

# COMPRESS<sup>®</sup>

## VERIFICATION MANUAL

ASME<sup>®</sup> Section VIII  
2010 Edition



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**Codeware, Inc.**

5224 Station Way  
Sarasota, Florida 34233  
United States

**Telephone**

(941) 927-2670

**Fax**

(941) 927-2459

**Sales**

[inquiries@codeware.com](mailto:inquiries@codeware.com)

**Support**

[support@codeware.com](mailto:support@codeware.com)

**Website**

[www.codeware.com](http://www.codeware.com)

**Manual Version**

11-2010

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# **Section 1: Introduction**

This document provides an abbreviated description of the procedures and verifications performed prior to releasing new builds of the COMPRESS software application. Note that the procedures and examples presented in this document are a representative subset of the various standard operating procedures within Codeware's Quality Management System. For a more complete description of Codeware's Quality Management System the reader is referred to the Codeware Quality Manual.

## **1.1 Purpose of the Application**

COMPRESS is a software application that designs pressure vessels and heat exchangers in accordance with the latest Addenda of the ASME Boiler and Pressure Vessel Code. The purpose of this software program is to provide users with a powerful, accurate and user-friendly tool that will enhance engineering productivity and simplify vessel design. Because of the nature of the application, the highest levels of quality assurance must be in place to provide users with software they can rely upon.

## **1.2 Future Changes**

Codeware is committed to continuously improving the systems and procedures used in the development of COMPRESS. Accordingly, this document is subject to change as required by Codeware's Quality Management System.

## **1.3 Intellectual Property Statement**

This document and its contents are considered to be proprietary. This material shall not be copied or distributed to other parties without the express written consent of Codeware, Inc.

## **Section 2: Quality Assurance Procedures**

This section describes the basic elements of the COMPRESS quality assurance procedures. The elements involved are Codeware's Development Team, the automated verification system and a list of the files used in the automated verification system.

### **2.1 COMPRESS Development Team**

The Codeware Development Team is responsible for the development and maintenance of the COMPRESS software product. The team consists of the President, Vice President, Software Developers and Technical Support Engineers. All members of the Codeware Development Team have a background in mechanical engineering or computer science.

### **2.2 Automated Verification**

Codeware's Baseline Conformity Assessment is an automated software test system that exercises the various options and functions of the COMPRESS software using a predefined series of verified examples. These examples are contained in a collection of COMPRESS files designed to test both the engineering calculation and various commonly used software functions. New examples are periodically added to the Baseline Conformity Assessment. COMPRESS calculation results are verified using this automated test system prior to releasing the software.



- ASME 2007 A09 L\_9.CW6
- ASME 2007 Edition L\_1.5.1.CW6
- ASME 2007 Edition L\_1.5.2.CW6
- ASME 2007 Edition L\_1.5.3.CW6
- ASME 2007 Edition L\_1.5.4.CW6
- ASME 2007 Edition L\_1.5.5.CW6
- ASME 2007 Edition L\_1.5.6.CW6
- ASME 2007 Edition L\_2.1.CW6
- ASME 2007 Edition L\_2.2.CW6
- ASME 2007 Edition L\_2.3.1 And L\_2.3.2 without Rings.CW6
- ASME 2007 Edition L\_2.3.1 And L\_2.3.2 withRings.CW6
- ASME 2007 Edition L\_2.3.3.CW6
- ASME 2007 Edition L\_3.1.CW6
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- ASME 2007 Edition L\_7.8.CW6
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