What is your role in the company?
I am the Global Product Manager for Sensored Products for Dodge mechanical power transmission products. In this role, I oversee the development of sensor technology for Dodge bearings, gearing, and coupling products.

Can you explain the difference between ABB Ability™ Smart Sensor and Digital Powertrain?
The ABB Ability Digital powertrain is a suite of digital solutions including devices, software and services. It combines connectivity and data analytics with ABB expertise to make your operations efficient, predictable and safe. The ABB Ability Smart Sensor for mounted bearings is part of the ABB Ability Digital powertrain.

Which conditions of the bearings are checked with the smart sensor?
The ABB Ability™ Smart Sensor for mounted bearings measures temperature and vibration of the bearing, as these are the first indicators of a potential problem in a bearing. By understanding the health of your bearings, you know when maintenance is needed before it’s too late.
How can potential customers integrate the system on their assets? Is it easy to use?

**Installation and portal setup**

The Smart Sensor easily threads into your bearing and is activated by pressing the button until the LED is visible.

Commissioning the bearing on the portal is easy. The app will walk you through the required information and how to assign your asset to the organization and group. The web portal uses the same registration information and allows you to quickly see trends across your bearings, and alert you to potential problems.

The ABB Ability portal uses an open architecture so that it is easy to integrate data into customers’ systems if they desire.

**For which industrial applications is this solution developed?**

The ABB Ability portal uses an open architecture so that it is easy to integrate data into customers’ systems if they desire.

**Are there similar R&D activities that you are currently working on? Which technologies may we expect in the future?**

The ABB Ability Smart Sensor for mounted bearings is just the start of our journey for the digitalization of our mechanical cast iron products.

**What does Industry 4.0 mean for you?**

Industry 4.0 for me is the connection of the physical product with the digital data storage and analytics. This allows customers to maximize their productivity by understanding what their equipment is doing and when it needs attention, so they can better plan maintenance and scheduled downtime. The ability to see trends across equipment also allows customers to identify areas where they can optimize the performance of their equipment.

---

**Hazardous location markings**

- II 1 GD
- I M1
- Ex ia I Ma
- Ex ia IIIC T3(50°C) Ga
- Ex ia IIIC T146°C Da
- Cl I, Zn 0, AEx ia IIIC T150°C Ga
- Cl I, Div 1, Gps ABCD
- Cl II, Zn 20, AEx ia IIIC T150°C Da
- Cl II, Div 1, Gps EFG
- Cl III, Div 1

**Certifications**

ATEX/IECEx (IEC60079-0) Zone 0,1,2 Gas/Zone 20,21,22 Dust NEC & CEC 500 Class I,II,III, Division 1 (Gas, Dust, Fibers and Flyings)

**Ingress protection**

- IP66: Global

**Communication**

- CE: EU
- FCC: USA, Canada
- IC: Canada

---

Mr. Artur Rdzanek
Product Manager for Sensor Technologies at ABB