

Optimize your production process with RheoStream®  
- a process rheometer that offers real-time viscosity measurements.



## PERSONAL CARE

Ensure consistent viscosity and maintain product quality.



### CHALLENGE

Viscosity is critical for consumer experience and function of many personal care products. The products are made in batch or continuous processes. Before filling into bottles, the viscosity must be controlled.

Traditionally viscosity is monitored using manual off-line methods. This is because in-line viscometers lack temperature control and do not capture the complex non-Newtonian behavior.

Manual methods are sensitive to human errors and do not allow for real-time control. They are time-consuming and require skilled operators. Precious production time is spent waiting for viscosity measurements.



### SOLUTION

**On-line Instrument** - RheoStream® integrates seamlessly into production lines (at mixing tank or down-stream from continuous mixer system), measuring without interrupting the manufacturing process.

**Real-Time Monitoring** - (2 minutes per sample measurement displayed at 3 selected shear rates) ensures precise and instant adjustments to maintain optimal viscosity level during the production and across different batches.

**High Accuracy and Precision** - across various product categories, thus eliminating variations through reliable, and persistent results.



### BENEFITS

**Increase Production Capacity** - eliminating the waiting time, during batch upstart in conti-production and before bottling, increases the production capacity. Up to more than 50% capacity increase.

**Reduce Waste and Rework** - increased efficiency and cost saving.

**Product Performance** - viscosity affects the cleaning efficacy or absorption into the skin, as well as stability during storage and use, that will ultimately influence the consumer's satisfaction and loyalty.

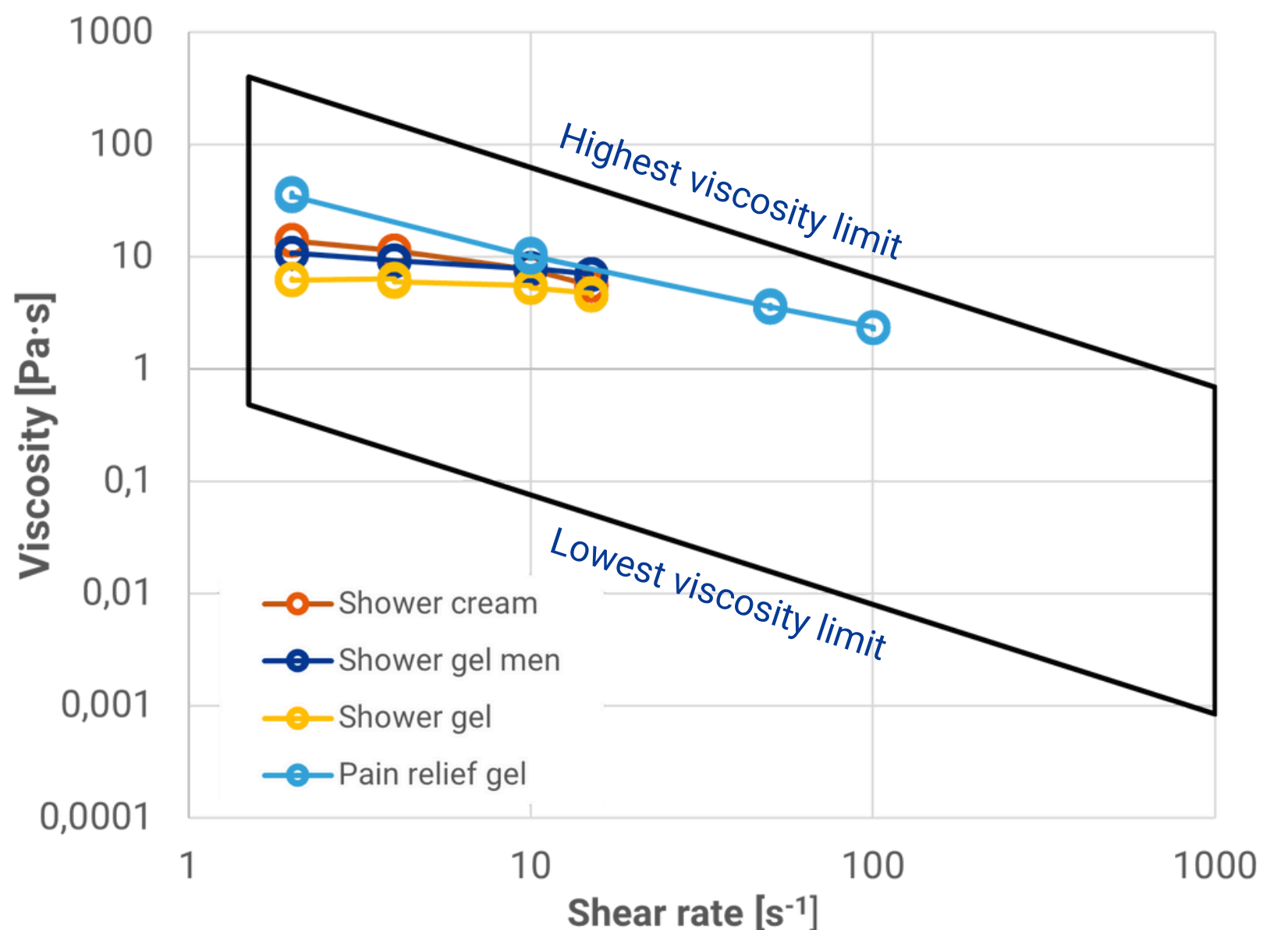
## APPLICATION EXAMPLE

- 4 personal care products were measured with RheoStream at 23 °C. The shear rates can be customized between 1.5 – 1000 s<sup>-1</sup>. New data obtained every 2 minutes.
- 10 measurements were made in each point (shown as circles in the Application Range plot) with great precision, better than 2%.
- Cleaning is done between different products or daily with either water or other cleaning agent (200 ml/cycle).

## HYGIENIC INSTALLATION

Please inquire for how to install RheoStream in accordance with your hygiene requirements.

### RheoStream® Application Range



CONTACT FLUIDAN  
+45 7060 5878  
info@fluidan.com