



Enhancing Process Reliability

With Advanced Level and Pressure Measurement Technologies



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Why Measurement Reliability Matters

Builds a safer, smarter, and more efficient plant.



SAFETY

Prevent abnormal operation



PROCESS STABILITY

Maintain process continuity



MAINTENANCE COST

Reduce maintenance downtime



Real Challenges in Level & Pressure Measurement

Chemical / petrochemical processes are rarely ideal conditions



FOAM

Bubbles / surface noise



VAPOR

Condensation & steam



BUILD-UP

Coating on antenna / diaphragm



TEMPERATURE

High or changing temperature



PRESSURE

High pressure or vacuum



CORROSION

Aggressive chemicals



LOW DK

Weak reflection signal



INSTALLATION

Nozzle / limited access



AGITATION

Turbulence

Reliability Is More Than Accuracy

Position reliability as a complete measurement approach

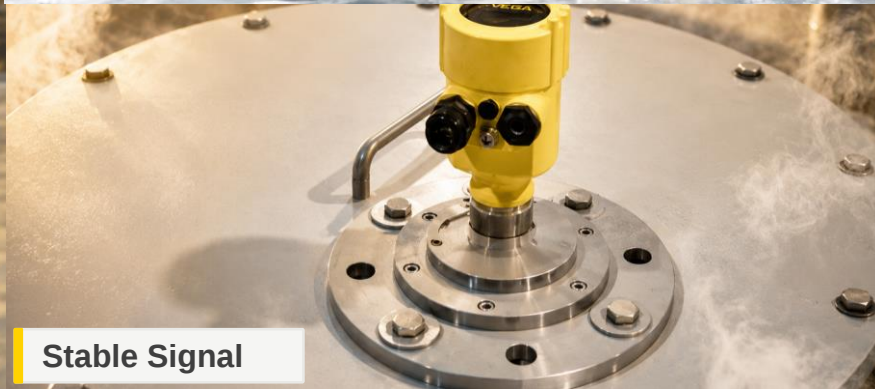
Correct Technology



Correct Installation



Stable Signal



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Smart Diagnostics

Why 80 GHz Radar?

Focused Signal. Reliable Measurement.

Focusing beam

- ☐ Simple

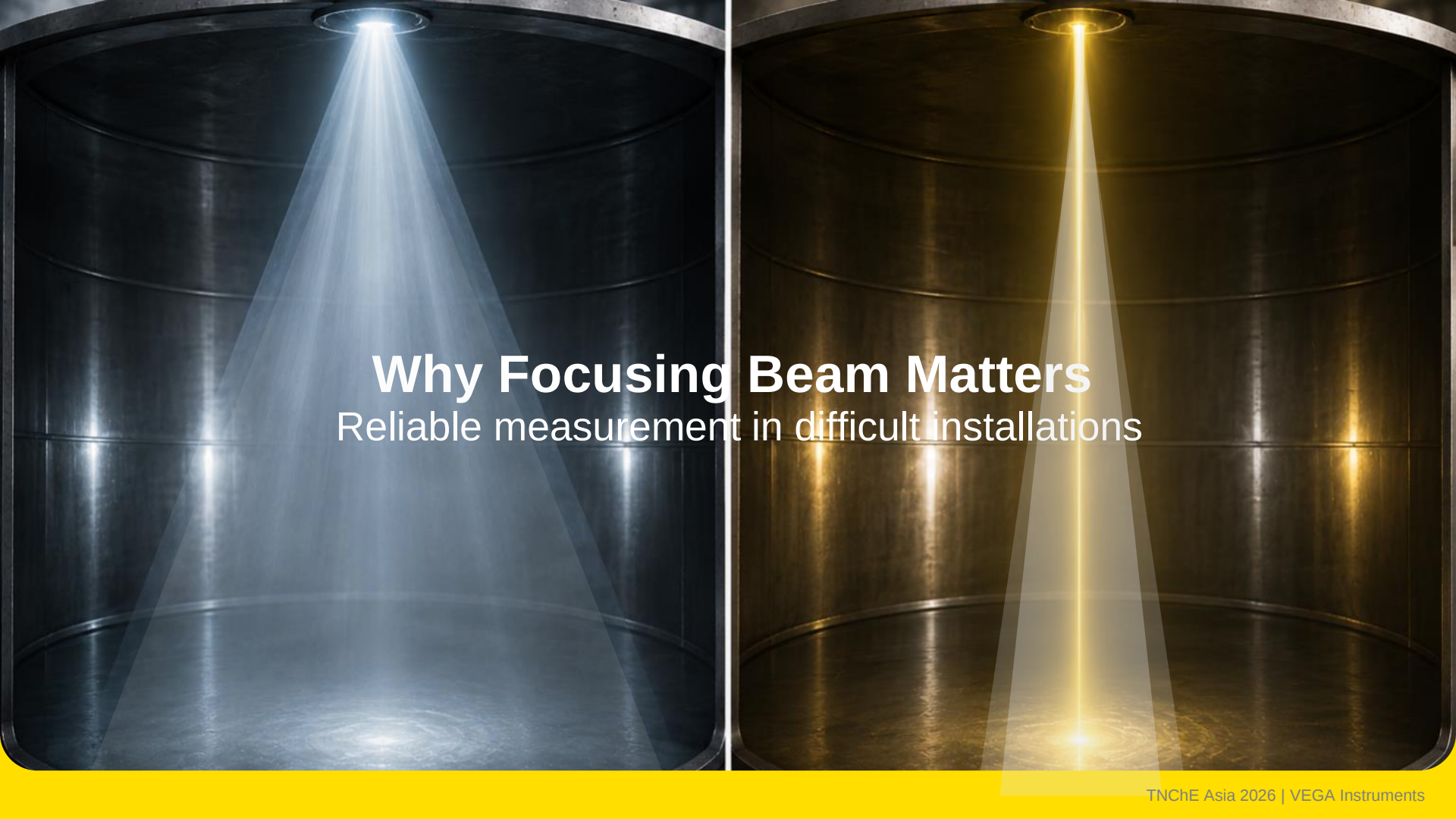
Dynamic range

- ☐ Safe and reliable

STC function

- ☐ integrated in the sensor is a filter for build-up





Why Focusing Beam Matters

Reliable measurement in difficult installations

Why is the Dynamic range 120 dB?

0 dB

120 dB

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120 dB

A close-up photograph of industrial machinery, likely a valve or flange, showing significant condensation and a thick, yellowish, crystalline buildup on the metal surfaces. The background is dark and industrial, with a metal grate visible.

STC Uninterrupted Measurement

Reliable measurement even with buildup and condensation

Why Ceramic or Stainless?

The right diaphragm creates reliable measurement.



Ceramic diaphragm

- ☐ Corrosion resistant
- ☐ Robust against overload
- ☐ Excellent for abrasive conditions



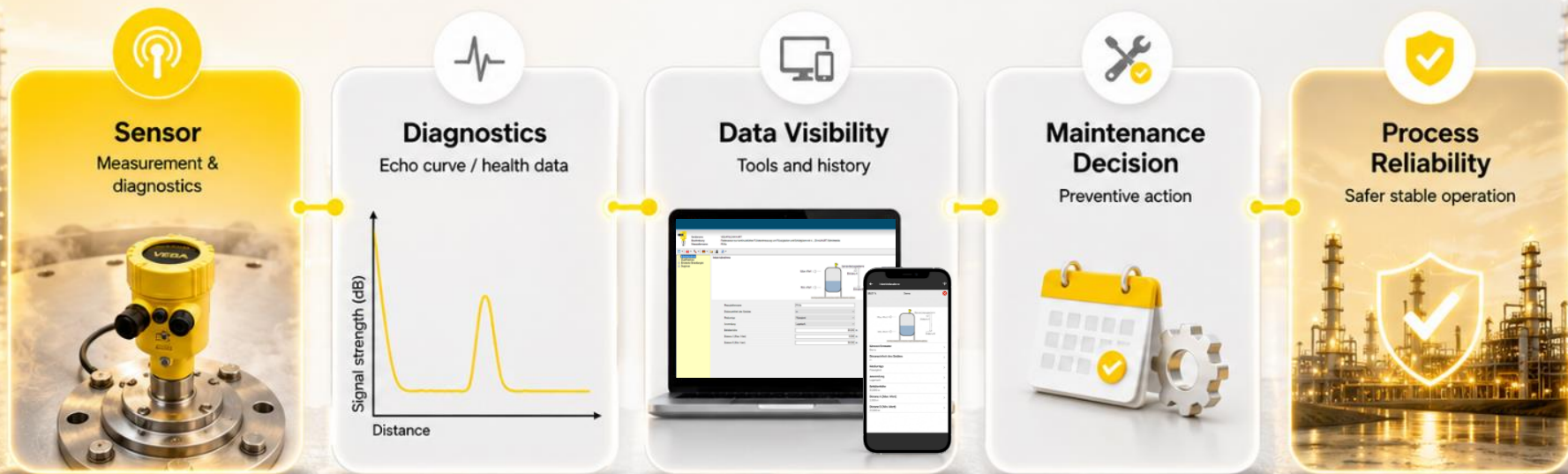
Stainless diaphragm

- ☐ High pressure capability
- ☐ Stable under rapid temperature changes
- ☐ Ideal for hygienic processes



From Instrument Data to Process Reliability

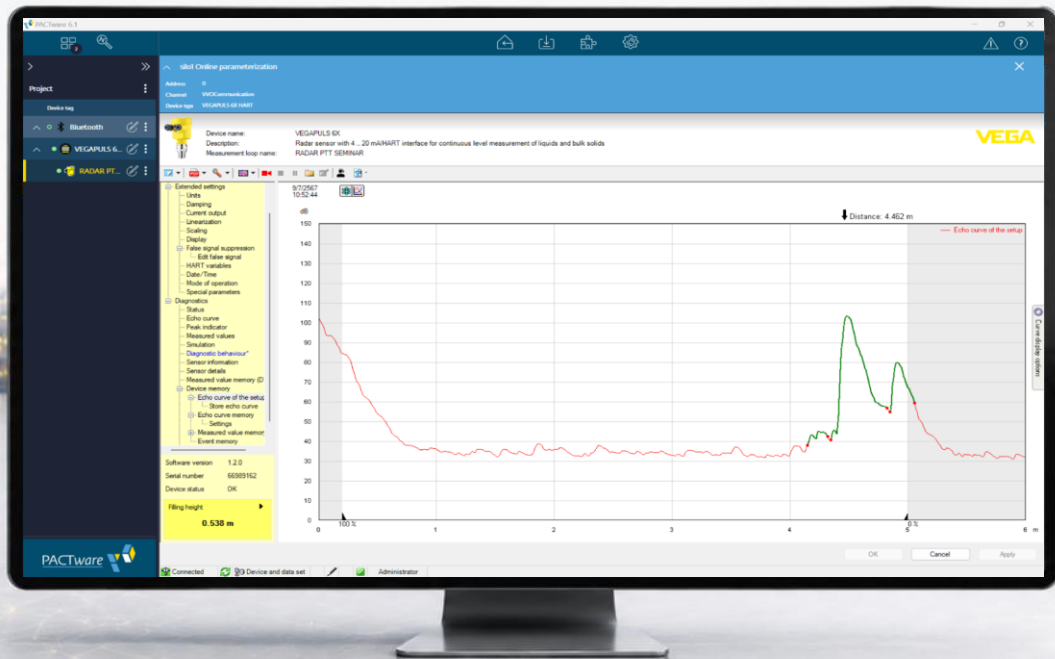
Use a simple workflow to explain digital value without over-selling



Digital tools help users move from reactive maintenance to preventive action.

Smart Diagnostics for Faster Troubleshooting

Diagnostics convert instrument data into useful maintenance information



Echo curve review

Quickly verify signal quality and process conditions



Parameter backup

Save and restore device settings for easy management



Faster commissioning

Reduce setup time with predefined parameters



Easier troubleshooting

Identify issues quickly with clear diagnostics



Reduced site visits

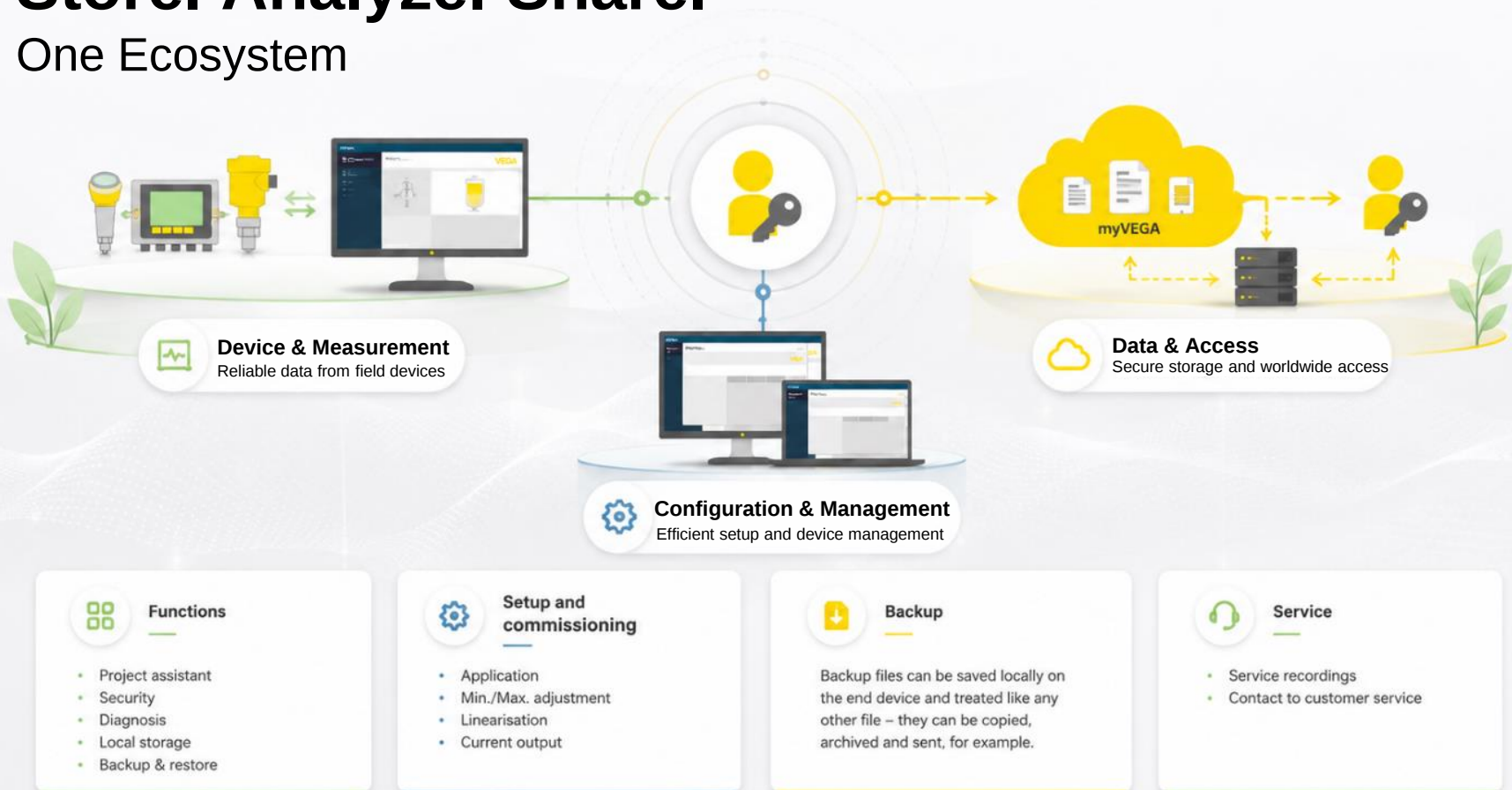
Resolve more issues remotely and save time & costs



Digital tools help users move from **reactive** maintenance to **preventive** action.

Store. Analyze. Share.

One Ecosystem



Key Takeaways

End with three clear messages

1



SELECT THE RIGHT TECHNOLOGY

Technology must match the real process condition, not only the tag description.

2



INSTALLATION MATTERS

Good installation is as important as good instrumentation.

3



USE DIAGNOSTICS

Diagnostics and digital tools improve long-term reliability.



Reliable measurement helps plants operate **safer, smarter, and more efficiently.**

VEGA **HOME
OF VALUES**