



THIS LETTER CERTIFIES THAT

Thermo Electric Instrumentation BV Waddinxveen, The Netherlands

has met ASM's quality standards and has obtained a license from ASM to perform and sell Licensed Services for use in ASM equipment as follows:

Licensed Products

Vertical Diffusion
Thermocouples

ASM Equipment

A400, A400XT, A412

This certification is contingent on Supplier continuing its obligations under ASM Qualified Licensed Supplier Program. Thank you for continuous support of ASM.

A handwritten signature in black ink, appearing to read "Dr. Han Westenrdorp", written over a light gray rectangular background.

Dr. Han Westenrdorp

September, 2018

VP Corporate Marketing