GLASS GOB TEMPERATURE MEASUREMENT

THE OPPORTUNITY

During the bottle formation process, a molten gob of glass is released from the feeder head. The size and viscosity of the gob is critical in determining the wall thickness of the final bottle. Gob temperature is directly related to the glass viscosity and cooling rate, and thus it is critical to measure this temperature accurately for high quality product.

Glass gob temperature measurement is only possible using non-contact thermometers. The pyrometers needed for this application must be fast due to the high cycle frequency and must be capable of measuring the temperature inside the gob. This is needed because the surface temperature of the glass is easily influenced by ambient conditions. In addition, the measuring depth is adjusted to suit the type of glass or size of gob by selecting different spectral ranges.

OUR SOLUTION

The Impac ISR 6-TV Advanced is a short wavelength (0.9 to 1.05 µm) ratio pyrometer for accurately measure the glass gob core temperature independent of the gob thickness with minimal emissivity errors. This fast response (2 ms) pyrometer can lead to increased throughput and the TV output allows the user to verify gob registration, size, and monitor for process deviations.

The rugged design with IP65 rating, optional cooling and purge jacket is well suited for harsh industrial environments. The world-class accuracy, repeatability and stability are ideal for glass production.
YOUR BENEFITS

- Fast measurement rate allowing high throughput
- Reliable core temperature independent of thickness with ratio pyrometer
- Full accessory package including sensor cooling & air purge
- TV option for visual image monitoring with registration
- IP65 protected housing