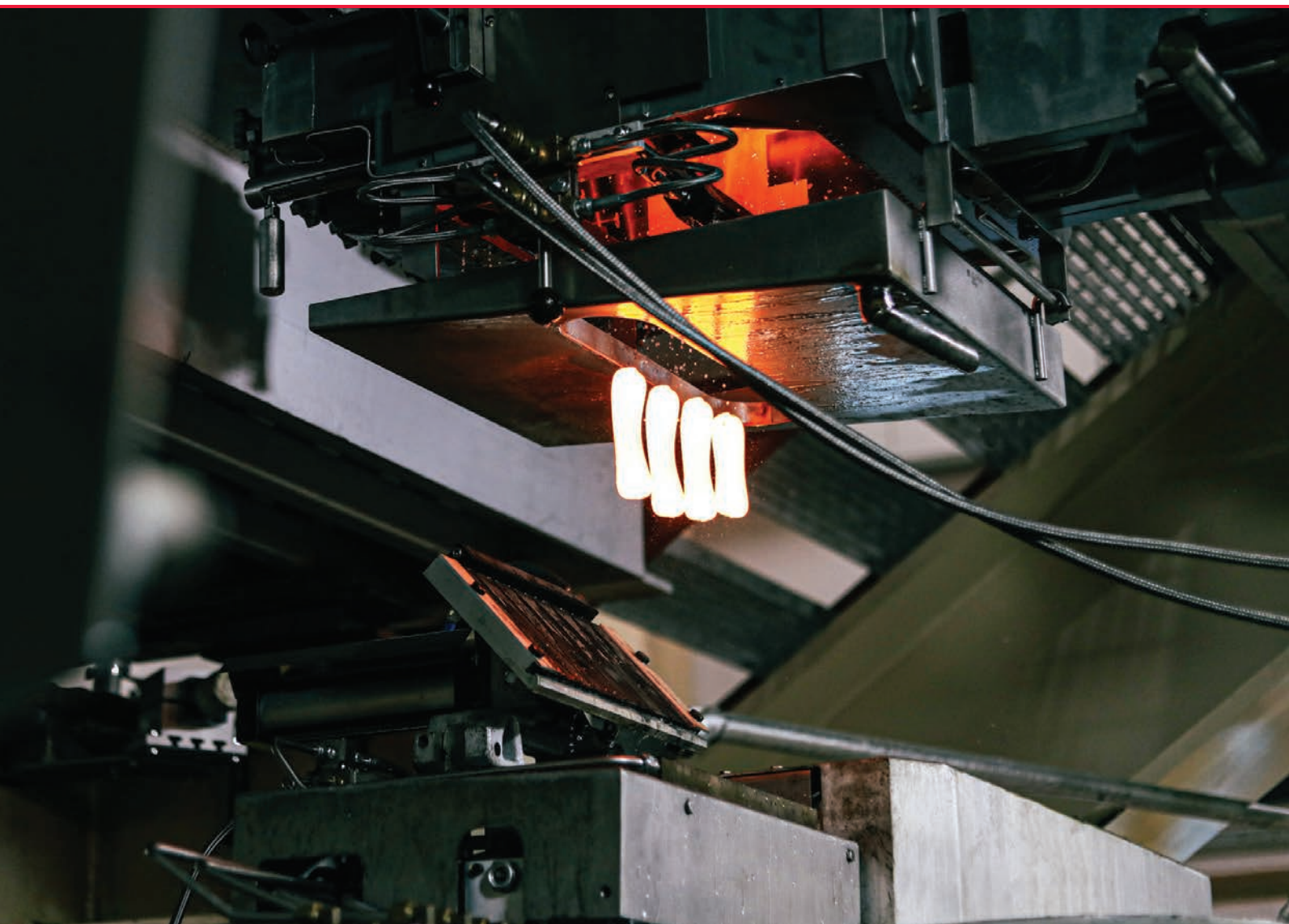


BUCHER
emhart glass

SMARTFEEDER

FULL GOB CONTROL



Create and maintain your desired gob automatically

The SMARTFEEDER is the latest development to automatically adjust the gob forming process to your needs, consisting of:

- GobRadar as a measurement system
- Advanced gob forming hardware -
575 Dual Drive Shear and Multi-Drive Feeder
- Gob Control Closed Loop

Prerequisite: FlexIS 3 machine control -
upgrade paths available

Gob Control Closed Loop

SMARTFEEDER improves process stability, enables easier start-up after job change and facilitates multi-article production.

SMARTFEEDER allows you to define parameters for your desired gob design. The Gob Control Closed Loop then adjusts any deviations per cavity and for multi-article production.



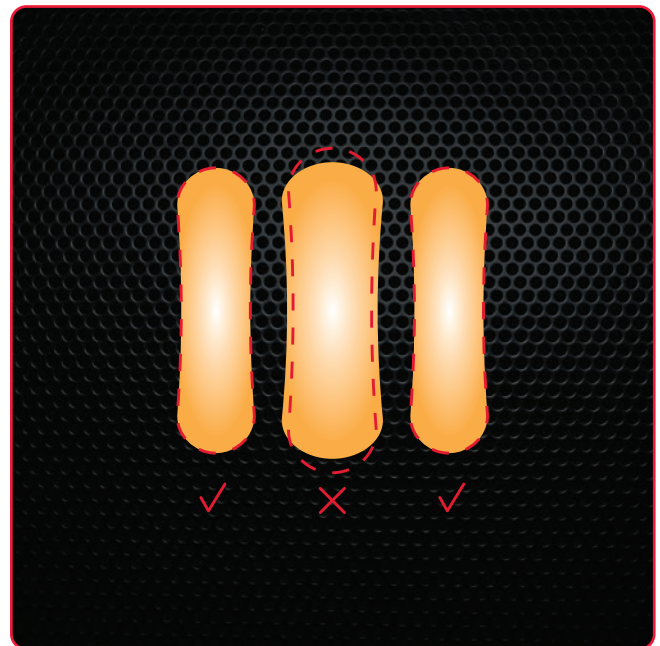
Gob Weight



Gob Length



Gob Tilt



Gob Shape

Benefits of the SMARTFEEDER

Improving efficiency and speed

Reduced job change time.

Improved start-up after a job change.

Gob parameters from the previous jobs can be stored and are achieved automatically even under different conditions.

Overcoming the knowledge gap

Less reliance on experienced operators to adjust the gob forming process. Automatic adjustments are independent of operator experience and result in a more consistent forming process.

Greater control from the start

Gob weight and length are automatically adjusted for each section individually.

Easy gob forming for single and multi-article production.

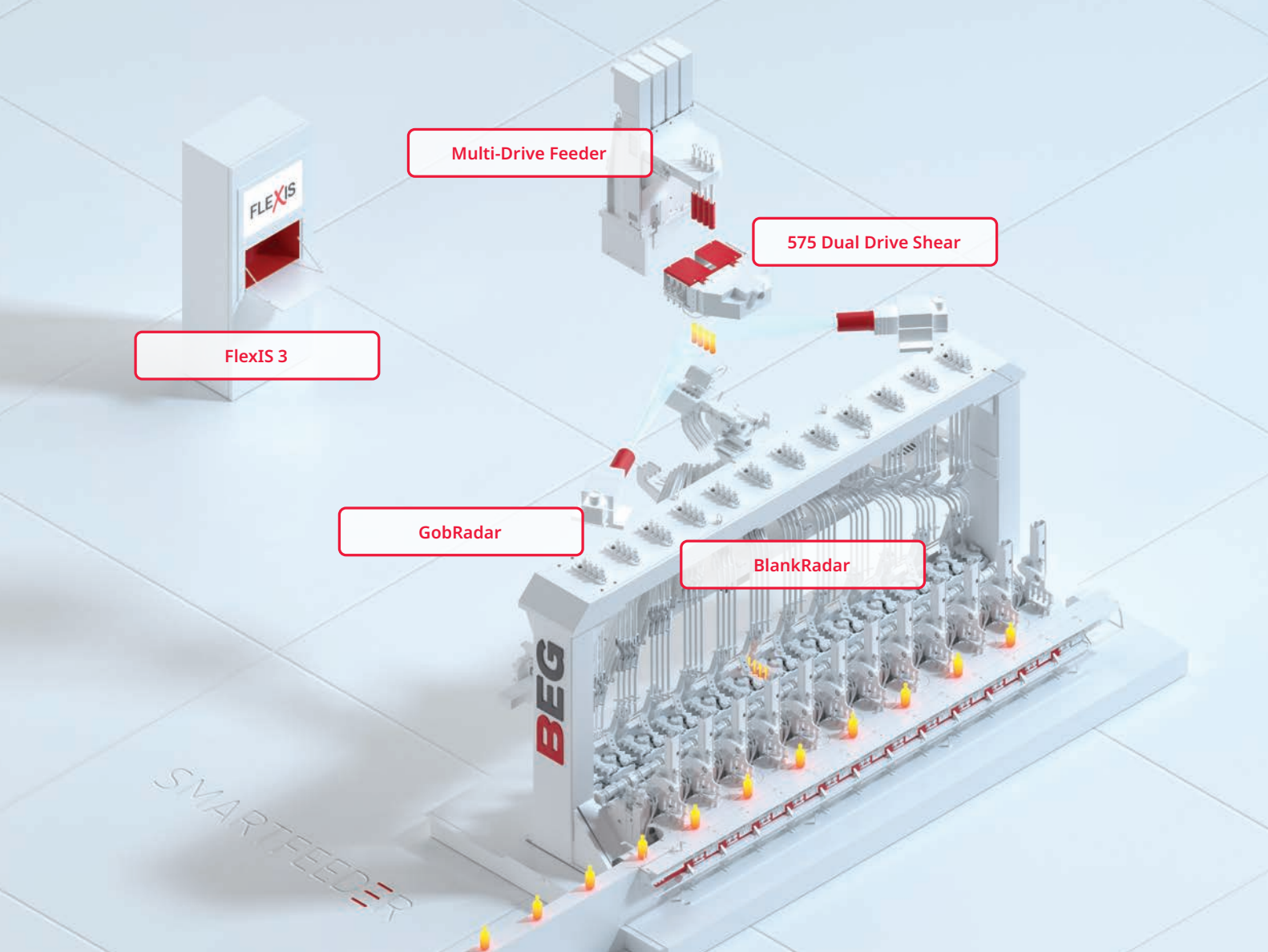
Greater consistency across jobs

Gobs are perfectly replicated even under varying conditions.

There is no need to change the calibration between jobs unless specific conditions within the feeder have fundamentally been changed.





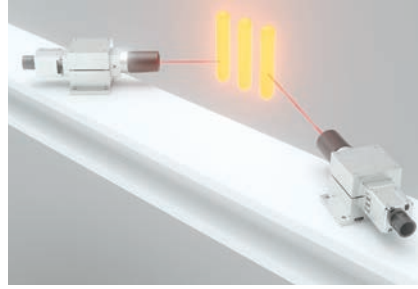


SMART equipment
for SMART feeding



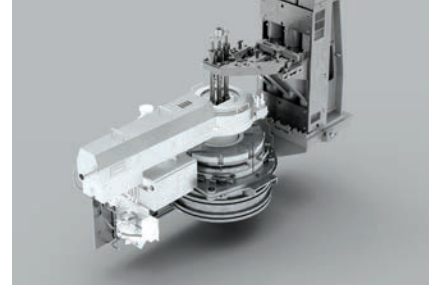
FlexIS 3 and Gob Control Closed Loop

Operators set desired gob parameters on the versatile, powerful and user-friendly touch screen, before the Gob Control Closed Loop monitors and adjusts the process based on data gathered by the GobRadar and BlankRadar.



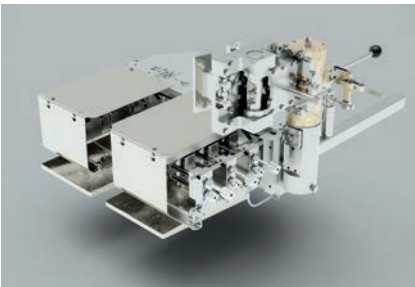
GobRadar

The GobRadar is a camera-based observation system (sensor) providing a number of measurements for each and every single gob. Two separate high-speed matrix cameras in cooled housings are installed on the feeder platform to monitor the gobs just after the cut. The images from two angles are used to create a 3D-model of each gob. The real time data acquired includes Gob Weight, Length, Diameter, Angle, Position, Trajectory, Shape, Freak Detection and Temperature. This information is then fed back to the Gob Control Closed Loop to ensure the desired gob parameters are being met.



Multi-Drive Feeder

Multi-Drive feeders allows for individual control of the feeder needles. This is the basis that the Gob Control Closed Loop is able to adjust each gob individually per cavity. The Multi-Drive Feeder helps in compensating for glass inhomogeneity in the spout. The servo drives are directly driven by PPC or Gob Control, and are flexible towards cavity conversions.



575 Dual Drive Shear

The 575 Dual Drive Shear is designed for high-speed cutting (up to 220 cuts per minute) and improves gob trajectory, reducing gob tilting and gob shape deformation. It also allows for multi-article application. Working alongside the Multi-Drive Feeder, operators can set parameters on the Gob Control Closed Loop and the shear will automatically adjust to reach the desired gob design.



BlankRadar

The BlankRadar is a gob loading and temperature measurement system installed on the blank panel of the forming machine. The BlankRadar stops in front of each section to measure the temperature and gob loading measurements. This information is then fed back to the Gob Control Closed Loop and used to ensure the desired parameters are being met.

www.bucheremhartglass.com

Emhart Glass SA

Hinterbergstrasse 22

CH-6312 Steinhausen

Tel. +41 41 749 42 00

Fax +41 41 749 42 71

webmaster@bucheremhartglass.com

www.bucheremhartglass.com