

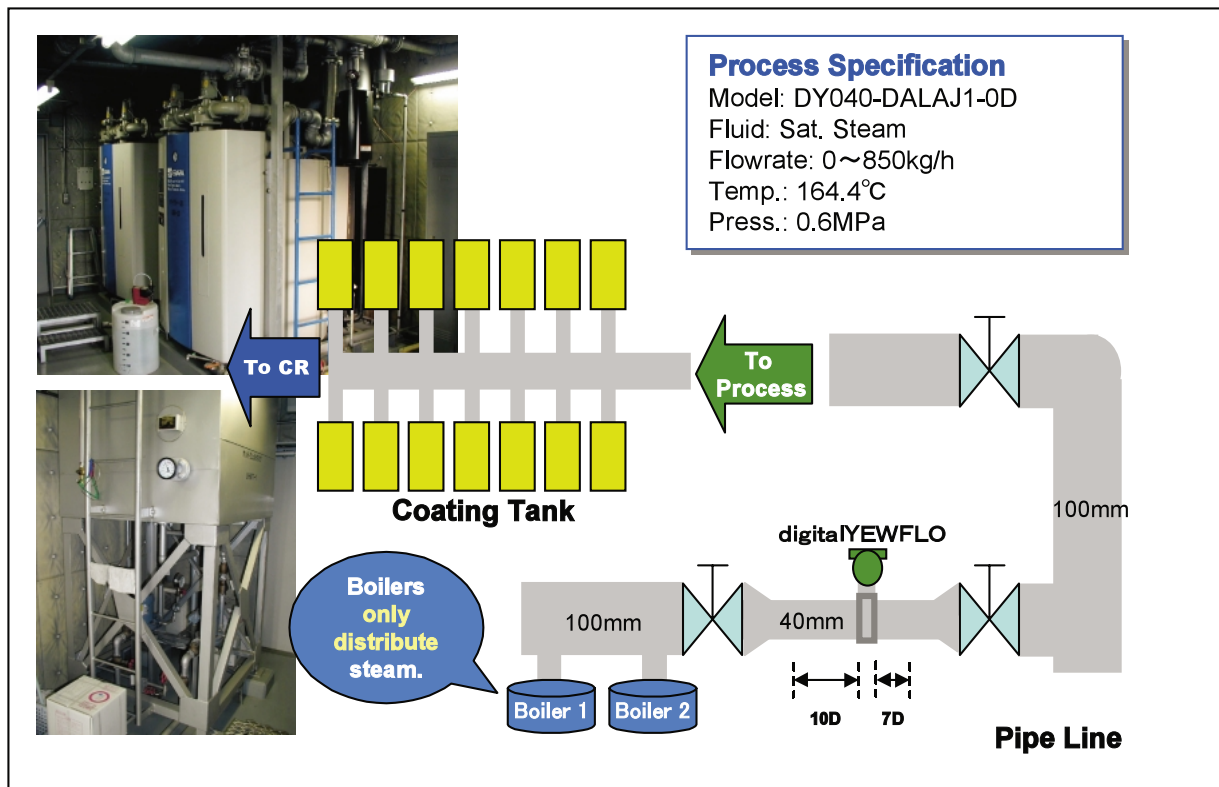
SENSOR APPLICATION NOTE

Steam Control for Coatings Process & Clean Room

At YMF Ome factory, two boilers distribute steam to warm 60 coating tanks for base board and to humidify a clean room. To control these process, flow rate is always fluctuating about 100 to 850 kg/h. This factory had controlled only amount of steam consumption, but they changed their way of control by digitalYEWFO for energy savings and more effective steam operation.



digitalYEWFO



Grasp exactly the amount of steam distribution and Use it the best.

digitalYEWFO has developed not only for high accuracy or endurance but also for cost saving or energy saving. The result of this case proves that digitalYEWFO will contribute to energy-savings and cost savings for customers.

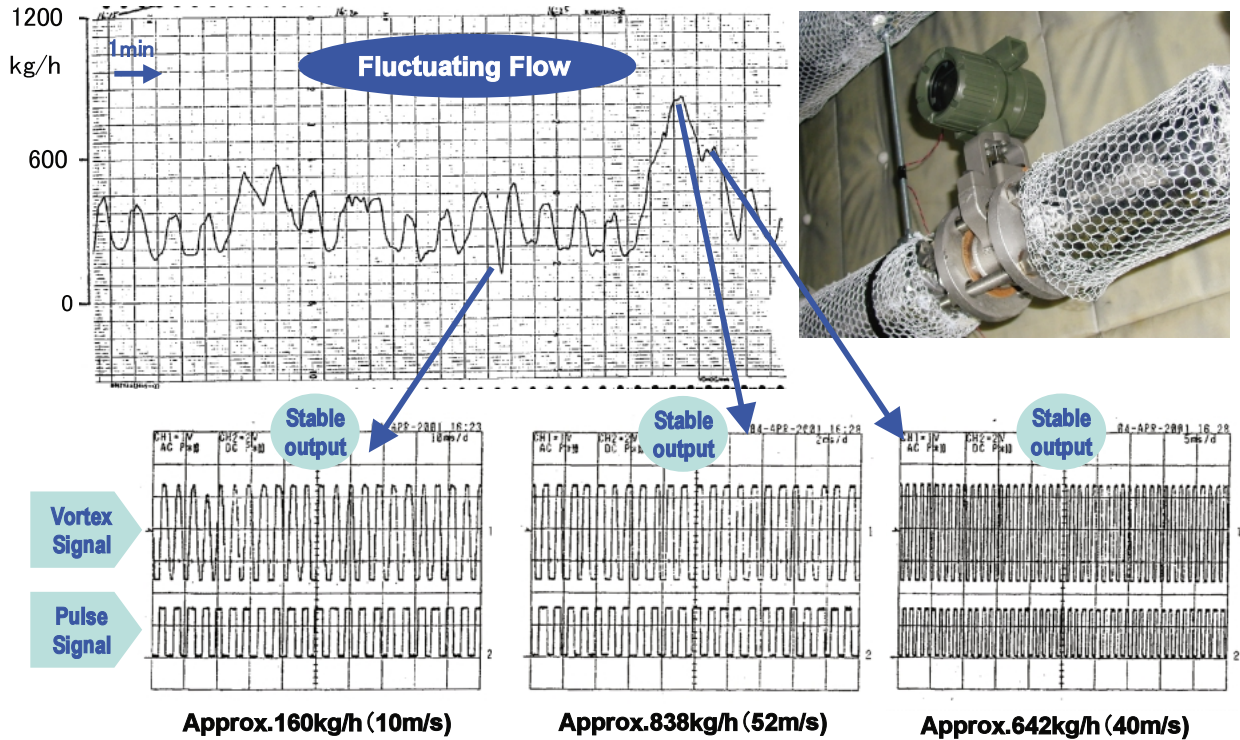
Advantages of digitalYEWFO

- ☆No Start-up Tuning ➤ **Initial Cost Saving**
- ☆No Moving Parts ➤ **No Regular Maintenance**
- ☆High Accuracy ➤ **Vibration proof**
- ☆Low Pressure Loss ➤ **Energy Saving**
- ☆Wide Rangeability ➤ **Energy-Savings**
- ☆Improved Self-Diagnostic function ➤ **the predictive maintenance**
- ☆Tough Body ➤ **High Temperature Steam**

TEST DATA

Keep the stable output for fluctuation of steam providing.

SSP (Spectral Signal Processing function) which digitalYEWFLOW has in the new amplifier, always watch the flow condition and keep the optimal adjustment for the stable output.



ADVANTAGE

This table shows compared accuracy of Orifice (2 to 5%) and digitalYEWFLOW(1%) for steam application, and calculated saving steam energy cost per year.

*The Orifice "3%" means antecedent value under considering error of fluctuation.



Item	digitalYEWFLOW	Orifice
Accuracy	± 1% of reading	± 3% of reading (ave.)
Size	40mm	
Flowrate	850kg/h	
Steam loss by Error (kg/D)	850x0.01x24h=204	850x0.03x24h=612
Steam loss by Error (90%Operation) (kg/Y)	204x365x0.9=67014	612x365x0.9=201,042
Money Loss (Steam@24\$)	67014x24\$=1,608k\$	201042x24\$=4,825k\$
Saving Cost (Year)	3%-1% 4,825,-1,608=3,217k\$	

More Cost Save
By
Maintenance Free!!

Save \$3,217
per Year!

The process in which fluid fluctuates drastically, digitalYEWFLOW can contribute save-energy by stable output and high accuracy.

NOTICE

- Before operating the product, read the instruction manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.

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