

# Realize high-accuracy monitoring of differential flow rate with immunity to flow noise and spike noise!

An electromagnetic flowmeter specifically designed for tuyere cooling water leak detection MagneW™ 3000 PLUS+

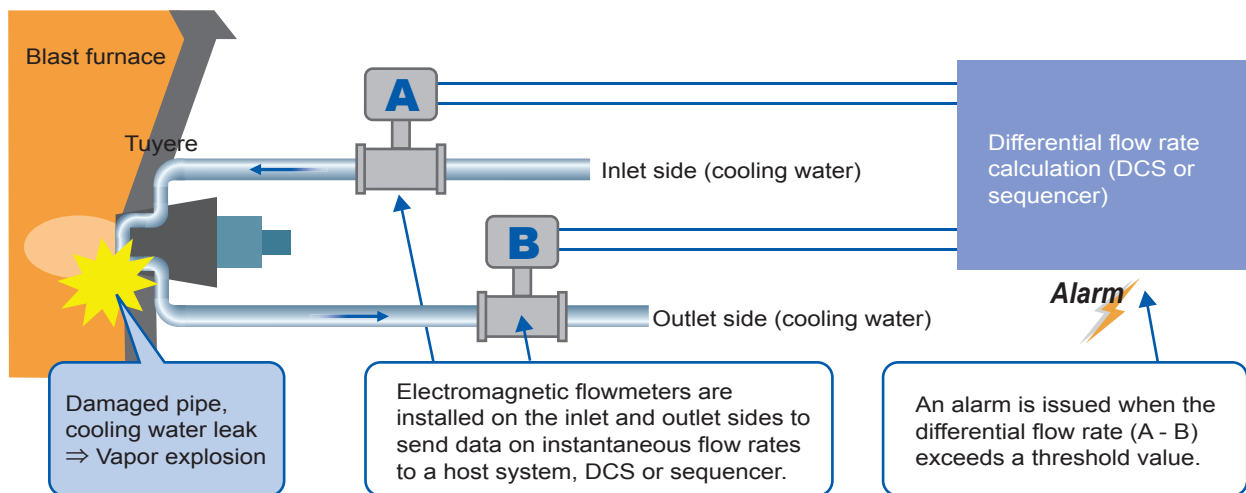
## Issues

- There is a need to detect a leak of tuyere cooling water into a furnace to prevent vapor explosions.

## Proposed preventive maintenance solution

- Monitor the differential flow rate of tuyere cooling water between the inlet and the outlet and detect leaks by using electromagnetic flowmeters that have high stability and repeatability due to excellent noise immunity performance!

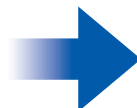
## Overview of the cooling water leak detection system



## Flowmeter installation conditions and required specifications

### Installation conditions

1. Strict differential flow rate control standards
2. Complicated piping with limited space for installing flowmeters
3. Severe environmental conditions
  - Dusty
  - Pipe vibration



### Required specifications

1. High stability and repeatability
2. Short straight pipe length
3. Resistance to environmental conditions
  - Dustproof structure
  - Vibration resistance



*For preventive maintenance, we propose the use of our smart electromagnetic flowmeter, MagneW™ 3000 PLUS+.*

*It provides highly-reliable leak detection of tuyere cooling water, based on stable measurements.*

# MagneW™ 3000 PLUS+

Smart Electromagnetic Flowmeter

## ***Meets strict control standards of differential flow rate with improved noise immunity performance***

### ■ High stability and repeatability achieved by specially improved noise immunity performance!

- Drastic cut in fluid flow noise (caused by friction and contact resistance between a fluid and an electrode surface) with a mirror-finish electrode surface and lining

Super mirror finish PFA lining with the world's smoothest surface roughness of Ra=0.03

- Automatic spike cut for stable immunity to spike noise (caused by solid matter in a fluid colliding with an electrode)



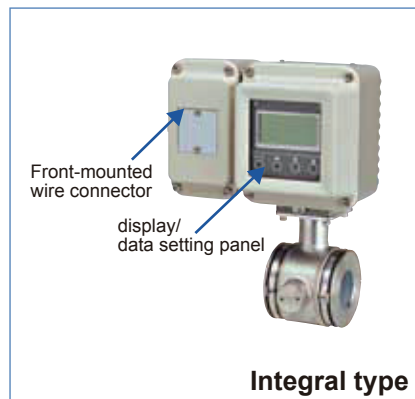
### ■ The electromagnetic flowmeter significantly reduces energy loss caused by pressure loss!

### ■ The electromagnetic flowmeter, which only needs a short straight pipe (5D min.) requires less piping cost and less space!

### ■ Enclosure rating : IEC IP67 (Detector)

### ■ Vibration-resistant compact structure with a vibration resistance of 19.6m/s<sup>2</sup>!

### ■ Front-mounted wire connector and display/data setting panel for easy installation and operation!



*Note: This product is specifically designed for the leak detection of tuyere cooling water. Please consult us about the use of this product.*

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