



Oxygen Measuring Instruments

Systeme zur Messung und Regelung von Sauerstoff

METROTEC

Online measuring technique and control engineering for gas carburizing

Constant protective furnace gases for defined surface and case hardness of your components

www.metrotec.eu

Inline O₂ sensors, type CLX, to record the C level

CLX

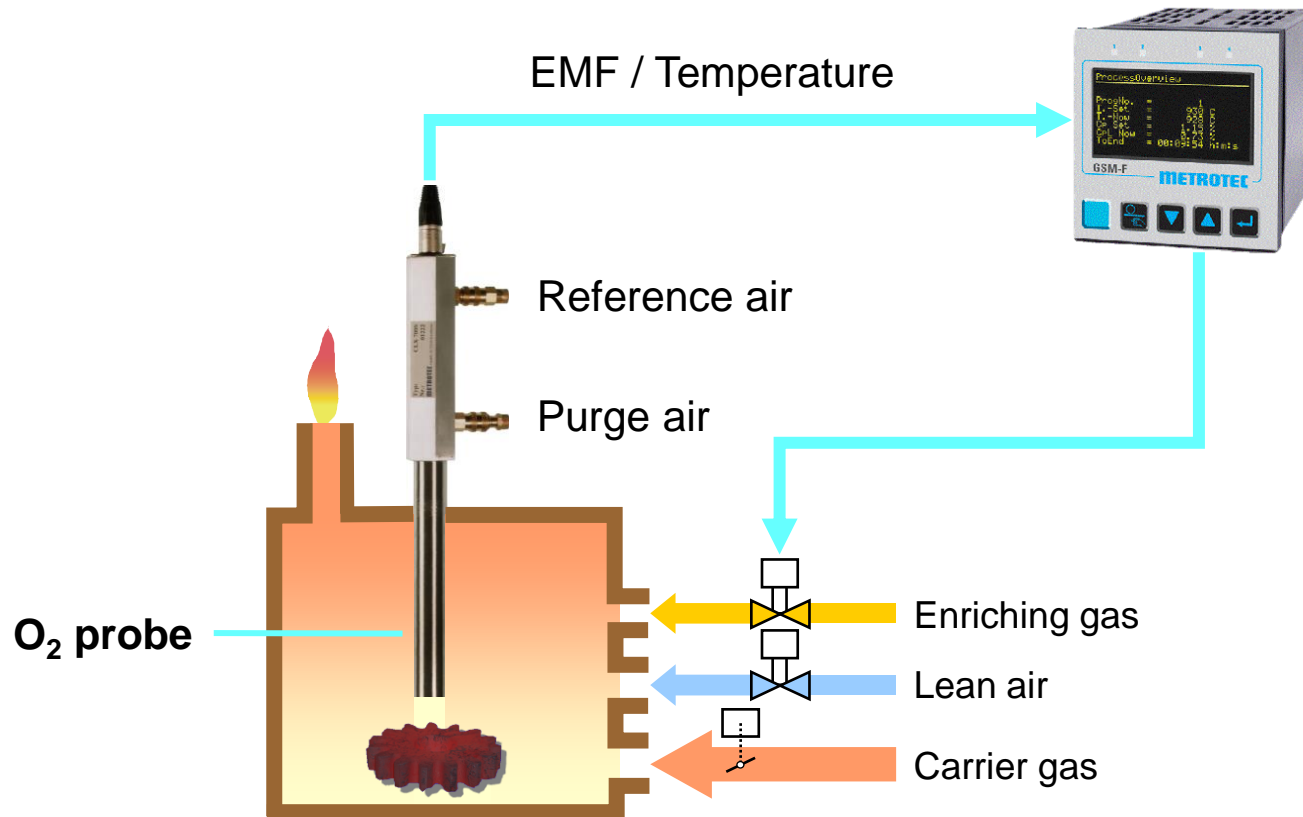
Low-cost inline oxygen sensor to
record C_p



Features

- Precise and reproducible measurement readings
- High temperature sensor element made of zirconium dioxide
- Sensor element consisting of a single piece for the total fitting length
- Industrial design
- Assurance of product quality
- Short response time, maintenance-free
- Absolute gasproofness regarding reference side
- Ready for installation
- Easy assembly

Case scheme



Installation into the furnace – Installation steps 1/5



Open screw-in thread

Installation into the furnace – Installation steps 2/5



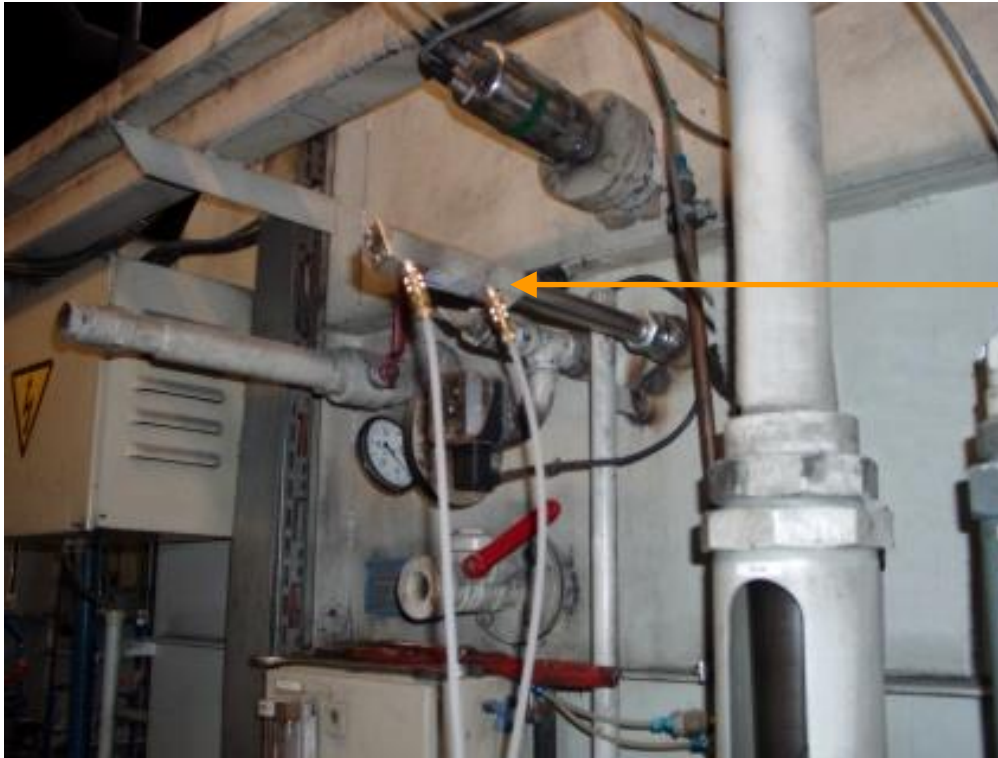
Insertion of the sensor

Installation into the furnace – Installation steps 3/5



Connection of the
reference air

Installation into the furnace – Installation steps 4/5



Connection of
purge air

Installation into the furnace – Installation steps 5/5



Connection of
the signal line

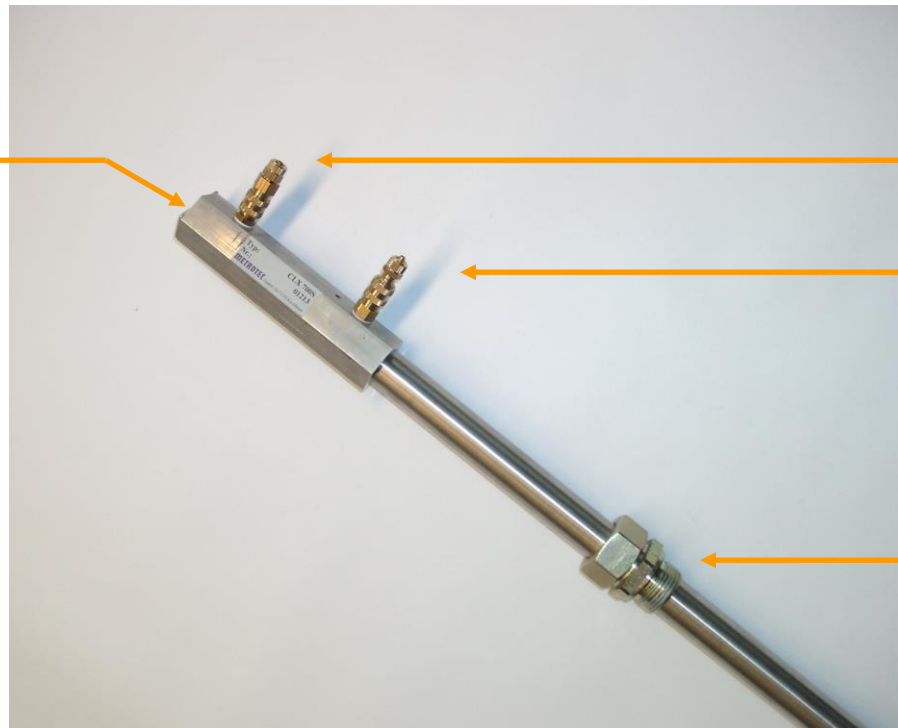
Basic construction

Connecting
plug

Reference air

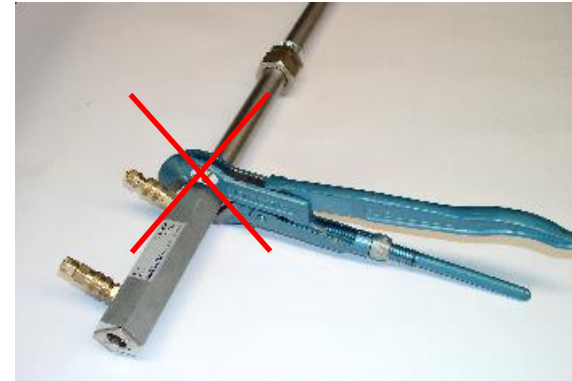
Purge air

Screwing

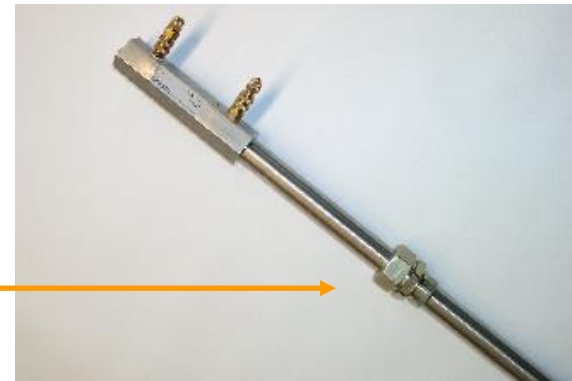


Installation instructions

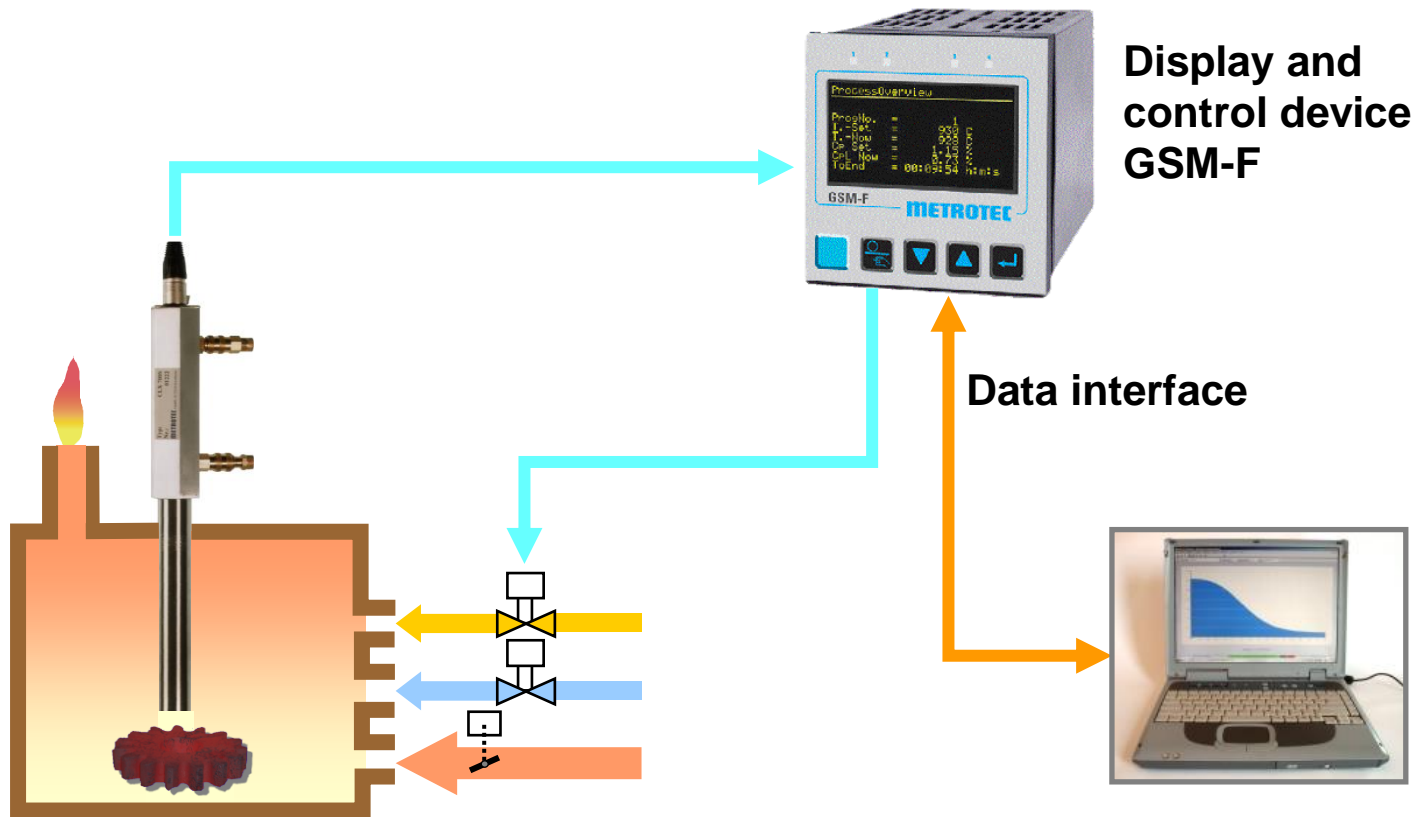
The initial installation takes place into the cold furnace in order to guarantee a precise location of the probe.



Adjustment of the fitting length by means of clamping ring connection (1 inch G)



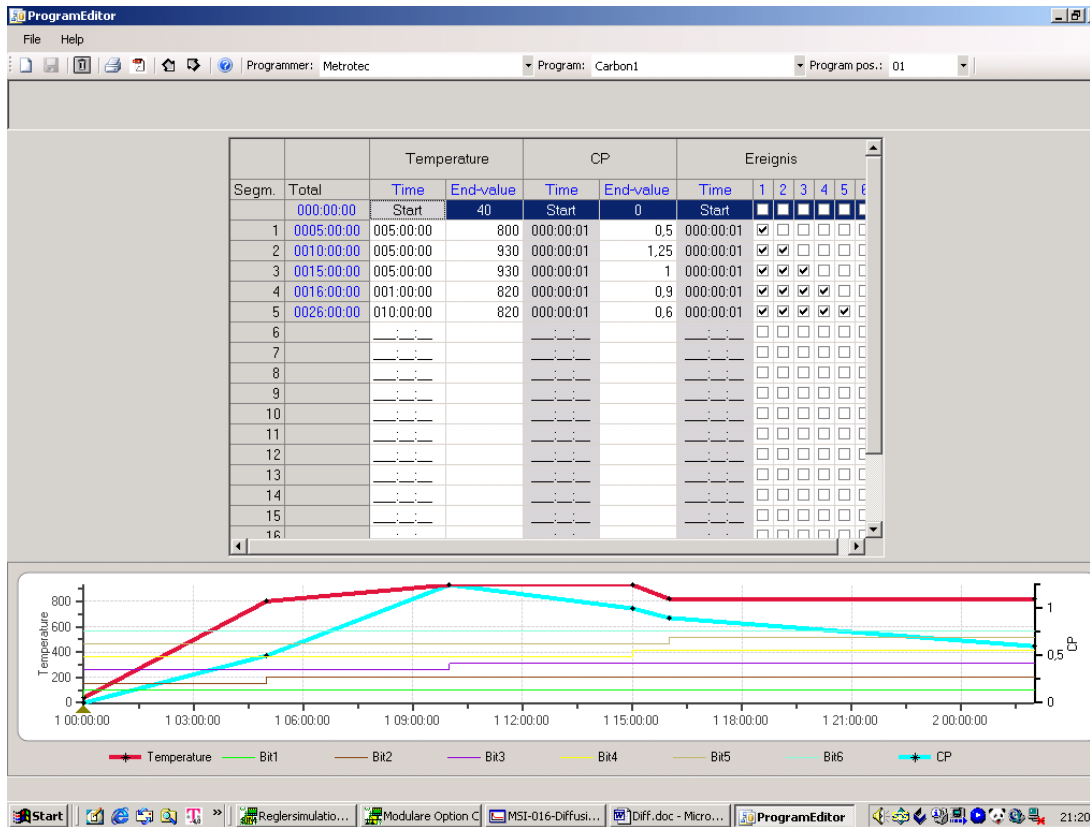
Process monitoring by control management system



Display and control device
GSM-F

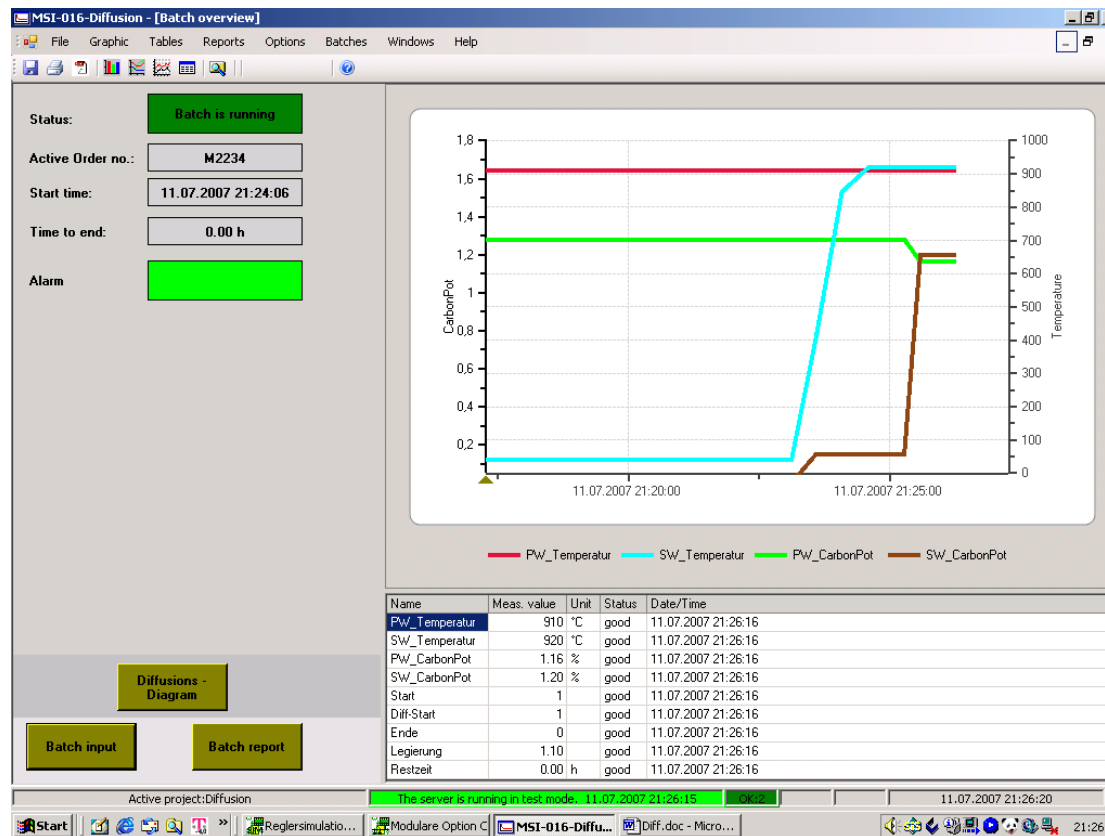
Data interface

Recipe preparation



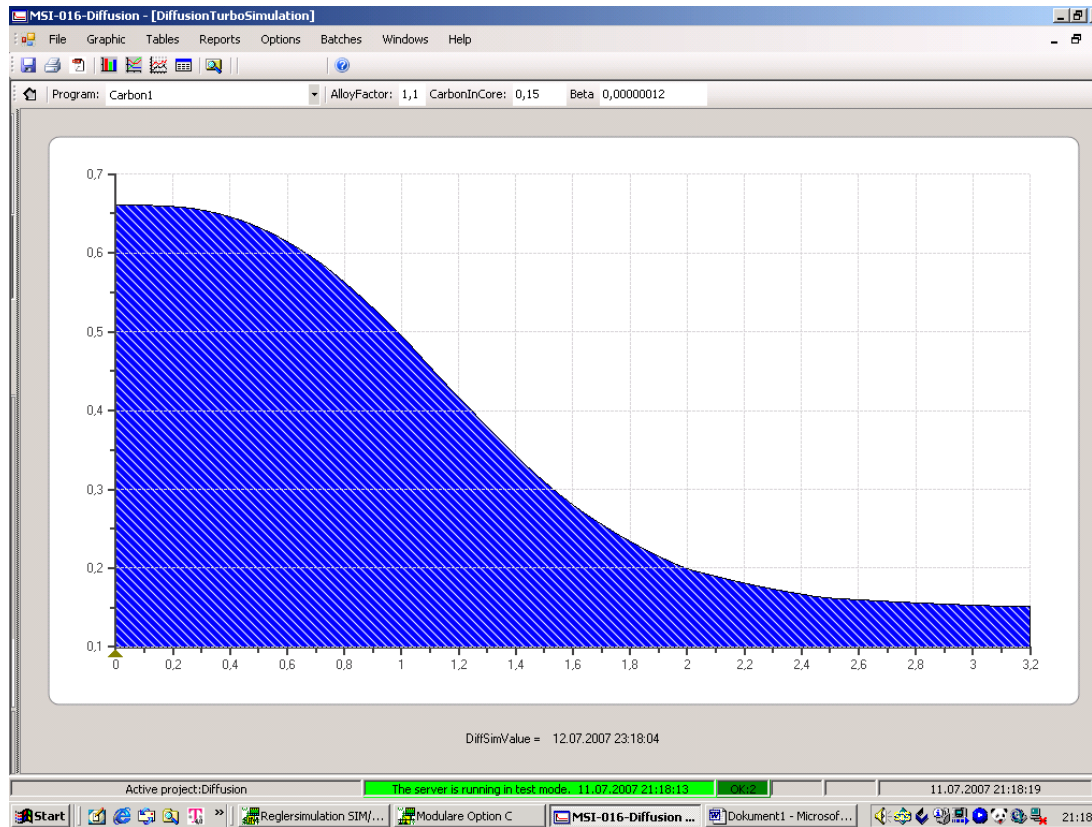
Fast preparation of recipes

Process monitoring



On-going monitoring of the course of the process

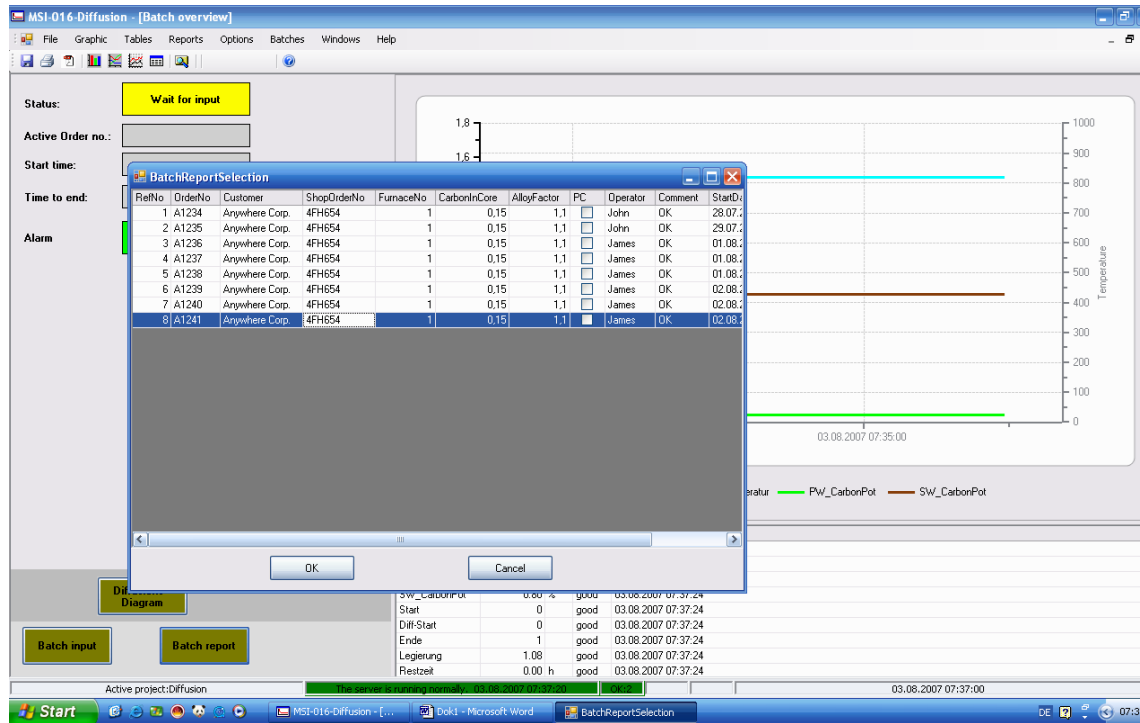
Diffusion calculation



Online diffusion calculation

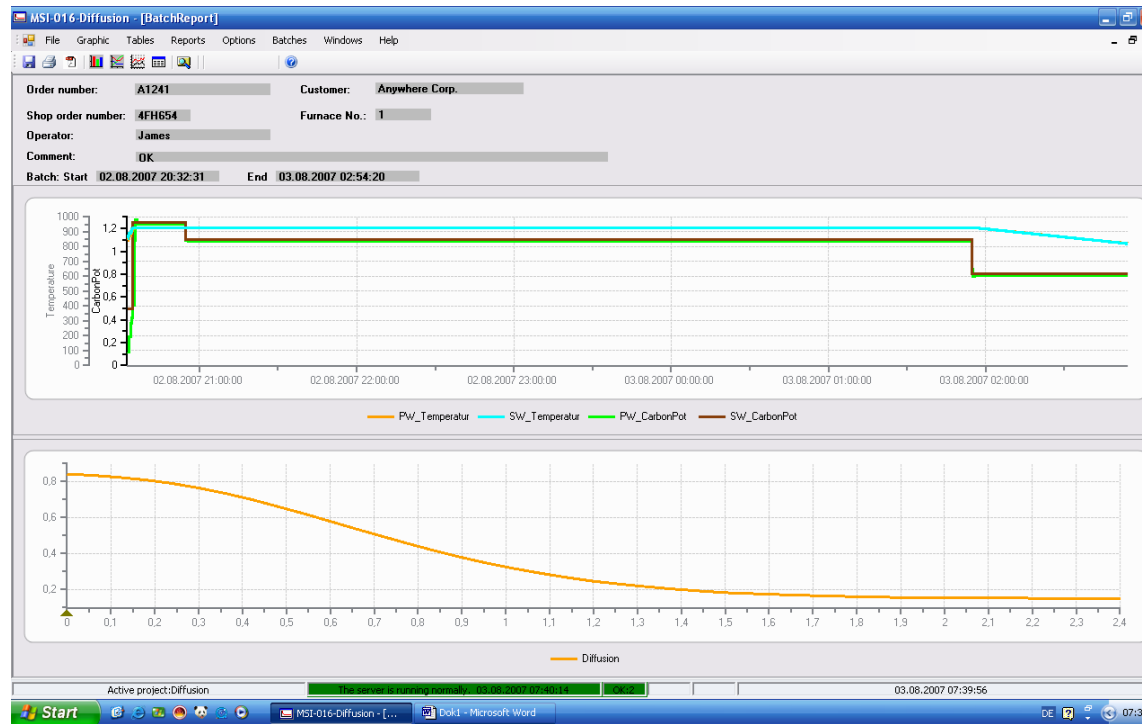
Carbon distribution in material

Storage



Storage of the process parameters in the data base

Batch record



Convenient
batch recording

Graphic diagram of the
historical course of the
process