
Professionals can now access comprehensive gasket information and best practices in a noncommercial format.

By Mike Shorts
FSA Member

The Gasket Division of the Fluid Sealing Association (FSA) and the Flange Gasket Division of the European Sealing Association (ESA) have been jointly working on a complete revision to existing gasket handbooks and associated documents for the past three years. This project was led by a working group consisting of professionals representing six FSA Gasket Division members, the FSA technical director, and a representative from the ESA Flange Gasket Division Technical Committee, along with collaboration from nearly all FSA and ESA member companies. The handbook includes references to several third-party publications. It has been a tremendous undertaking but one that has an enormous amount of content value for readers at every level.

The Gasket Handbook is part of a mutual commitment to industry and a consensus to provide technical education for end users, contractors, distributors and students. It is focused on technical information for gaskets as components of bolted flange connections. The handbook is provided in the public interest to help ensure bolted flange connection integrity with maximum safety and environmental compliance. It is not a catalogue of gasket manufacturer’s products and technology and is not presented with commercial intent. The Gasket Handbook is meant to act as a complete and modern noncommercial guide to gasket users in the best practices for gasket usage and troubleshooting.

Some may wonder why such a generic document needs to exist when individual manufacturers have relatively detailed resources of their own. FSA is asked this question a lot. The answer is fairly simple—our research indicates there is a profound interest in noncommercial gasketing information. This handbook is meant to be a fundamental resource for gasket users and a complimentary source of manufacturers’ commercial data. Because of the collaborative process used to create this document, the reader has access to information that individual manufacturers may not be willing to divulge.

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Figure 1. The Gasket Handbook Table of Contents
(Graphics courtesy of FSA)
Handbook Contents
Successfully sealing a bolted flange connection is dependent on all components of a well-designed system working together, effectively and safely. The Gasket Handbook provides technical information on gaskets as a constituent part of a bolted flange connection, typically employed in chemical, petrochemical, refinery, power plant and other industrial facilities. It includes guidance for plant engineers on specifying gaskets, for maintenance operators on installing and troubleshooting bolted flange connection leaks and for purchasing personnel on the important functional distinctions between gasket types.

Contents include definition of mechanical considerations for a bolted flange connection, important considerations for flanges and fasteners, and installation best practices, with a focus on gasket selection and gasket-to-flange system interaction. Gasket storage and handling also are addressed.

Contents are organized for the reader to quickly and efficiently find the information needed, while maintaining important technical detail. It is intended to complement plant-approved documents. The Gasket Handbook does not address compliance requirements of regulations specific to a particular industry, facility or regulation body. Therefore, readers should consult appropriate local, regional, national or federal authorities for precise compliance requirements.

It is essential to note that the condition and maintenance of the connection will affect and cause variations in the results obtained from installation and use of any gasket. Readers must...
The intent of the Gasket Handbook is to consolidate industry and gasket manufacturers’ best practices for gasket application and installation and present this information in the main text.

The guidelines in the Gasket Handbook represent the combined efforts of member and associate member companies of FSA and ESA who have provided material and technical personnel needed to complete this work. While it was developed with a global perspective in mind, some regional nuances are highlighted. The members and associates of FSA and ESA are established, reputable gasket manufacturers, producing quality products in accordance with modern manufacturing practices. The suggested procedures are based on substantial and proven experience.

Illustrations & Associated Documents
The Gasket Handbook has been structured in a deliberate format that will take the reader through forces acting on the bolted flange connection, gasket categories, gasket selection, installing gaskets, diagnosing failures and a list of frequently asked questions. Accompanying the text are many high-resolution, 3-D descriptive graphics and detailed tables that will assist the reader in fully understanding the provided content (see Figures 2 and 3).

Release & Publication
The Gasket Handbook will be released in two stages to allow this valuable information to get into the public’s hands as soon as possible. Chapters 1 through 3 are scheduled to be released in Spring 2015 and the final Chapters 4 through 6 are scheduled for Summer 2015. The full document will become available later in 2015 to provide the complete resource in one file or hard copy. It will be available on a “free-to-read” basis through a link on the FSA and ESA websites and can be purchased for print and electronic storage for a nominal fee. Please refer to all FSA communications via our website and follow us on Twitter and LinkedIn for official release updates and link information.

Next Month: What five new types of expansion joints will be added to the FSA Expansion Joints Handbook?

We invite your suggestions for article topics as well as questions on sealing issues so we can better respond to the needs of the industry. Please direct your suggestions and questions to sealingsensequestions@fluidsealing.com.
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