

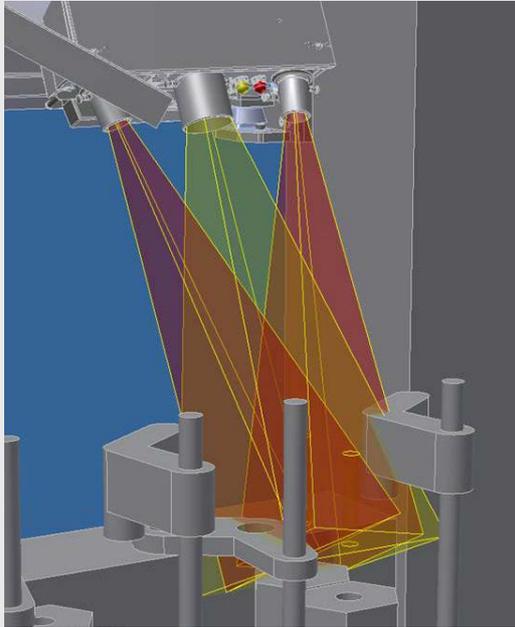
**S**YMPLEX

**TMGO**

**Travelling Mold Temperature and  
Job Loading Observation**

# TMGO

## Traveling Mold Temperature and Gob Loading Observation



### Monitoring of mold temperature and gob loading

#### Symplex TMGO

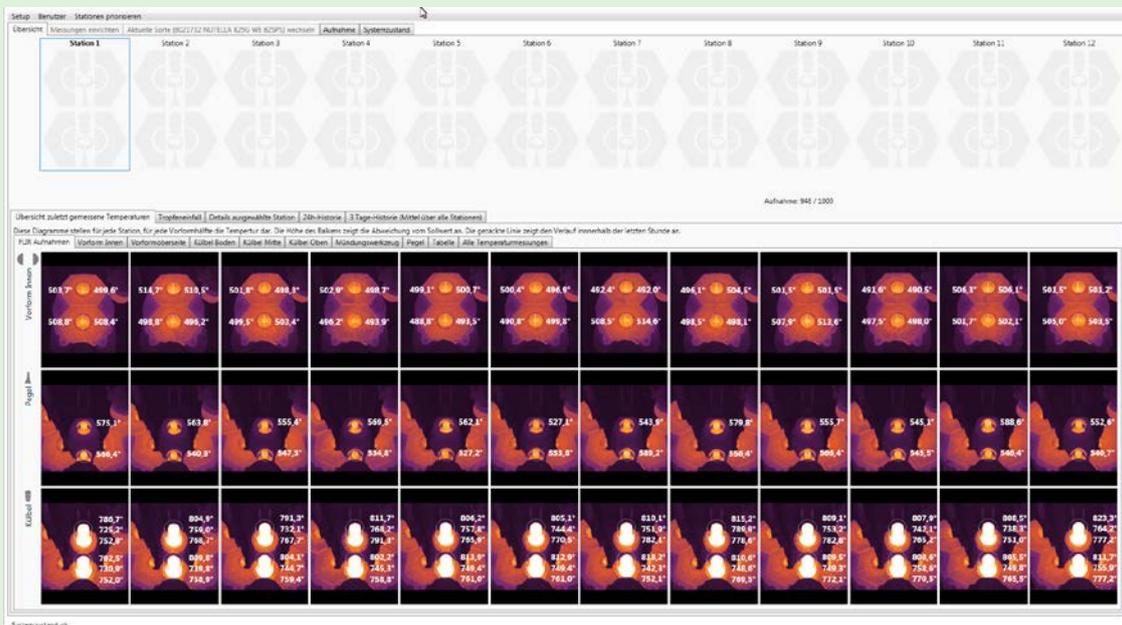
observes the mold temperatures and the gob loading of IS machines during running operation.

Temperature and gob entrance angle deviations from the reference values are calculated and displayed.

This allows to draw conclusions about the production process and initiate corrections if necessary.

### Mold Temperature Observation

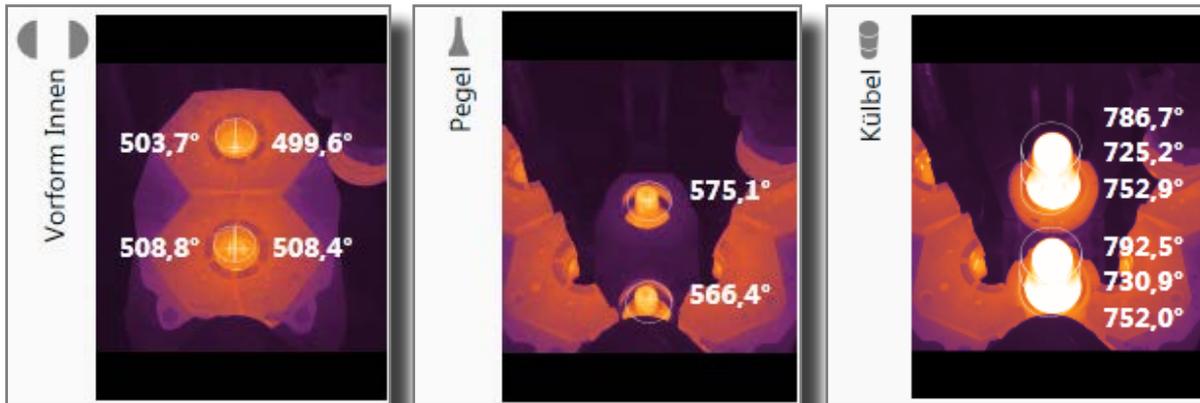
The Mold Temperature Observation uses a thermo-graphic camera to regularly record images at every IS machine station. You can define the measuring point and time. The images are analyzed by TMGO and the temperatures are calculated. The temperatures and temperature trends are clearly represented on the screen.



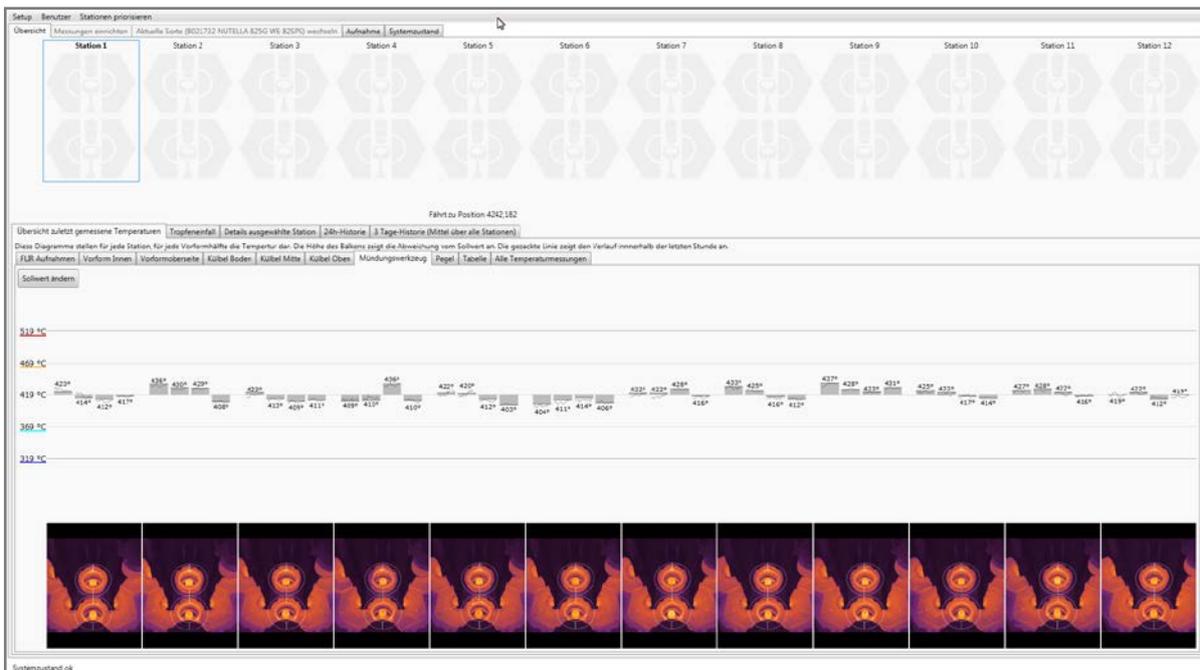
The system informs you about:

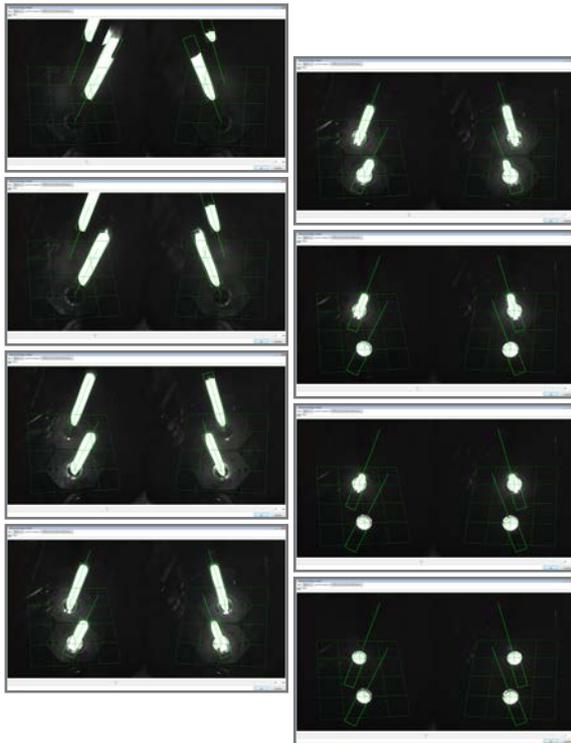
- temperatures
- temperature trends
- deviations from reference values
- exceeded thresholds
- images and image sequences

## Example: temperature display



## Example: temperature deviations



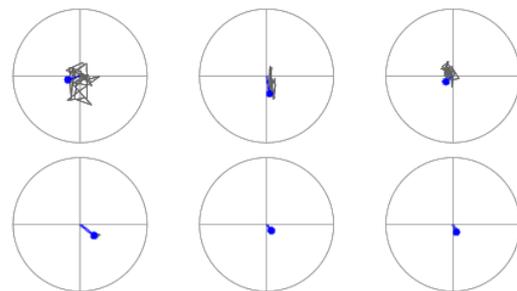


### Gob Loading Observation

The Gob Loading Observation uses two high-speed cameras to record image sequences of the gob while it falls into the mold.

The system calculates the exact spatial position of the gob. The calculated values are analyzed and clearly represented on the screen.

Sample display:

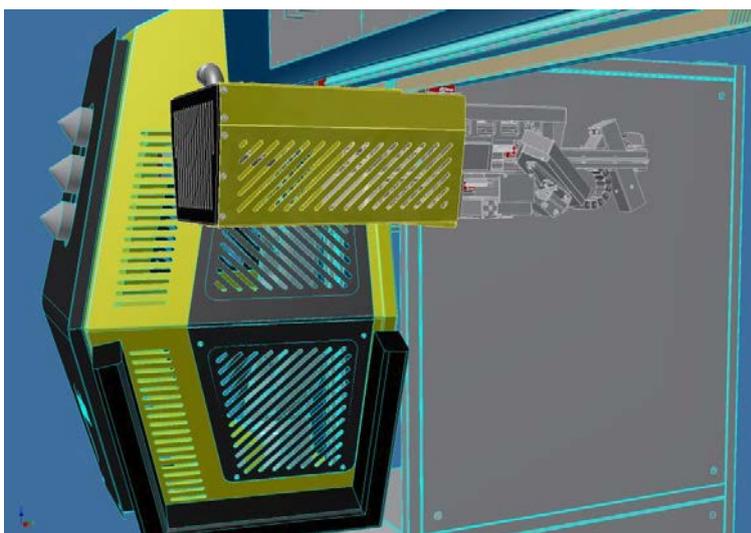


### Fully integrated with Swabbing-Robot - the TMGO atRobot

In combination with the Swabbing-Robot the two TMGO and robot use the same support structure and offer a cost-efficient solution for both systems.

Further use of camera technology opens additional applications for the robot as well as for IS-machine control.

TMGO and robot integrate with the Symplex hot-end product line.



### Symplex Vision Systems GmbH

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## Highlights

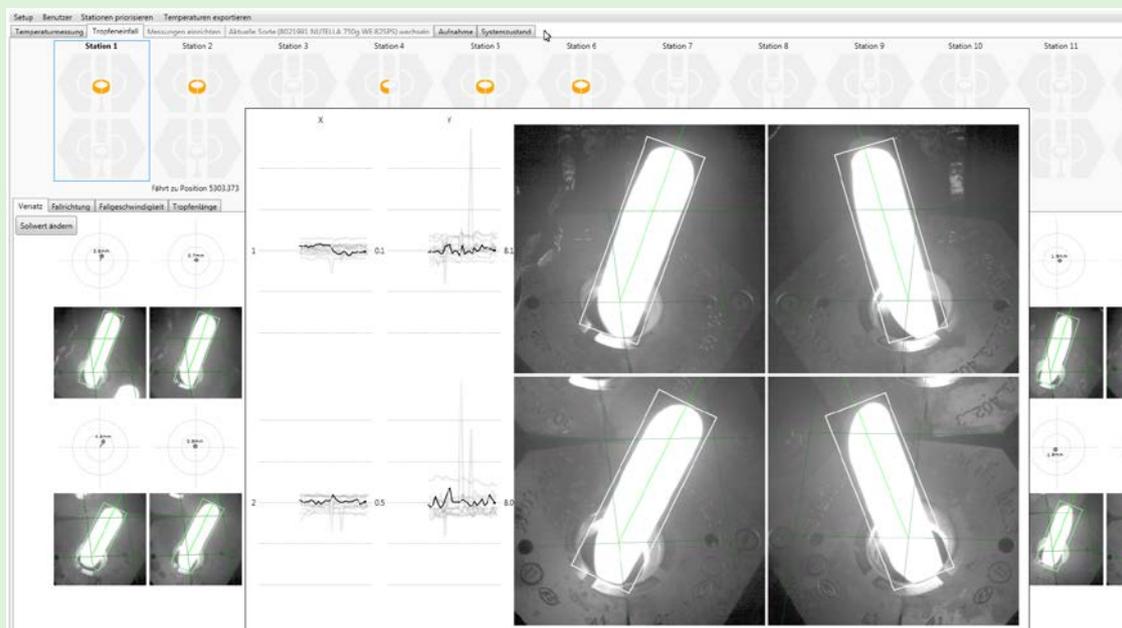
- Available fully integrated with Swabbing-Robot

The system informs you about:

- the gob position
- the gob length
- the gob angle when it falls into the mold
- the gob offset when it falls into the mold off-center
- the fall velocity until the gob falls into the mold
- gob width and rotation
- time offset between gobs
- period until mold closes

## Gob Loading Observation: Sample statistic

The gob statistic informs you about gob measurement values.





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