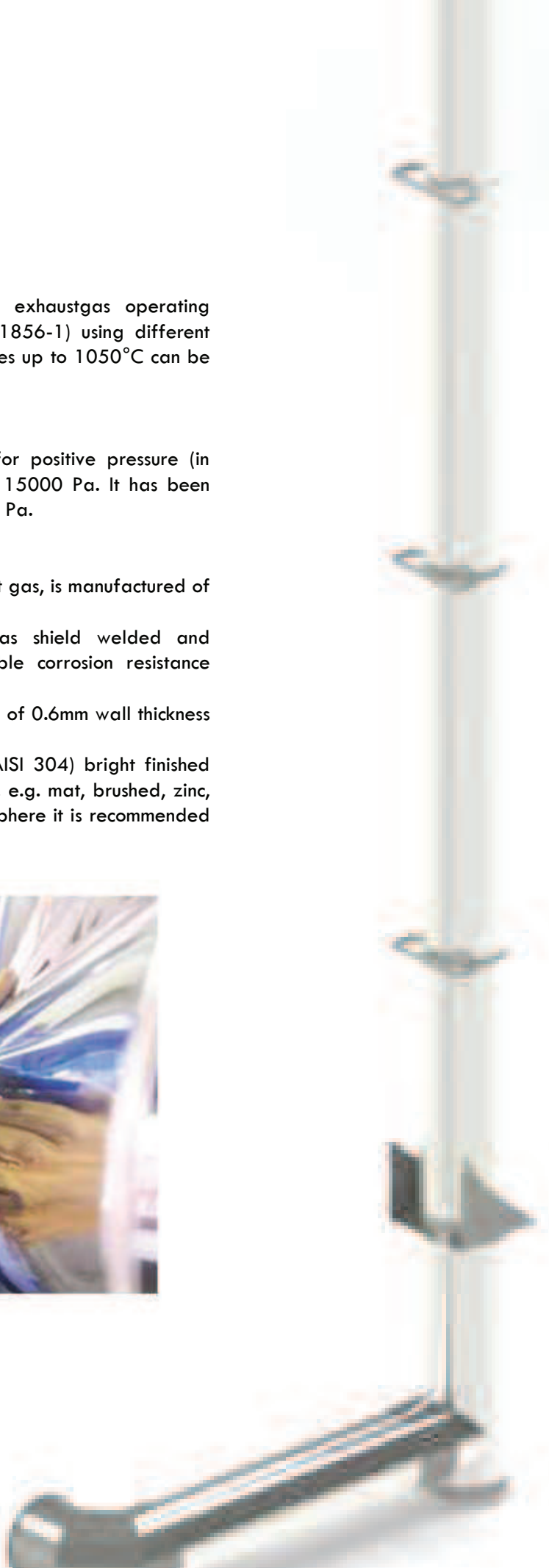
All longitudinal seams are TIG or laser gas shield welded and passivated. This guarantees the highest possible corrosion resistance available.

The standard NOVETERM600 inner liner is made of 0.6mm wall thickness or as an option up to 1.0mm on request.

The standard outer liner is made of 1.4301 (AISI 304) bright finished (IIID). Other finishes can be supplied on request, e.g. mat, brushed, zinc, painted or copper covered. In aggressive atmosphere it is recommended to use stainless steel 1.4404 (AISI 316L).



NOVETERM®600





**Advantages**

- Flanged connection on inner pipe with gasket sealing.
- Complete stainless steel .
- Easy installation due to low weight and no advanced and expensive anti vibration mounting required.
- No thermal bridge due to applying high density insulation → low outer wall temperature.
- Tightness guaranteed till 5000 Pa (positive pressure) in accordance to EN1856-EN.
- Suitable for high temperatures till 600°C.
- 4 hours fire resistant (BSRIA tested).



**Standards and certifications Noveterm 600:**

CE certified flue system under BD-EN1856 by TUV-SUD



- HETAS approval

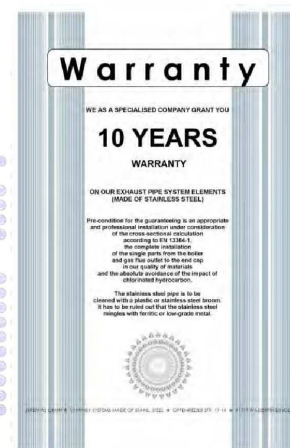


- 4 hours fire resistance tested by BSRIA



**Novetec certificates:**

- ISO 9001-2015



NOVETERM® 600



NOVETERM® 600



**THE POWER OF SILENCE**