

Dear Reader,

Welcome to the first issue of the ADZ NAGANO Newsletter in 2013, in which we would like to present to you our latest developments.

Our thanks go out to all our partners, customers and suppliers for their confidence placed in us as well as to our staff for their high commitment and great endeavors to meet all our customers' requirements.

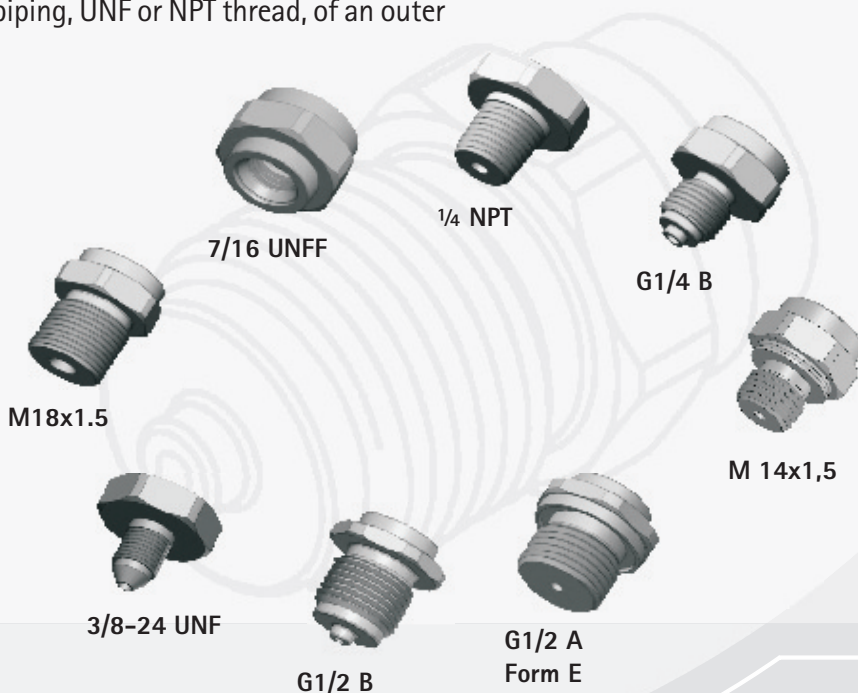
Dietmar Arndt  
Managing Director



## Wide Variety of Threads

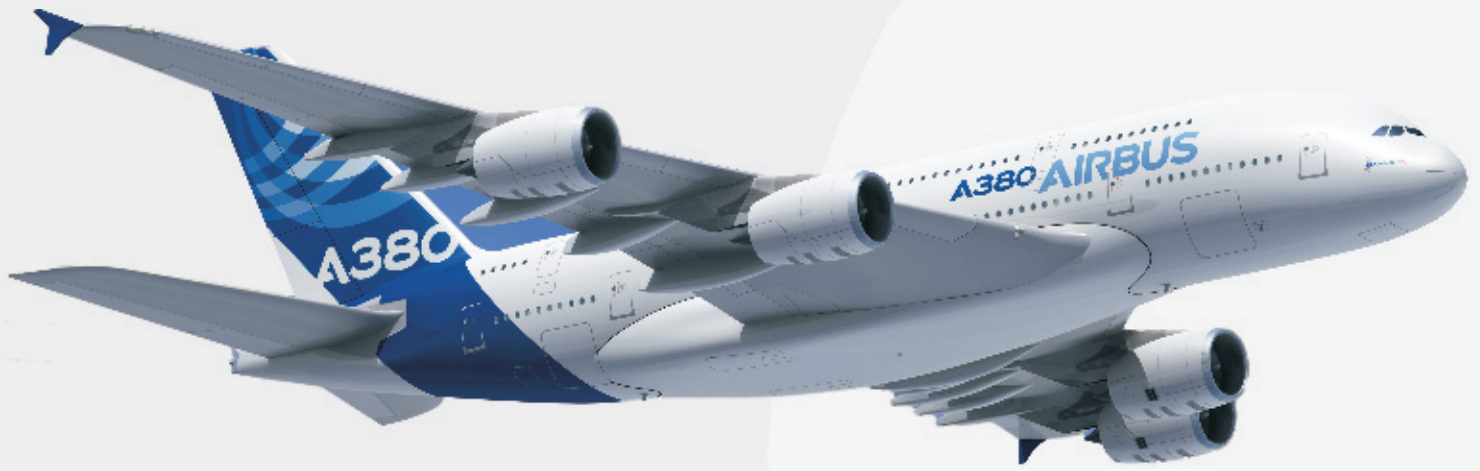
Apart from providing thread standards with their appropriate sealing, we are capable of supplying customized solutions – be it metric, piping, UNF or NPT thread, of an outer

diameter from 5mm. We can also provide assembly services and sealing, just O-sealed and unthreaded or as a welded connection.



# NEWSLETTER

## Pressure and Temperature-measuring Technology for the Aerospace Industry



For as long as seven years now, our company has also been engaged in aerospace. In that time, we have established a reputation as a renowned partner for German and international system providers and aircraft manufacturers.

ADZ NAGANO GmbH is capable of independently developing, completely qualifying and serially producing custom-made pressure and temperature transmitters. Our

products are applied, for example, in hydraulic and pneumatic systems, in fuel and water management, in air conditioning, but also in the ground service and in test systems for aircraft engines.

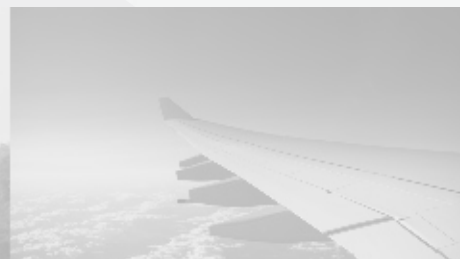
They are integrated in systems of aircraft manufacturers, such as Airbus Industries, Embraer, Augusta as well as Westland.



Pressure transmitter for a hydraulic system in starting and landing flaps to be controlled by redundant sensors and electronics



Pressure Switch (Helicopter) Hydraulic control system for motor and landing gear



## SKL High-temperature Pressure Transducer with a Cooling Section SKE High-temperature Pressure Transducer with Remote Electronics

The SKL with an integrated cooling section has been designed for industrial applications of higher temperature requirements in the temperature range of the medium of up to 180°C (ambient temperature - 40°C - 105°C). This version is well suited for application in environments exposed to high thermal loads. Thereby, the integrated cooling section serves to reduce the temperature of the medium at the sensor element. Thanks to its stainless steel membrane and semiconductor thin-film technology, it features excellent properties. The SKL is

applied in automotive engineering, hydraulics, pneumatics and other areas as long as they are compatible with stainless steel. Its modular design provides for a multitude of signaling, threading and connecting options.

The SKE series is equipped with remote electronics, connected to the pressure cell by Teflon wire, in order to achieve yet higher temperature ranges. This permits installation of the electronics in an environment of lower ambient temperatures. Intended for application in the chemical industry, for example. With

immediate effect, we can offer another alternative for high-temperature applications with actual temperatures of the medium of up to 200°C by applying titanium as a material for pressure absorption. We will share with you more detailed information on that in our next Newsletter.

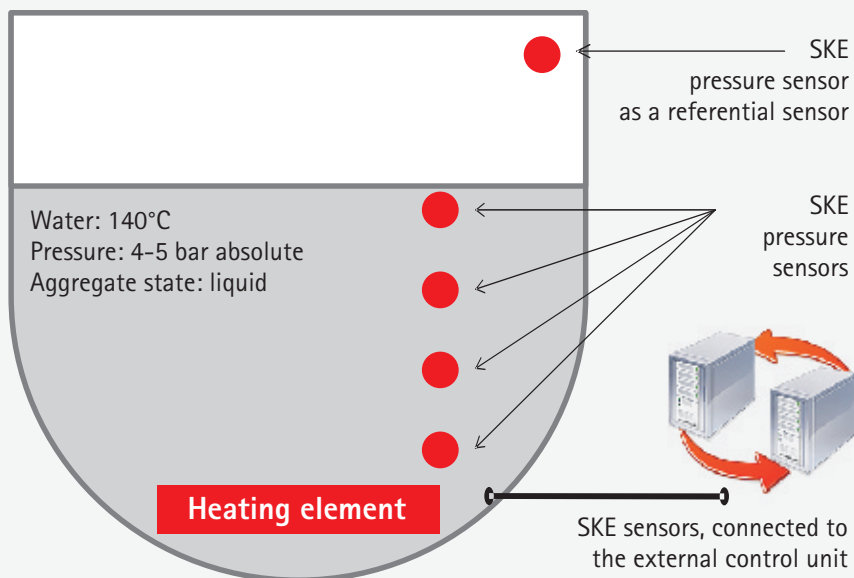
+ 160°C  
(short term +180°C)



+ 180°C  
(short term + 200°C)

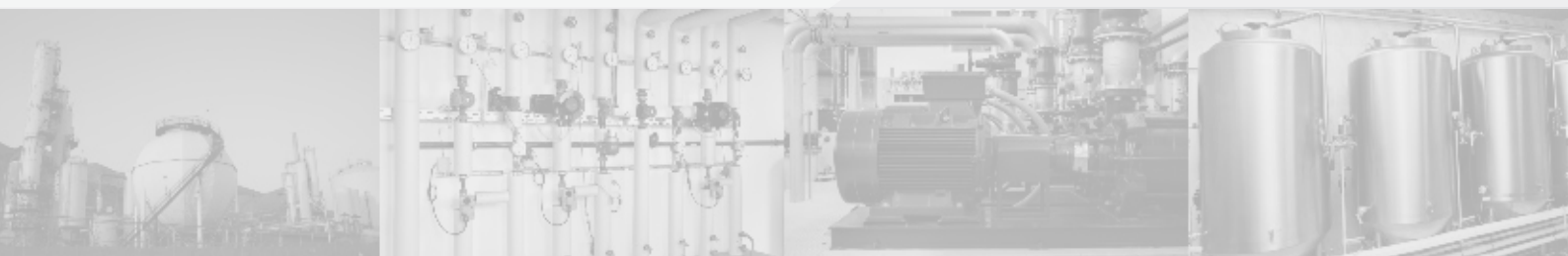


### CLOSED, PRESSURIZED TANK



The pressure vessel contains water that is heated, putting the vessel under pressure. Introduction of a chemical additive can influence the aggregate state of the fluid, and the transition into the gas phase can be detected by four sensors placed in the medium. The escape of gases from the medium cause tiniest pressure differences that are measured by the pressure sensors. The signals are received by the external control unit and can be processed there.

The referential sensor measures the pressure building up inside the tank.



# NEWSLETTER

## 2013 Trade Fairs – Come and Visit Us ...

Paris Air Show Le Bourget  
June 17 – 23, 2013,  
Joint Stand of Saxony  
Hall 1, Stand G294

SEMICON Dresden  
October 8 – 10, 2013,  
Silicon Saxony – Joint Stand

AIRTEC International Aerospace,  
Frankfurt, November 5 – 7, 2013,  
Joint Stand of Companies under the  
Auspices of the Chamber of  
Commerce and Trade

DIAM Bochum  
November 6 – 7, 2013,  
Hall 1, Stand A34

Our friendly and competent staff will be at your service for individual consultancy. Convince yourself of our wide range of solutions.

We are looking forward to meeting you there.

## JOINT ASCENT

### ADZ NAGANO TO ACCOMPANY ROEDER RIVER VALLEY BEES IN THEIR MOVE UP TO THE FEDERAL LEAGUE – Our alliance is gaining in strength

To us, Corporate Social Responsibility (CSR) is not just a hip term for traditional middle-class virtues, but a self-evident matter of course. We feel obliged to meeting our social responsibility not only by creating jobs, but would like to show presence and social commitment outside our company's premises, too. For that purpose, we provide for a fixed budget as we aim to be a reliable partner rather than losing face by butterflying around. What we favor most is to maintain a close personal relationship, for us to make sure that the money we invest is well spent.

Therefore, we are a sponsoring partner of the Handball Club Rödertal (HCR) – the Roeder River Valley Bees. This club is like us: performance-oriented and successful. When it was founded back in 2009, it was still a vision – but a vision come true: today, the Handball Club Rödertal (HCR) is the handball performance center for women and young ladies within the Dresden metropolitan area. And what's more: The Ladies' First Team will move up to the Second Federal League later this year. But the association is also very successful in pursuing its junior program. The

Junior Team of the Roeder River Valley Bees will be promoted to the Saxon League, and the Female Youth D Team is the current East-Saxon champion. Therefore, we have decided to further boost our commitment to the Roeder River Valley Bees – our ties are getting stronger and stronger.



## In the next issue we will report on:

- SME-Kombi – Miniaturized pressure and temperature transducer
- **CANopen** SAE J1939 and its application
- Titanium