

WELCOME @ ADZ NAGANO GmbH

COMPANY PRESENTATION
HYDROGEN APPLICATION

FUTURE. MADE IN OTTENDORF-OKRILLA.

**OUR SENSORS,
FOR YOUR MEASUREMENTS.**



OVERVIEW

1. [Facts](#)



... who we are ?

2. [Industries](#)



... who are our customers ?

3. [Products](#)



... what you get from us ?

4. [Services](#)



... what sets us apart ?

5. [Capabilities](#)



... what is possible ?

6. [Utilization](#)



... where are we already on board ?

7. [Contact](#)



... how to get your individual solution ?



ADZ NAGANO

- Foundation
- Location
- Employees
- Sales
- Certification

... who we are ?

... **your partner in customer-specific solutions for pressure-, temperature- and force-measurement**

... *October 1998*

... *GmbH in private + partner ownership*



... *Ottendorf-Okrilla [near Dresden] Germany*

... *110 incl. ~25 R&D [@2021]*

... *20 Mio € [@2021]*

... *Company IATF 16949:2016*

EN 9100:2018

ATEX / IECEx

... *Products*

[EC79/406](#) 

ECE-R10 ECE-R110

German Lloyd Rail

UL MIL

WE MEASURE EVERYTHING
ADZ NAGANO GmbH

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... the content
but not the contact

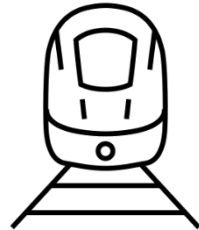




ADZ NAGANO

**... pressure-, temperature- and force-sensors/switches
for all industries**

RAILWAY



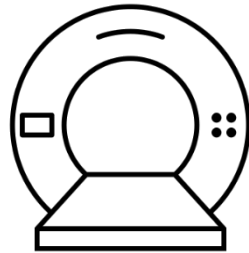
VEHICLE
TECHNOLOGY



AEROSPACE



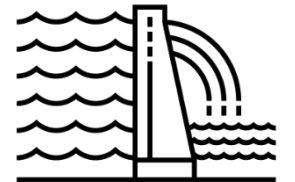
MEDICAL
TECHNOLOGY



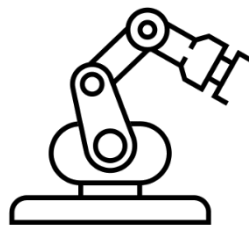
MARINE



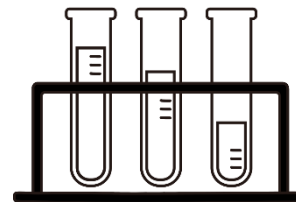
ENVIRONMENTAL
ENGINEERING



MECHANICAL
ENGINEERING /
FACTORY
AUTOMATION



PROCESS
TECHNOLOGY



MOTORSPORT



... AND MANY MORE

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ADZ NAGANO

... we measure everything !

- Sensor portfolio

transmitters

sensors

electronic switches

... for measuring of ...

pressure [absolute, gauge, differential]

temperature

force

... and combined

- Measuring range

... 2 mbar <> 5000 bar -200 °C <> +200 °C

- Environment

... H₂, harsh, chemicals, fuel, oil, gas, food & beverage, water





ADZ NAGANO

... to the utmost !

- H₂ specific Pressure sensor

SH2



... our offer for your H₂ application

- Measuring ranges ... 2 bar <> 700 bar [[EC79/406 approved](#)]



... 1500 bar

... ≥ 50 mbar [@316L]

... -40 °C <> +125 °C

- Materials ... 316L and SUH660 [no hydrogen embrittlement !]

- Pressurized media ... H₂

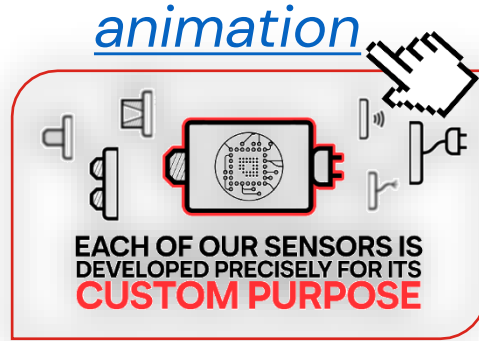




ADZ NAGANO

... our products – as individual as our customers !

- USP



... product & sensor system design

... modular system of standardized ...

- components
- designs
- internal interfaces
- assemblies

for ...
 ... customized solutions
 ... specific modification

for ...
 ... ≥1 pcs
 ... up to 50T pcs

... optimal degree of automation

➤ tailor-made solutions for specific requirements in specific application



Capabilities

ADZ NAGANO

- Management
- Engineering
- Technologies
- Production

... what is possible ?

... your partner at eye level !

... projects

... requirements, configurations

... product life cycle, replacements

... documents

... mechanics, electronics [hardware]

... industrialization

... tests, verification, qualification

... mechanical machining, laser beam welding

... automatic soldering machine

... assembly, calibration, acceptance test

... prototypes [≥ 1 pcs], series [up to 50T pcs/y]

[Overview](#)



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... solutions for decisive moments !

- Sunfire [Germany, Dresden, sunfire.de]



- Pressurized alkaline electrolyzers
- Production: "green" hydrogen
- System pressure: ~30 bar (for generated hydrogen), purity >99.6%
- Design-relevant nominal pressure of the pressure sensors: 70 bar
- H₂-Production capacity: 2,230 Nm³/h



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- Fuel cell powered drones
 - For civil applications in the field of security, agriculture and construction
 - System pressure: ~350 bar
 - Design-relevant nominal pressure of the pressure sensors: 700 bar
 - H₂-Tank capacity: 9 L



Image source: Justdrones.com / uvuedrones.co.uk





- Fuel cell powered local public transport, ships, trucks and decentralized supply
 - System pressure: ~20 bar
 - Fuel cell nominal power: up to 200 kW
 - Use of the pressure sensors for monitoring / monitoring in:
 - tank system
 - cooling systems
 - H₂ cycle

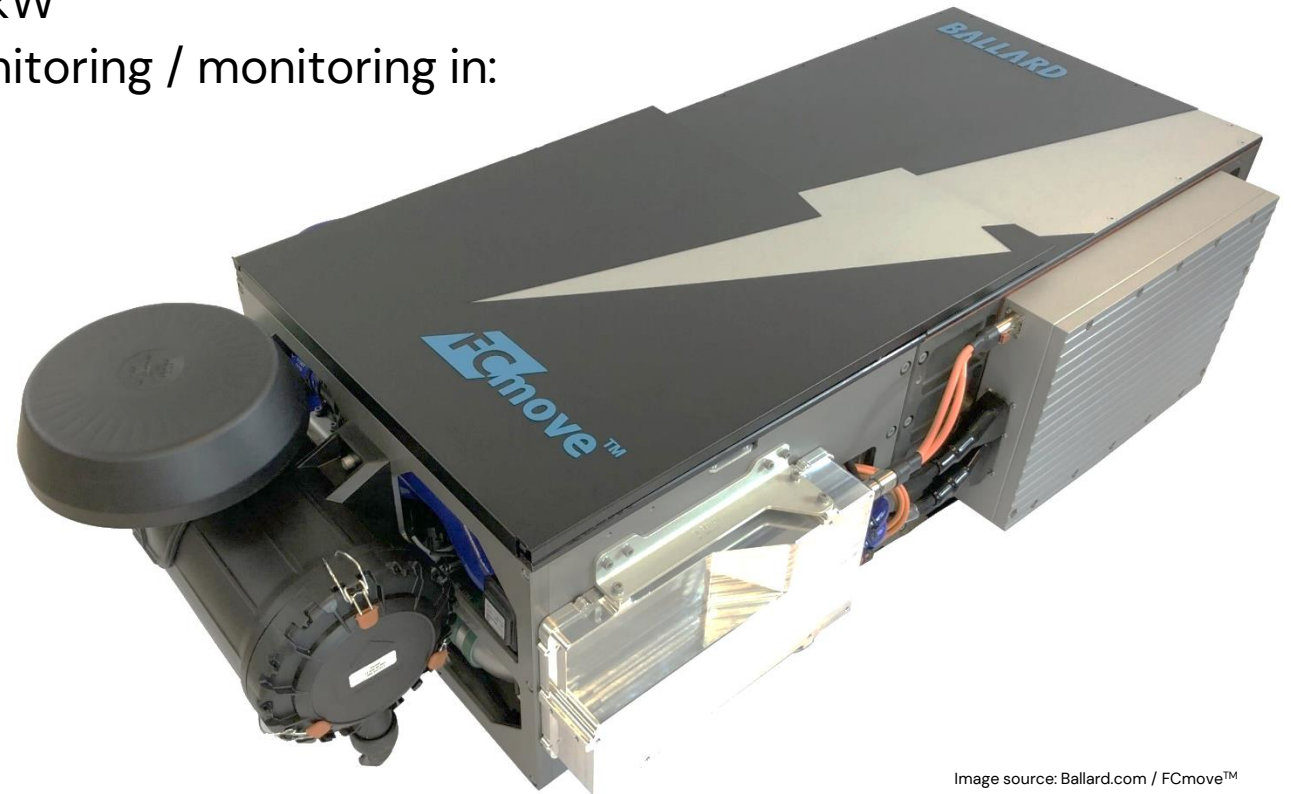


Image source: Ballard.com / FCmove™

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THANK YOU VERY MUCH
AND
CONTACT US FOR YOUR INDIVIDUAL SOLUTION

www.adz.de

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ADZ NAGANO – GREAT THINGS ON A SMALL SCALE

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