

**ABS (American Bureau of Shipping) Product Type Approval**

Greg Hughes, Engineer 13 March 2013

A Product Type Approval is a certification by ABS that the manufacturer can consistently produce equipment that will perform reliably in a marine or off-shore environment.

Explanation: In order to have products type approved two steps must be taken.

**1. The product must be issued a Certificate of Design Assessment.**

To achieve this, the data sheets, drawings, lab tests, performance curves, and other data are submitted for each product to be certified. The product is reviewed by the Houston office of ABS, and if deemed to comply, a certificate is issued. This certificate will list all products that are certified.

Warren Rupp, Inc. has been issued a Certificate of Design Assessment Number: 08-HS366434/1-PDA. Sandpiper metallic models S-series, HD-series, SB and ST-series pumps, and Tranquilizer surge suppressors are listed on the certificate. The certificate must be renewed every five years.

**2. The product must be issued a Certificate of Manufacturing Assessment.**

To achieve this, a factory audit of manufacturing processes is done. Using the criteria as listed on the above Certificate of Design Assessment, an auditor from the Cleveland office of ABS, checks to see that quality is maintained and processes are followed from receiving through the shipping of the product.

Warren Rupp, Inc. has been issued a Certificate of Manufacturing Assessment Number: C1086348-X. This certificate states that the above pump models are consistently manufactured in compliance with the ABS Product Design Assessment Certificate and the designated standards therein. These models are placed on the Bureau's List of Type Approved Products, subject to annual facility audits and renewal of the certificate every five years.

This Certificate of Manufacturing Assessment, along with the published List of Type Approved Products, will allow customers to buy pumps with the assurance of ABS when a Unit Certification is not required. The Product Type Approval will avoid delays in shipping and the added cost associated with a Unit Certification.

The Certificate of Manufacturing Assessment does not mean the Product Type Approval replaces a Unit Certification. When a customer requests a Unit Certification, an ABS surveyor would still be required to witness a lab test on a product, usually to specific ABS rules and a particular application.