

By Ralf Vogel

# A valuable resource for sealing information

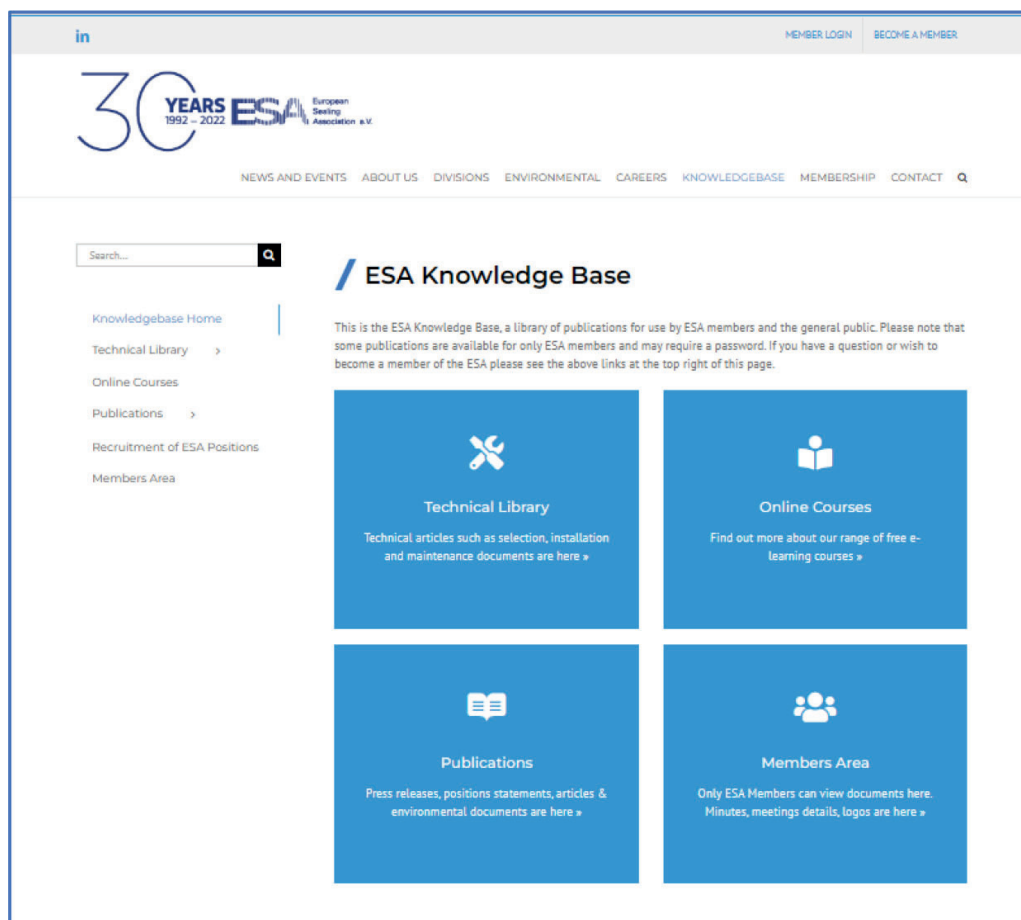


Figure 1: ESA Knowledge Base landing page

It can safely be said that there is hardly a single piece of mechanical equipment or industrial process that does not rely on sealing devices to operate. However, sealing technology is generally poorly understood and often overlooked.

The European Sealing Association (ESA) was established in 1992 and is celebrating its 30<sup>th</sup> anniversary this year. As a non-profit trade association, the ESA represents manufacturers and suppliers of sealing devices and materials. Its members form the majority of the sealing industry in Europe. The ESA was established to work towards harmonising appropriate standards and legislation, developing sealing technology and promoting safety, efficiency and environmental protection. One of its primary objectives is to educate end users about sealing elements and their proper use. The members have developed a wide variety of useful information, including handbooks, pamphlets, magazine articles and training courses. The aim is to make all of this information freely accessible for users of gaskets, packings and elastomeric seals used in valves. In addition, guidance is included on mechanical seals for pumps and fabric expansion joints for pipes.

The ESA Knowledge Base was created to locate all of this educational information in one source. It

can be accessed at [www.esaknowledgebase.com](http://www.esaknowledgebase.com). Alternatively, it can be also accessed via the main ESA website [www.europeansealing.com](http://www.europeansealing.com). The Knowledge Base is divided into four main areas: Technical Library, Publications, Online Courses and Members Area. The Technical Library

## About the author

Ralf Vogel is a mechanical engineer and has been working in the sealing industry for 27 years. Currently, he is the Technical Director of the European Sealing Association.



Figure 2: Compression Packing Technical Manual

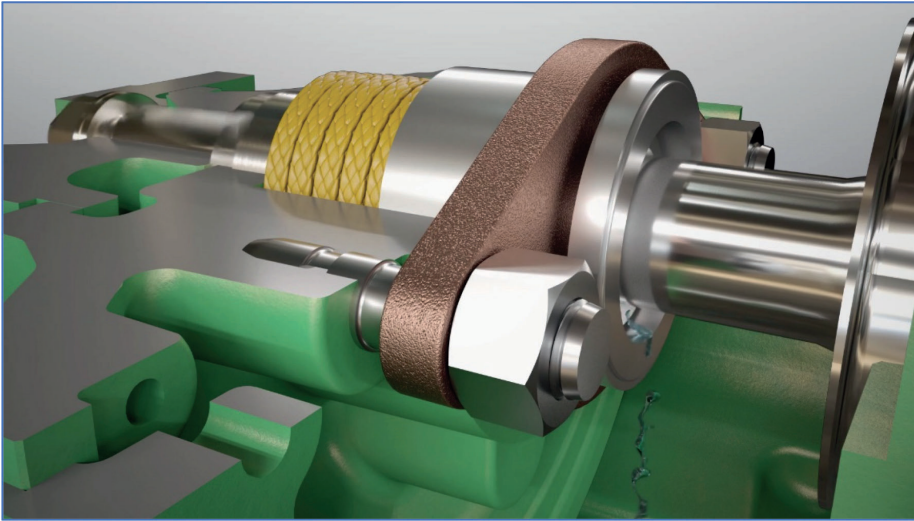


Figure 3: 3D view of stuffing box gland

contains a wide range of documents which are organised by: Applications, Design/Construction, Installation, Materials, Standards, Training and Troubleshooting. The documents are all freely downloadable and range from magazine articles up to extensive handbooks such as the Compression Packing Technical Manual, a 126 page guide covering all aspects of this method of sealing. Some documents are not only available in English but also in other languages, the Packing Manual is also available in German for example.

Under Publications, documents are listed with reference to the ESA Division which created them. Also, all articles published by ESA members in Valve World magazine are available for download in this area. For people interested in a specific topic there is a helpful search function to find the required information easily by typing in a keyword.

The third area contains online Training Courses. This recently introduced section currently holds three courses: An Introduc-

tion to Compression Packings, Compression Packings - Troubleshooting and A Guide to Successful Gasket Installation. These courses are free but require the user to enrol and provide a username and email address. The most extensive course is the Introduction to Compression Packing, which contains five sections broken down into easy-to-follow lessons with additional voiceover. Also included are some 3D animations. Recently, the Troubleshooting Course for packings was added, highlighting specific application problems and explaining the reasons for the failure and the measures to prevent this from happening. Further training courses for other seal types are being prepared and will be added in the future. The fourth area of the Knowledge Base is the Members Area. This resource is a protected area and only available for ESA members and contains agendas, minutes of meetings and other documents for internal use.

### Conclusion

The ESA Knowledge Base is a universal reference library for all sealing-related issues. The information is freely available, and the aim of ESA members is to educate interested parties in the proper use and handling of sealing materials.