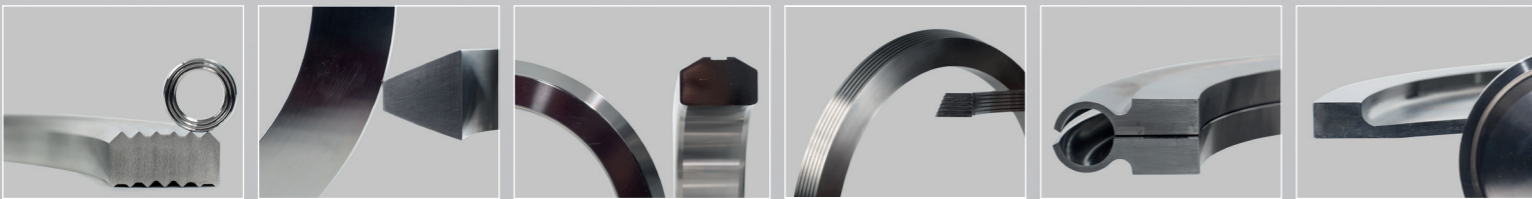
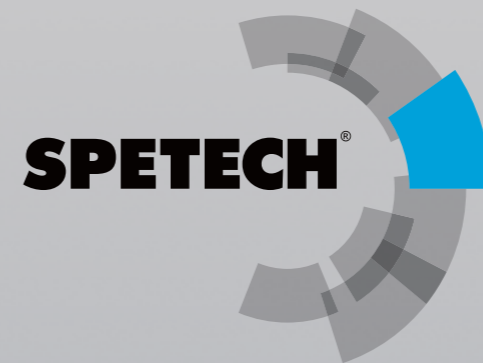
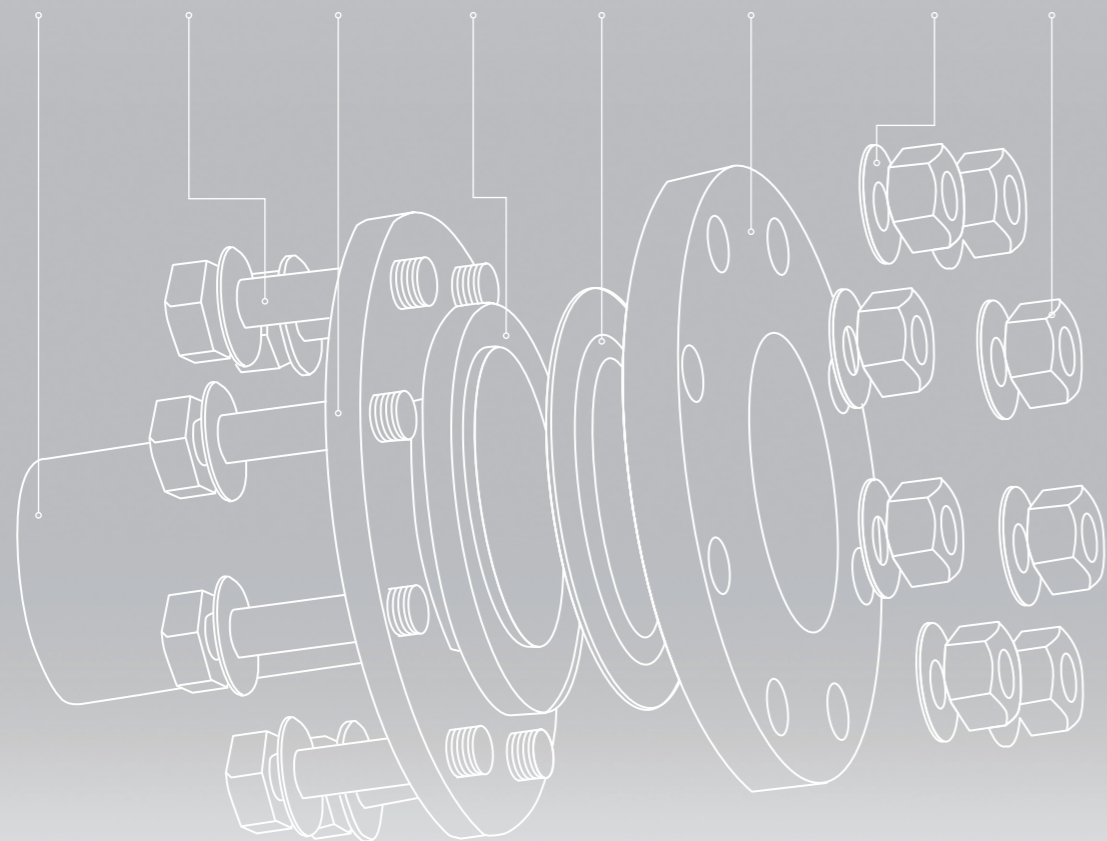




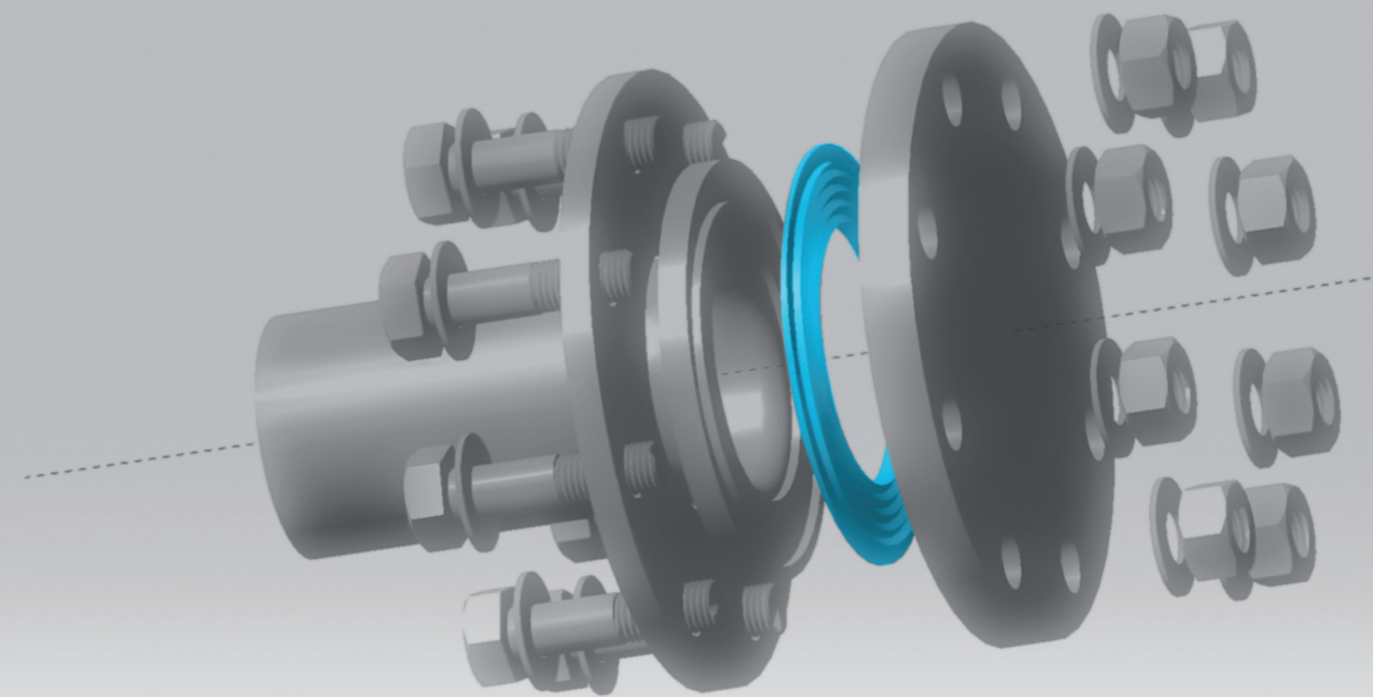
SPETECH®, 43-382 Bielsko-Biala, ul. Szyprow 17, POLAND  
tel. +48 33 818 41 36  
consulting@spetech.eu  
www.spetech.eu



Pipe Fastener Flange Flange Face Gasket Blind Flange Washer Nut



ENGINEERING SERVICES



EDITION 2022

WELCOME TO **SPETECH**® ENGINEERING

CONSULTING SERVICES FOR HIGH PERFORMANCE  
GASKETS AND PACKINGS

With more than 30years of experience in field of Special Metal Seals, **SPETECH**® is capable to provide various types of **Engineering Services** about flange joint applications. We share our Know-How with our customers by **Flange Joint Calculations, Concept Studies, Gaskets Designs & Analysis** as well as **Technical Support** before, during and after installation.

Our **Know How and Experience** are effects of more than three decades of practice. **SPETECH**® activity started in late 80's and our first technical task was to bring non-asbestos sealing technologies to industrial applications located along Eastern Europe. Currently our **Consulting Team** consists of well-educated, multidisciplinary engineers, technicians and experts with outstanding number of difficult sealing applications secured. Each of **Engineering Team** member inputs technical knowledge, practical experience, scientific background as well as untypical way to face technical challenges which are still put in front of us. Additionally our Engineering Service is supported by our **Sealing Material Research Laboratory**, performing tests about flange gaskets and packing and we co-work with **Technical Universities** and independent **Research and Development** centres.

**SPETECH**® is also licensor of **EUROPARTNER**®2.0 - **Calculation Software** for designing of flange joints according with all key algorithms used in pressure vessel and pipelines construction process. Last not least is that **SPETECH**® owns large production facility in Poland/EU which we use for **manufacturing of Special Metal Seals**.

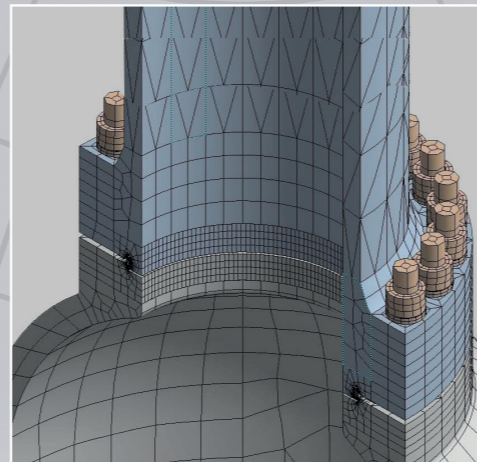
  
Grzegorz Rusak  
Managing Director SPETECH®

### FLANGE JOINT CALCULATIONS

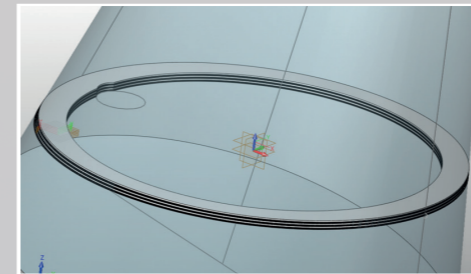
In accordance with EN 1591-1 \* EN 13445 \* EN 13480 \* ASME CODE S. VIII \* AD-2000 MERKBLATT B7 & B8 • For simple gaskets and advanced joints • For weld ring flange joints and metal closures • For round, rectangular and special shape seals • Tightening torques for assembling the flange joints • Tightening sequences • Guidance on torque specifications • Bolt tightening patterns • Calculations with predefined leakage class

### CONCEPT STUDIES

Fugitive Emissions feasibility studies • Analysis of troublemaking flange joints • Preselection of promising gasket types solutions • Introductory sketches • Initial dimensional concepts • Preliminary flange joint calculations • Selection of suitable materials • Summary of case specific requirements • 'Step by step' implementation of studies towards feasibility analysis • Risk analysis • Flange joint failure analysis

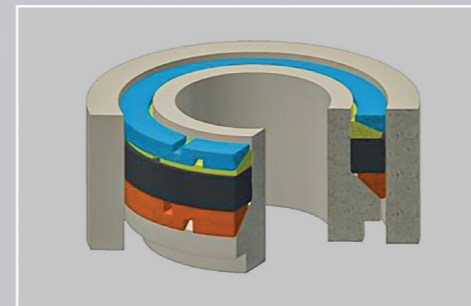


## ENGINEERING SERVICES



### TECHNICAL SUPPORT BEFORE, DURING & AFTER INSTALLATION

Training for flange fitters acc. EN 1591-4 • ESA & FSA assembly standards • Gasket installation supervision • Leak tightness certificates • Flange joints inventory support • Flange joints reverse engineering • Flange and gaskets measurements and material identification • Analysis of damaged flange joints • Gaskets and packings failure analysis • Bolts, Flanges & Sealing Surface Incidents Investigations • Planning of repair work • Safety aspects



### GASKET DESIGN & ANALYSIS

Designing and calculating for High Temperature and High Pressure applications • Designing and calculating of advanced metallic seals: Weld Ring Gaskets, Metal Diaphragm, Double Cone Seals, Lens Gaskets, Ring Type Joints and others • Gasket details optimization • Final selection of dimensions / material / construction • 3D design and Finite Element Analysis simulations • Design documentation and design reviews



spetech.eu



### EUROPARTNER® SOFTWARE FOR SALE

EN 1591-1 \* EN 13445-3 ANNEX G \* ASME CODE S. VIII \* AD-2000 MERKBLATT B7 & B8 • Real time calculations • Constantly upgraded database of flange joint elements (characteristic values about gaskets / flanges / bolts) and steel materials properties • Intelligent input data hints system as alternative to manually entered data mode • Large selection of trainings for software users • Customized layout of print report • 3 subscription packages available (Gold / Silver / Bronze) • 2 subscription periods available (3months / 12months)

[More info](#)



[consulting@spetech.eu](mailto:consulting@spetech.eu)