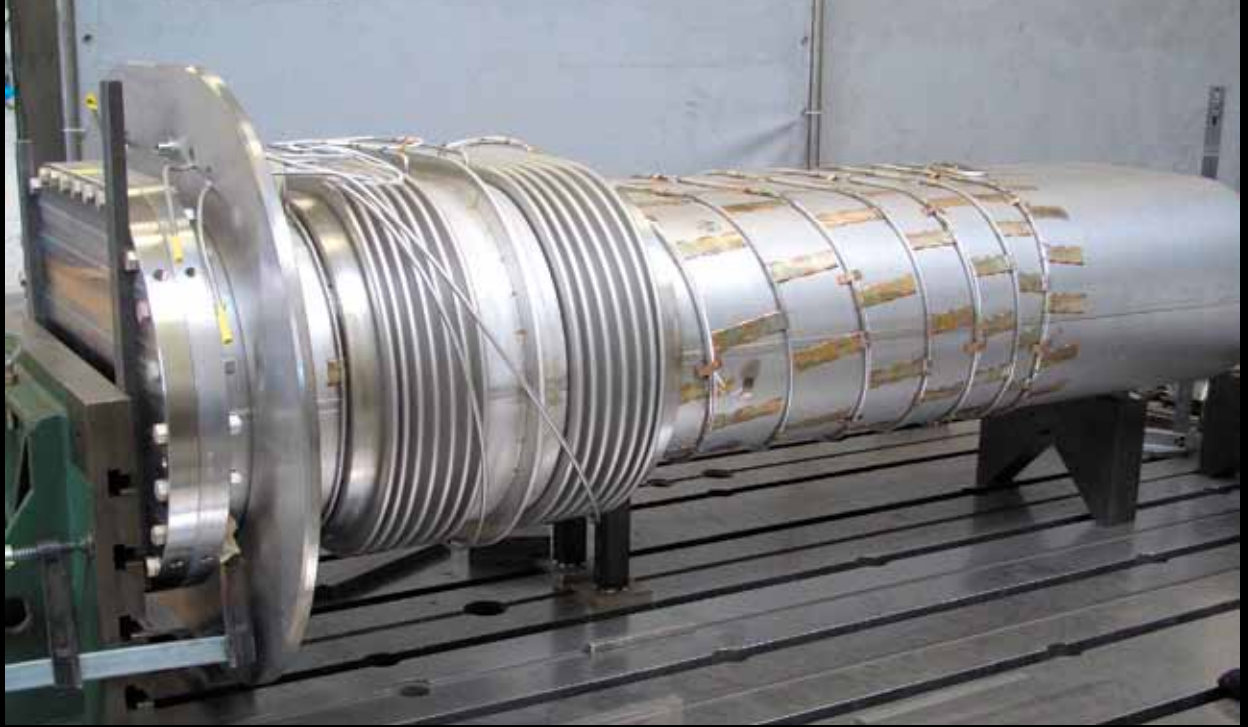


# Swiss competence in High Vacuum Bellows



**kompaflex ag**

OUR QUALIFIED TEAM USES THE LATEST TECHNOLOGIES AND PROCESSES IN ORDER TO MEET THE HIGH QUALITY STANDARDS FOR ULTRA HIGH VACUUM APPLICATIONS.

### IN-HOUSE TESTING FACILITIES

- Helium leakage testing up to 10-10 mbar<sup>1</sup> / sec
- Life cycles testing
- Pressure tests up to 700 bar
- X-ray, Ultra sonic tests
- Special packaging for ultra high vacuum bellows

### WELDING COMPETENCES

- TIG welding
- Plasma welding
- Welding without any gaps
- Manufacturing in kompaflex pressurized clean room



Single walled universal vacuum expansion joint



Fatigue life test under vacuum and temperature 150° C for IPP Wendelstein 7-X



Helium leakage testing in the kompaflex own clean room



Water pressure test of expansion joints for a Nuclear Plant



KOMPAFLEX OFFERS A WIDE RANGE OF ROUND, RECTANGULAR, OVAL AND ELIPTIC BELLOWS WITHOUT ANY WELDING SEAMS IN THE CORNER AREAS.

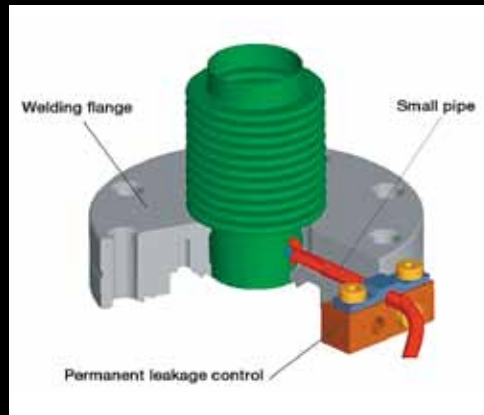
**CERN**

Oval and rectangular expansion joints installed at the LHC CERN



**MAX PLANCK INSTITUTE OF PLASMAPHYSICS – FUSION REACTOR WENDELSTEIN 7-X**

- Delivery of over 300 multiply expansion joints connecting the ports to the reactor.
- Round, oval and rectangular forms in different sizes.

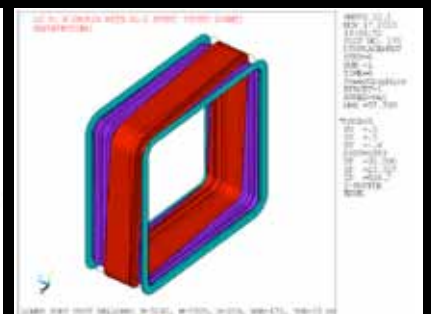
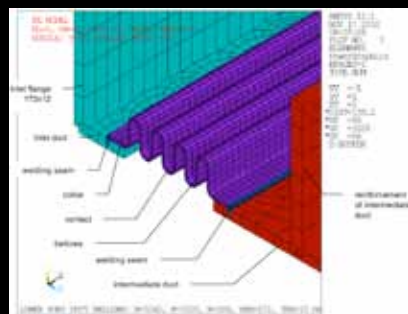


**ALSTOM FORMER AREVA TD**

Pressure balanced expansion joints for SF6 switch boards

**ITER FUSION PROJECT CADARACHE**

kompaflex designs all rectangular 3320 x 3240 mm universal bellows connecting the ITER vacuum vessel and cryostat. kompaflex uses complex FEM analysis to perform this task.



**All major research institutes and vacuum companies rely on kompaflex expansion joints. We have an experience of over 30 years in this field:**

- Accel GmbH, Bergisch-Gladbach
- ALD Vacuum Technik GmbH, Hanau
- Areva TD
- Babcock Noell
- CERN, Switzerland
- DESY Deutsches Elektronen-Synchrotron, Hamburg
- Forschungszentrum Karlsruhe
- Forschungszentrum Jülich, Fusionsreaktorprojekt ANKE / ANLESA
- GEVA GmbH, Berlin
- GSI Gesellschaft für Schwerionenforschung
- Ilmvac GmbH, Ilmenau
- IPP Max-Planck-Institut für Plasmaphysik, Greifswald
- ITER Cadarache, France
- KLM Rapid Prototyping, Ellwangen
- Linde Kryotechnik
- Paul-Scherrer-Institut, Villingen
- Pfeiffer Vacuum GmbH, Asslar
- Research Instruments GmbH
- Systec GmbH, Karlstadt
- Trinos GmbH, Göttingen
- University of S-Lund, Max Lab
- Universität Dortmund, DELTA Accelerator
- VAI Fuchs GmbH, Duisburg
- VAT Haag

