



WHO IS KAEFER?





THAT'S US

It is our mission to be the **most reliable** and **efficient** provider of **technical industrial services**

20+
languages

30+

50+ nationalities

1 family

1,500,000,000

turnover in € (2020)



FOR MORE THAN 100 YEARS







THIS IS OUR STRUCTURE

EXECUTIVE BOARD

Corporate Functions

AUSTRALIA & SOUTH EAST ASIA (incl. China & USA)

BENELUX

BRAZIL

CANADA

CONSTRUCTION & MARINE (CONMAR)

FRANCE

GERMANY

LITHUANIA, POLAND, SWEDEN MIDDLE EAST

NORWAY

SOUTH AFRICA

SPAIN

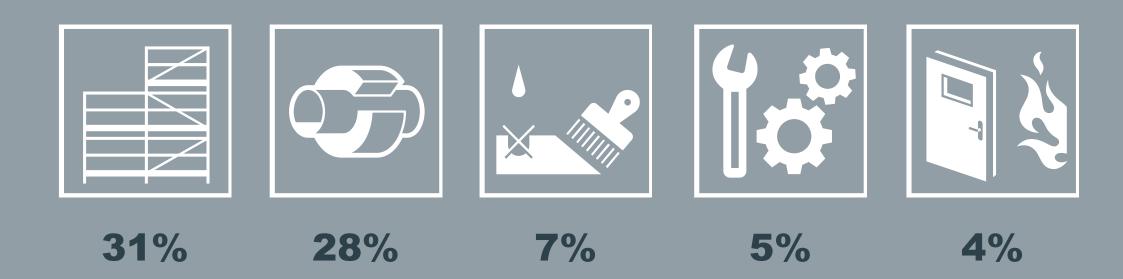
UK & IRELAND







OUR CORE SERVICES



75% of total turnover. The remaining 25% are generated by related services.



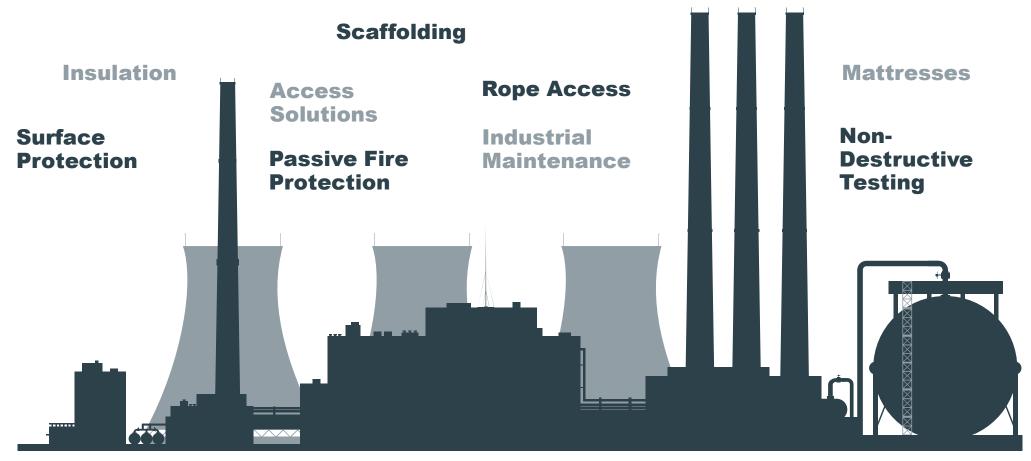
OUR SERVICE PORTFOLIO

Scaffold Training Insulation Rope Access Training Access Solutions Thermal Insulation Electromechanical Work Rope Access Facades CUI Management Services Mattresses Thermography/Energy Audits Scaffolding Glycol and Heat Tracing Renewables Refractory Passive Fire Protection Metal Construction **Offshore and Industry Maintenance** Facilities Services Asbestos Solutions Noise and Vibration Prognosis Fire Safety Products System Testing in own Laboratories Mechanical Work Manpower Supply Interior Outfitting Design & Engineering Non-Destructive Testing Scaffold Design Surface Protection Industrial Cleaning Cold Storage Doors Materials Supply Cryogenics / LNG Mega Yacht Refit Civil Maintenance Yacht Interior Design





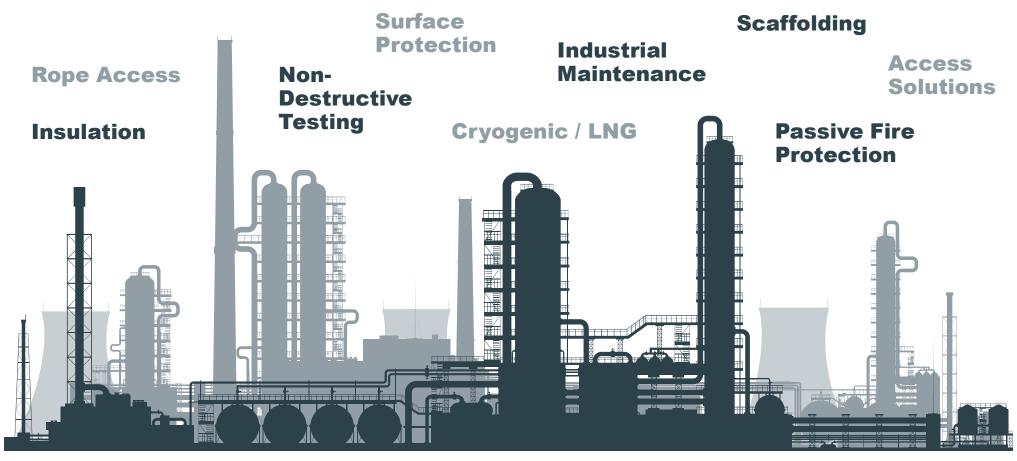
POWER PLANTS





REFINERIES

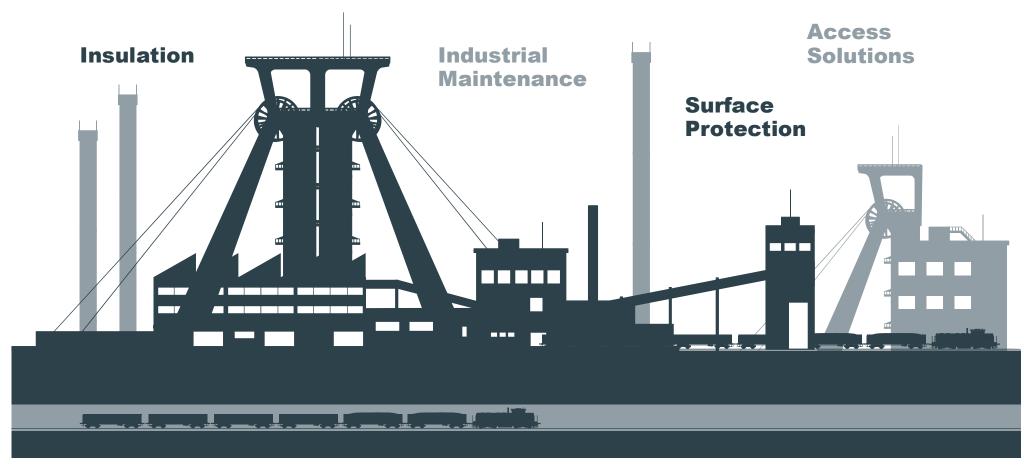
Electromechanical Work





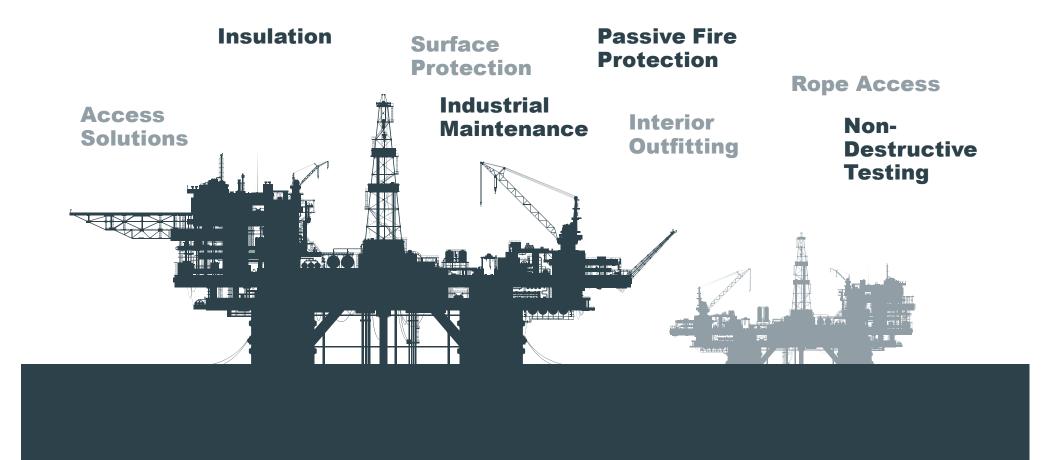
MINING

Electromechanical Work



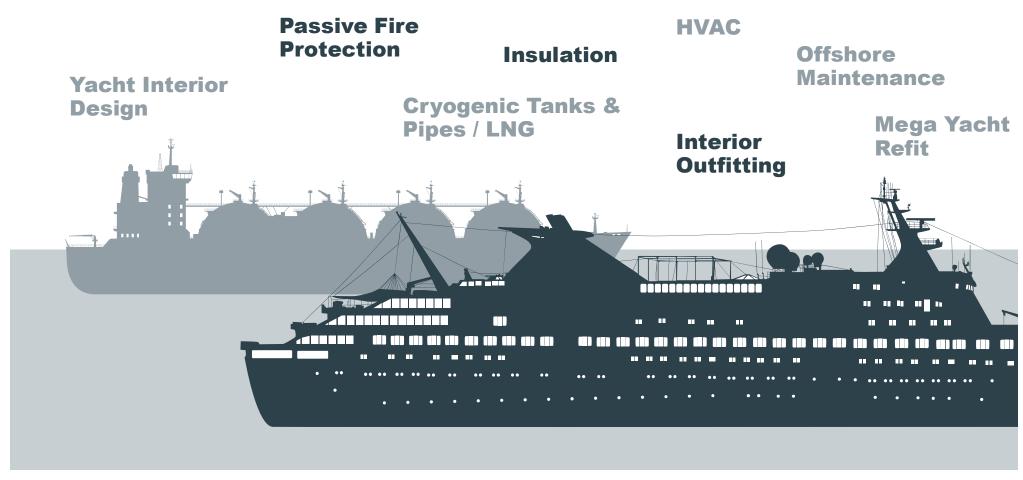


OFFSHORE PLATFORMS



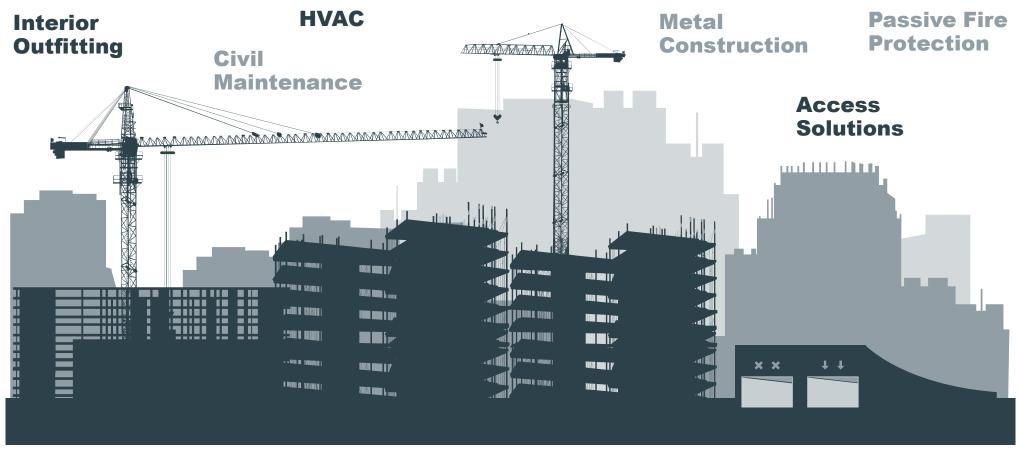


SHIPS





BUILDINGS & TUNNELS





SERVING MANY INDUSTRIES

Merchant vessels Cruise ships Cement plants River cruise ships Yachts LNG, methanol and ethylene plants Chemical and petrochemical plants Energy from waste plants Tunnels Industrial facades Copper mines Refineries Thermal-solar plants Offshore production platforms Ferrous and non-ferrous mines LNG and LPG vessels Iron ore mines Natural gas storage vessels Power plants Nuclear facilities Offshore receiving terminals Gold mines Pipelines Ferries Naval vessels Offshore drilling rigs Natural gas tank farms Buildings Alumina mines FPSO facilities



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TESTING











MATERIAL TESTING LABORATORY



Thermal Conductivity

CIE is KAEFER's in-house expertise for material testing offering:

- Thermal conductivity measurements using the Guarded Hot Plate method, acc. to DIN EN 12664 and DIN EN 12667
- For special applications: Hot Disk equipment



TEST RIG FOR LONG-TERM TEST

- System test for different insulation materials and coatings
- Testing temperature from 30 °C to 180 °C
- DN 150 pipeline, 30 m long
- Testing of measuring devices, sensors and monitoring systems
- Live measurements of operating and ambient temperatures





ENVIRONMENTAL TESTING

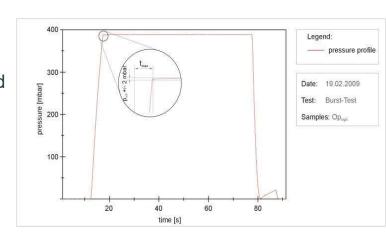
Air ducts Qualification Tests for Airbus Industries

The tests were carried out with a combination of the most extreme pressures and temperatures among the different operating conditions and life requirements e.g. inside an Airbus A400 M.



Test examples

- Leakage tests
- Pressurization tests with different pressure between 250 and + 500 hPa
- Static pressurization tests under temperature influence between + 120 °C and – 75 °C
- Dynamic pressurization tests (fatigue test) with more than 200.000 load cycles under temperature influence
- Elastic deformation tests
- Ageing test (with different temperatures and humidity)





ACOUSTICS

Services

- Noise/vibration measurements, analysis
- Preparation of acoustical expertise and prediction
- Acceptance test with documentation
- Planning of noise protection measures, emission and immision, noise at working places
- Acoustical monitoring and support of development projects of the KAEFER divisions
- Own development projects (blow-off silencer)
- Training and seminars







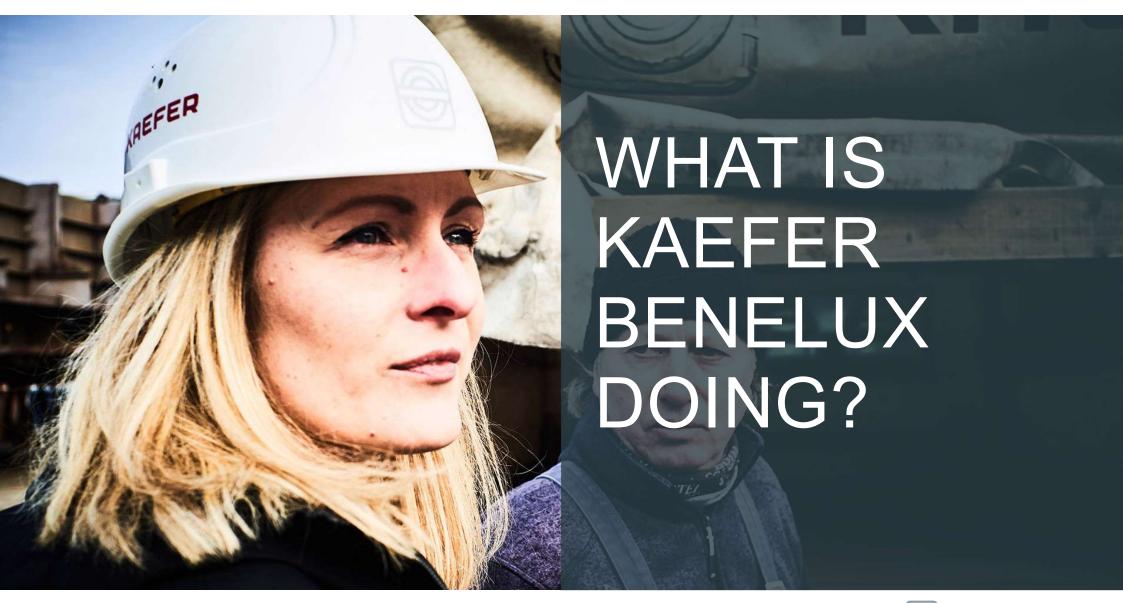


KAEFER BENELUX



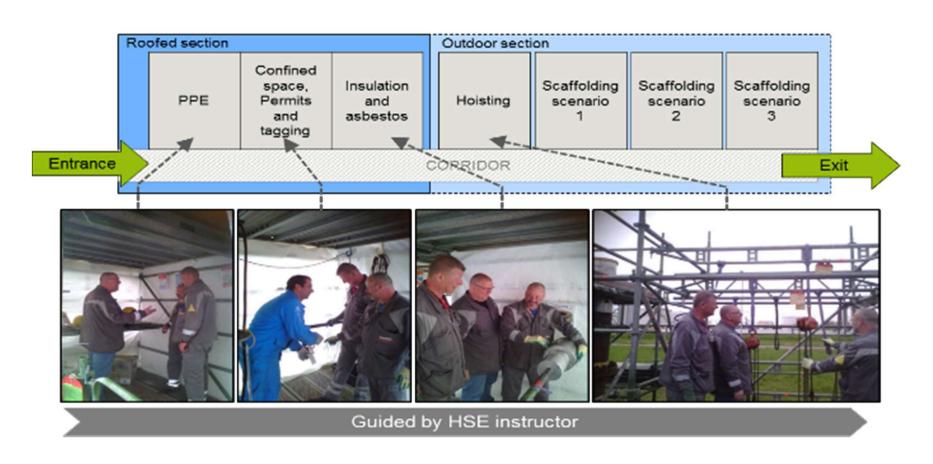
- > Head Office; Dordrecht
- Approx. 450 direct workers, 900 incl. subcontracted
- In 1973 KAEFER's been awarded a maintenance contract on DOW Terneuzen and has been on-site ever since.





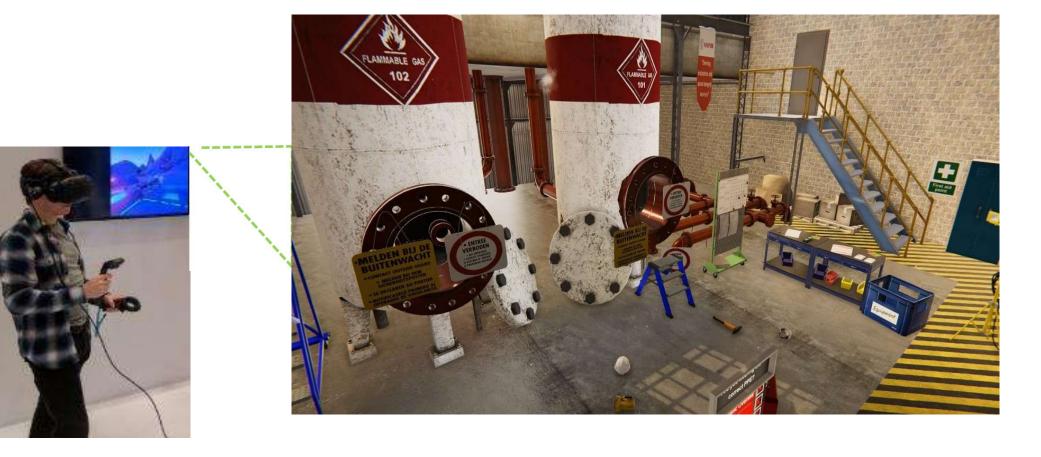


FIRST SAFETY STREET (COLAB WITH BIS)





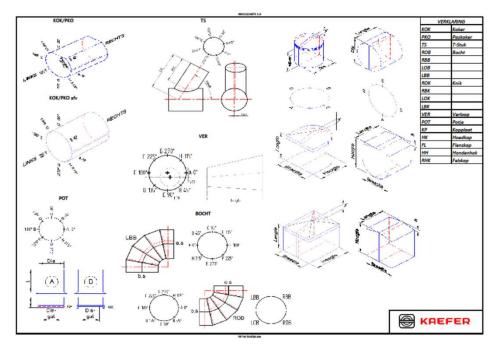
DIGITAL SAFETY STREET VR





DIGITAL SCOPING OF INSULATION

(DEVELOPMENT)





isoconnect



AUTOMATED CUTTING OF CLADDING ON OUR 2 LASERCUTTING MACHINES





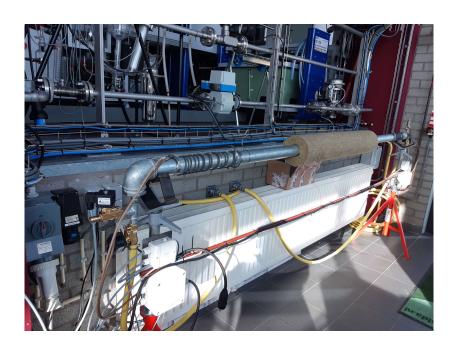






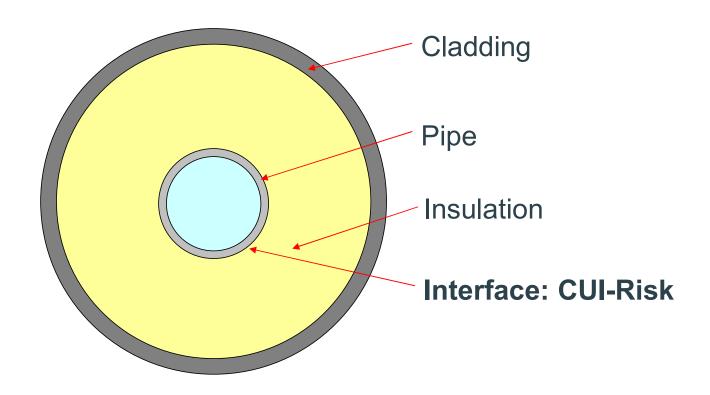
WE ARE A FULL PROJECT PARTNER IN CORROSIELABS

- > We can provide the insulation materials
- > We can provide the insulation skills
- > We want to test several insulation methods



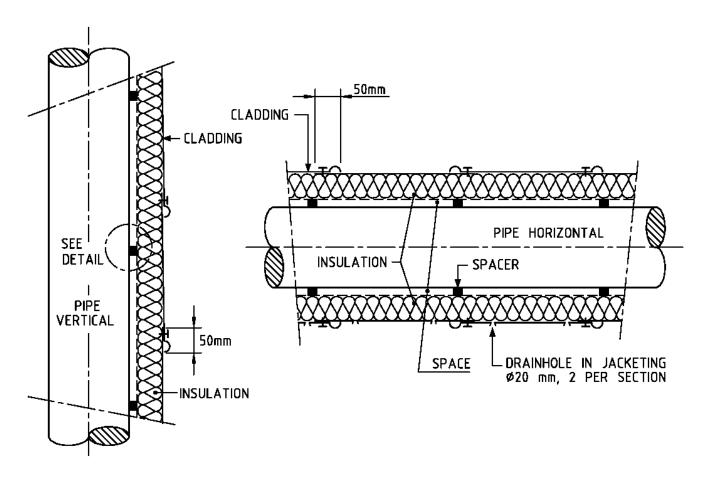


TYPICAL INSULATED PIPE





CINI - non contact Insulation





Statoil/CINI - non contact Insulation

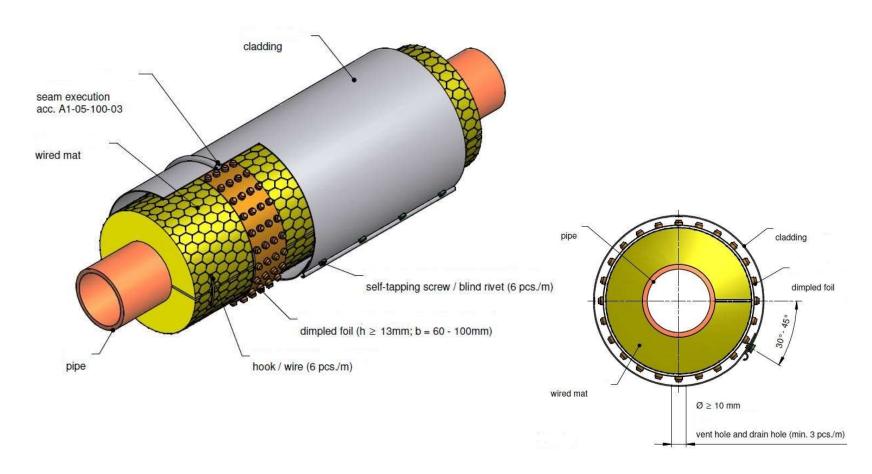








German - non contact Insulation





NON CONTACT INSULATION

- > All concepts minimize the water accumulation on the metal surface and remove water through drain holes
- CINI & Statoil concept reduce insulation effectiveness due to convection effects under the insulation layer
- > German distance insulation prevents water ingress from condensation on the inner side of the cladding into the insulation & insulation system is untouched

Drain Plugs

> Generate heat loss and bear water ingress potential





WHAT DOES KAEFER GAIN FROM THE CORROSIELABS

- > We hope to contribute in a solution for the global CUI problem
- We hope to raise awareness for the challenges we as insulators face
- We hope to create interest in our profession



