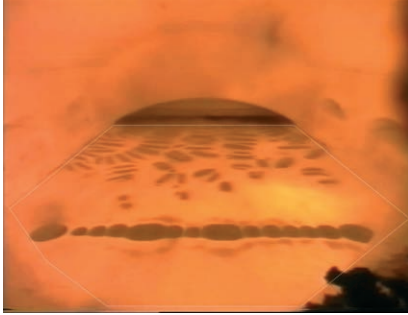
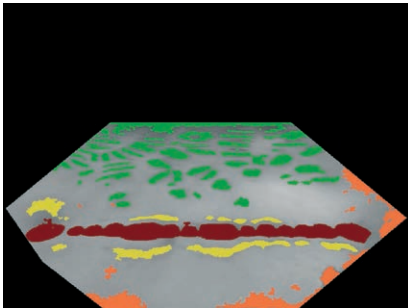


OMC – Software picture processing of furnace camera pictures



Original image furnace camera



Objects recognized by OMC:
green - batch
red - bubblings
yellow - colder glass
orange - image error from camera

With Optical Melting Control software STG has created a tool with the ability for energy saving and quality control. Image processing and statistical analysis provides a wide range of information to use in the process control system as additional process variables.

Features

- Continuous input from the furnace camera and subsequent analyzing the pictures
- Recognition and classification of the objects:
 - Batch
 - Foam
 - Bubbling
 - Image errors
 - Additional classes
- Usable with all typical type of furnaces
- Determination of several process variables:
 - Batch coverage
 - Batch density
 - Melting gradient
 - Max. expansion of batch coverage
 - Standard deviation and coefficient of variation of batch size
 - Size of whole batch surface
 - Identifying, if surface of the batch covered area is below/ above average
 - Spread area
- Quantified observation of the melting process
- Transmit the processed data to process control system
- Creating long-term data archives for processed data
- Internationalized interface

Scope of supply

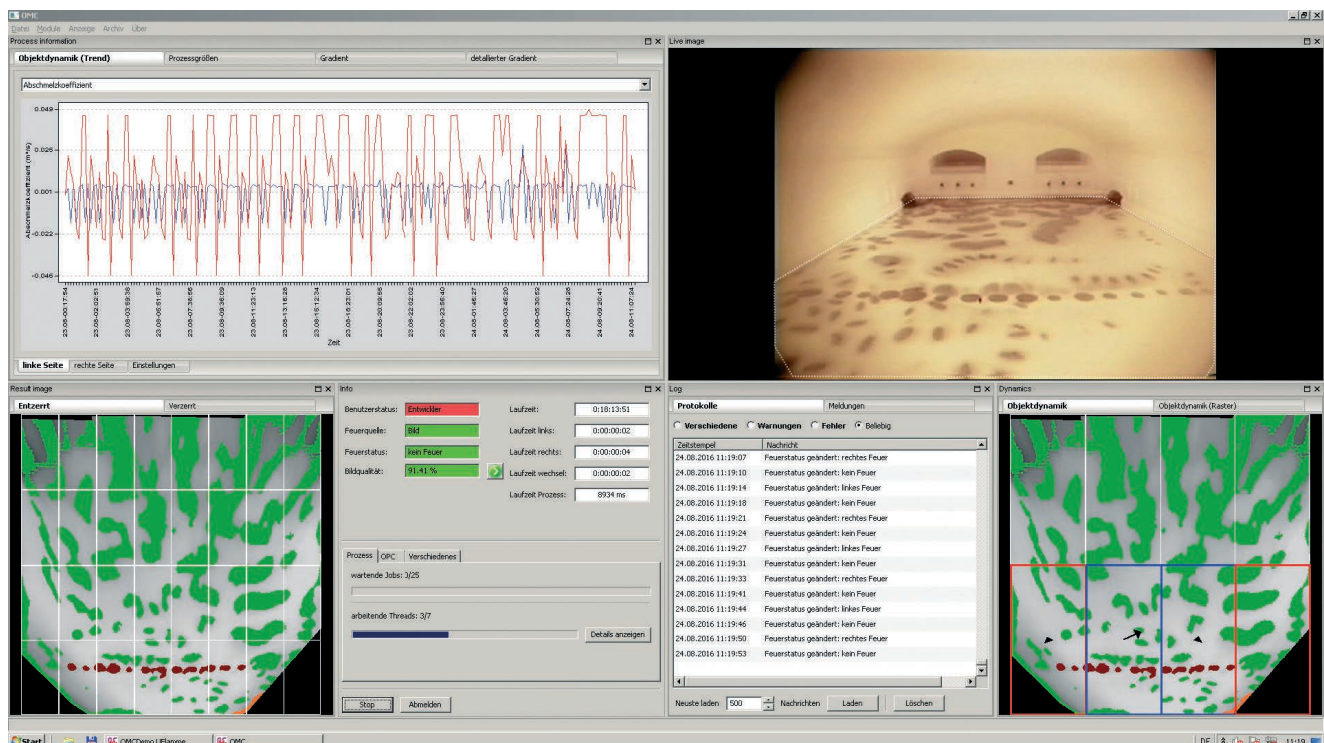
- Providing and installation of Software
- Implementation into existing Furnace Control
- Individual control strategy (STG Energy Control, STG Lambda Control)
Patent WO2012/038482 A1- Temperature- and Symmetry Control
- Regular system maintenance

System-Voraussetzungen

- PC with Windows 7 or higher
- Framegrabber, connected with furnace camera
- Implementation into existing Process Control System via OPC to existing PLC

User Interface

- Adaptive interface with dynamic views
- Modular structure allows dynamic configuration of the processing steps and system extension
- Process logging
- Management of the long-term archives (Monitoring/Filtering/Delete)
- System settings customizable with a configuration manager



Main operation window OMC