



# COMPONENT TESTING PRESSURE PULSE TESTING

In our modern laboratory for pressure pulse tests we test your products regarding their behavior and reliability according to standards. We determine operational and fatigue strengths of components due to probit and stair case method.



## **SERVICE PORTFOLIO**

- Pressure pulse tests (impuls pressures up to 1400 bar)
- Hydropulse tests
- Combined pressure pulse and vibration testing (IACS, GL, DNV)

## **PRESSURE / VIBRATION**

maximum pressure up to	Impulse frequency typical
1,400 bar	1 Hz
sinusoidal up to	vibration
30 Hz	ending frequency of hy- draulic pipes up to 20 Hz

## LABORATORY EQUIPMENT

- 4 pressure pulse test rigs
- Freely configurable servo hydraulic cylinders
- Climate and temperature shock chambers
- Media heating from -40°C up to 140°C
- 4 elektrodynamic shakers for combined vibration tests with temperature overlapped

### **DEVELOPMENT ACCOMPANYING VALIDATION TESTS**

- Vibration testing with temperature
- Pressure pulse testing
- Burst pressure testing
- Probit tests
- Determination of Wöhler lines
- Stair case method
- Fuel resistance
- Temperature shock
- Climate testing
- Leak test



#### sure diagramm acc. to IACS Res. 2001 (Res. 2 200) \$51 450 99 13 12.4 0.5 0.5

#### CONTACT

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- Burst pressure tests (burst pressures up to 4500 bar)
- Pull-out-test
- Leak tests with various media (oil, water, nitrogen, helium a.o.)
- Vacuum test

## **CURVE FORM**

- Sine
- triangular
- trapeze
- tandardised curves for example according to IACS P2.11.5.5.3

### **OUR COMPETENCES**

- Accredition for pressure pulse tests in accordance with standards
- Flexible accredition for modification and new development of test procedures
- Long-standing research activities in the field of material science and testing
- Complex cooperation with other test laboratories in our company

### **TYPICAL TEST STANDARDS**

- IACS International Association **Classification Societies** 
  - Requirements concerning pipes and pressure vessels
- GL Germanischer Lloyd Classification and construction guidelines, pipe fittings
- DNV Det Norske Veritas
- Typetests of pipe connections
- BS 4368 British Standard Pressure pipe connections
- DIN EN ISO 19879





