



## POLYMER APPLICATIONS

Up to 200°C\*

Epoxy resins

Formaldehyde resins

Phenolic resins

Urea resins

PMMA

Polyamide

Polycarbonate

Polyester

Polyimide

Polyurethane

Silicone

EPDM

Polybutadiene

Polyisobutylene

Synthetic rubber

# HOW TO EFFECTIVELY OPTIMIZE BATCH POLYMERIZATION REACTIONS IN HAZARDOUS ENVIRONMENTS?

For applications up to 200°C\*

**Polymerization reactions are complex processes** involving reaction mechanisms often difficult to control. Most resins and specialty polymers are made using batch polymerization with unique recipes that require constant adaptation of manufacturing parameters.

**Common problems encountered in batch polymerization include:**

- **PRODUCTION CAPACITY LIMITED BY BATCH TIME**
- Variations and evolution of reactions controlled by laboratory measurements which are **COSTLY** and **TIME CONSUMING**
- Unknown evolution between laboratory controls which affect **FINAL PRODUCT QUALITY** and **END-POINT DETECTION**
- Lack of control that can lead to hardening of polymer with **LOSS OF PRODUCTION** and great **MATERIAL DAMAGE**

## POLYMER BEST SELLER SOLUTION – in hazardous environments

- +** Optimization of **cycle time** to increase production
- +** Better **end-point** detection and easier reaction monitoring
- +** Correct viscosity and reaction parameters from **beginning to end of batch**
- +** Prevention of **mass solidification**
- +** Reduction of **costly and time consuming** laboratory sampling
- +** Only sensor to provide such level of **sensitivity** over a very **large measurement range**



### Key characteristics:

Good sensitivity at low viscosity

High full scale range

No wearing parts, very low maintenance

Precise on low and high viscosity

Robust and reliable

Measures in any positions

\*Other configuration available on demand

## FEATURES & SPECIFICATIONS



**MIVI process viscometer**

Typical Full Scale Range: 1000 cP\*

Temperature: up to 200°C\*

Pressure: up to 60 bar\*

Ex-proof certification

Material: 316L SS\*

Ingress Protection: IP67

With 316L SS Weld-mount flange



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 \*Other available on demand



**9602 processor**

Viscosity and temperature processor

LCD screen

4 x 4-20 mA outputs

Adjustable correlation: up to 8 distinct products

Operating temperature: 0-45°C

Panel-mount type

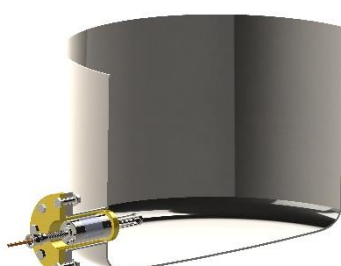
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## MAIN MOUNTINGS

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On reactor wall



On immersion tube



On a bypass loop

**Any questions or specific needs regarding other viscosity solutions?  
 Let us help you find the best match for your process by **contacting us** at:  
[instruments@sofraser.com](mailto:instruments@sofraser.com)**