

Yokogawa Process Analyzers B.V.

*pH & Conductivity sensors
Design, Engineering,
Manufacturing and Distribution*

Henk Leijten
16-11-2017



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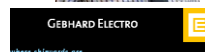
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Introduction

■ Henk Leijten

- ◆ 64 years
- ◆ Study : Bachelor Electronics & Engineering
- ◆ 1977 - 1985 Gebhard Electro, 9 years
 - ✓ Repair, Sales, Certifications, Engineering
- ◆ 1986 - 2002 Fisher-Rosemount, Emerson, 17 years
 - ✓ Sales Support
 - ✓ Production Manager Systems (RS3, Provox, DeltaV)
 - ✓ Global Procurement
- ◆ 2003 – now Yokogawa Process Analyzers Europe, 14 years
 - ✓ Production Manager Analytical (pH, SC, DO sensors and Analyzers)
 - ✓ General Manager (pH, SC sensors)
- ◆ Activities
 - Work at Yokogawa
 - Drive Motorbike
 - DIY at home



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Yokogawa Process Analyzers Europe BV

- Manufacturing Organization within Yokogawa Corporation.
- Amersfoort, The Netherlands
- 1982 Electrofact acquired by Yokogawa
- **Worldwide Production for:**
 - pH sensors
 - Conductivity sensors
 - Fittings, Adapters, Holders
 - Cables for sensor mounting
- **Employees employed in:**
 - Chemical laboratory
 - Mechanical workshop
 - Glass blowery
 - pH- & Conductivity Sensor assembly lines
 - Development & Engineering
 - Purchase, Planning & Order Processing, Distribution
 - Finance controlling.



Number of YPA employees 47 fte

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YPA Strategic overview

- **Mission:** *YPA is the global center of excellence for developing and manufacturing of pH and conductivity sensors within Yokogawa, adapting:*
- *Extension of business by product digitalization and other parameters (DO, FC, TB)*
- *Simplified display analyzer (HMI) function for new industries*
- **Overall Strategy:** secure further business growth, following the Transformation 2017, despite the existing market challenges



❖ **Market challenges:**

- ❖ Grow current marketshare before the end of FY2021 by:
- ❖ the introduction and further expansion of the intelligent Sencom sensors in our defined target markets:
- ❖ Petro- and chemical industry
- ❖ Power industry
- ❖ Food Industry
- ❖ Water and waste-water industry (new)



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Transformation 2017



Timeframe: FY2015-FY2017

Focus on our customers

- Developing Business by pursuing close relationships with customers
- Expand our business with our current customer base

Creation of new value

- ICT advances are leading to new business opportunities
- Co create value across companies, industries and markets by improving efficiency and achieving overall optimization

High efficiency global company

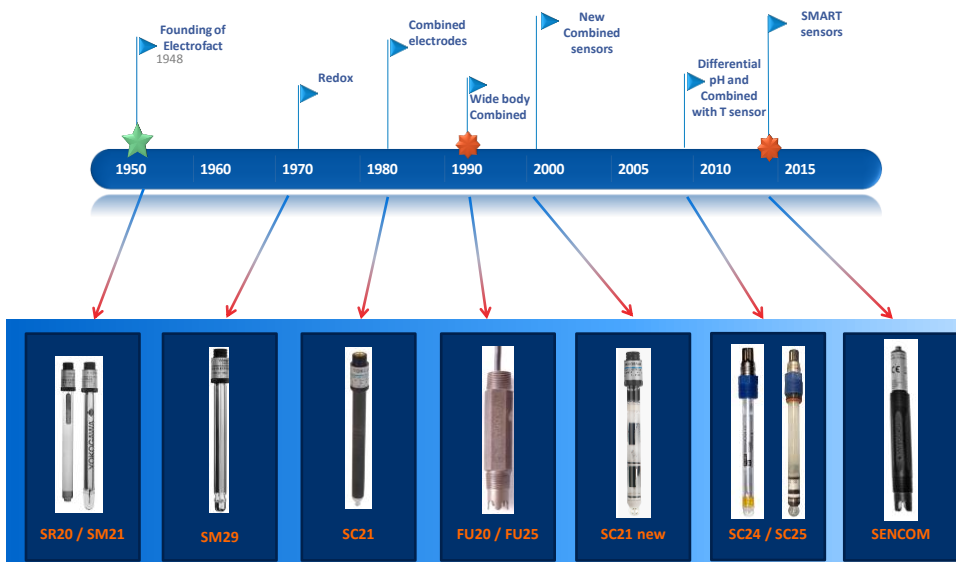
- Globally optimize all functions and operations
- Be more profitable than our competitors

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Yokogawa Electrofact now YPA: Historical development pH sensors



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YPA introduction movie (short)



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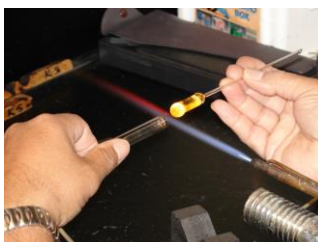
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Production process pH-Glass

■ The production of pH-glass is the core business of YPA

- Production of special glass in our laboratory
- Glassblowery with 8 skilled employees
- Takes 3 – 5 years to have a skilled glassblower
- It takes 5-10 years to have an experienced glassblower skilled for all complex products



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Production process pH-glass (Core business pH)

Glass production on specific recipe



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Production process pH-glass (Core business pH)

◆ Production process pH sensor

➤ Laboratory

-Melting pH glass

- Moulding pH glass

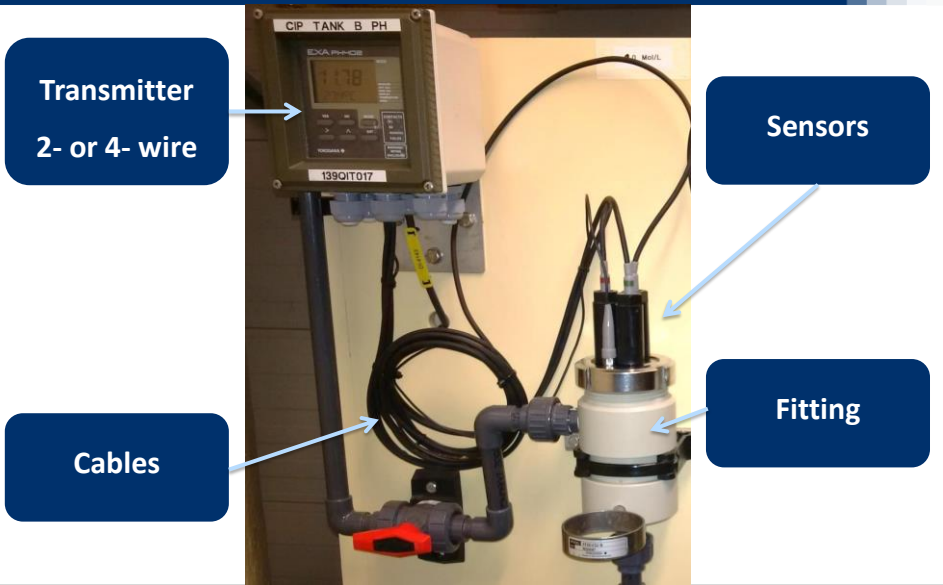


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Example of pH measurement loop



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PRODUCTS: some examples of pH-Electrodes



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Sensors based on SENCOM technology

- Released: Digital pH sensors (FU20F, FU24F, SC25F)

Integrated (non re-usable) SENCOM technology
 Certified for ATEX/IECEX, FM, CSA, TIIS
 fully IP67 (no moisture problems!!)



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PRODUCTS: Some examples of Conductivity Sensors



ISC40-Peek version



ISC40-Teflon version



SC4A

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PRODUCTS: Some examples of Fittings & Adaptors

Fully equipped mechanical workshop
for in-house manufacturing



Sampling



Flow through



Retractable fitting



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Floating Ball



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