

# 13<sup>th</sup> Chemical Process Safety Sharing (CPSS)

## Topic: Radar Level Measurement for Process Safety Management

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Company : VEGA Instruments Co.,Ltd





**Process Safety Management with Radar level transmitter**



**Principle of Radar level transmitter**



**Technology the Radar 80 GHz**



**SAFETY & SECURITY for increase safety function**



# Process Safety Management



VEGA  
HOME  
OF VALUES

## Process Safety Management

P  
S  
M





# Process Safety Management



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# LOPC Prevention



# Principle of Radar level transmitter

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# Principle of Radar level transmitter



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# Principle of Radar level transmitter



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# Principle of Radar level transmitter



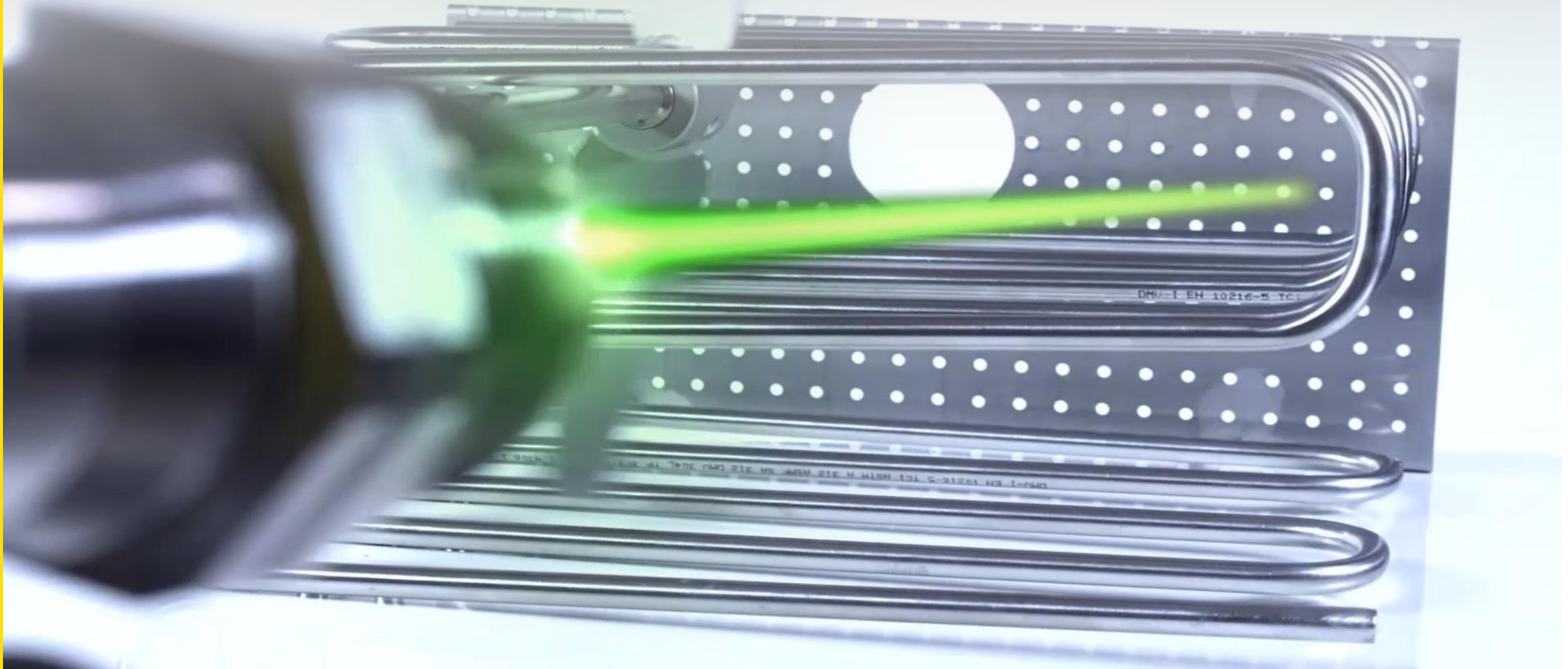
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# Principle of Radar level transmitter

## Focusing beam



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# Principle of Radar level transmitter



Reliable measurement  
even with agitator

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# Principle of Radar level transmitter

## Installation on a ball valve

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# Principle of Radar level transmitter

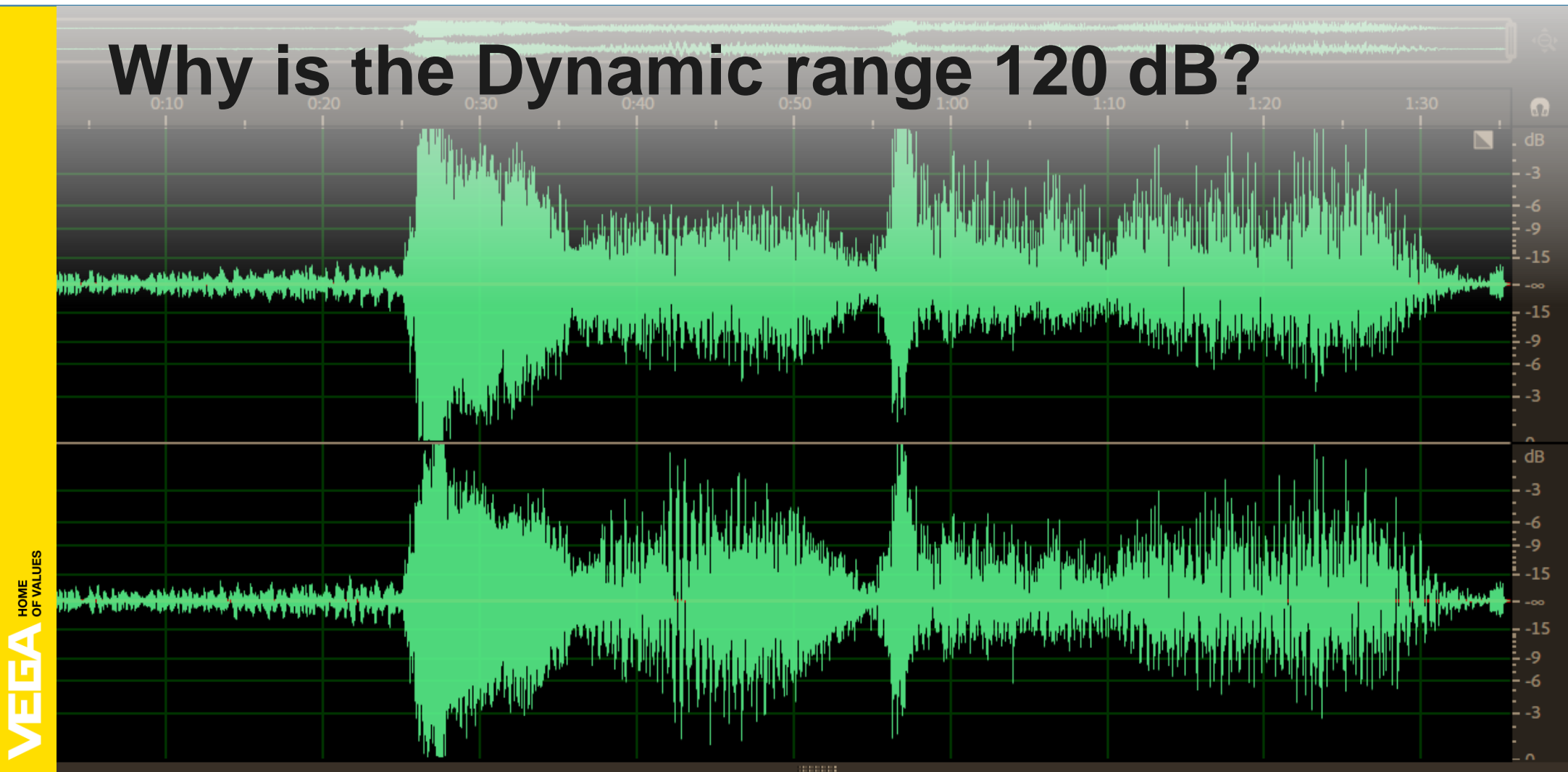
## Installation on a ball valve

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# Principle of Radar level transmitter





# Principle of Radar level transmitter





# Principle of Radar level transmitter



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# Principle of Radar level transmitter

Unaffected by buildup

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# Technology the Radar 80 GHz

## Why Radar 80 GHz

**Focusing beam**

→ Simple

**Dynamic range**

→ Safe and reliable

**STC function**

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



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## Cyber Security IEC 62443

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# Principle of Radar level transmitter

**SIL IEC 61508**

**SIL**

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13<sup>th</sup> Chemical Process Safety Sharing (CPSS)  
June 20<sup>th</sup>-21<sup>st</sup>, 2024, Dusit Thani Pattaya Thailand



# Principle of Radar level transmitter

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Cyber Security  
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**SAFETY & SECURITY**  
**COMBINED IN ONE SENSOR**





Thank you for your attention

