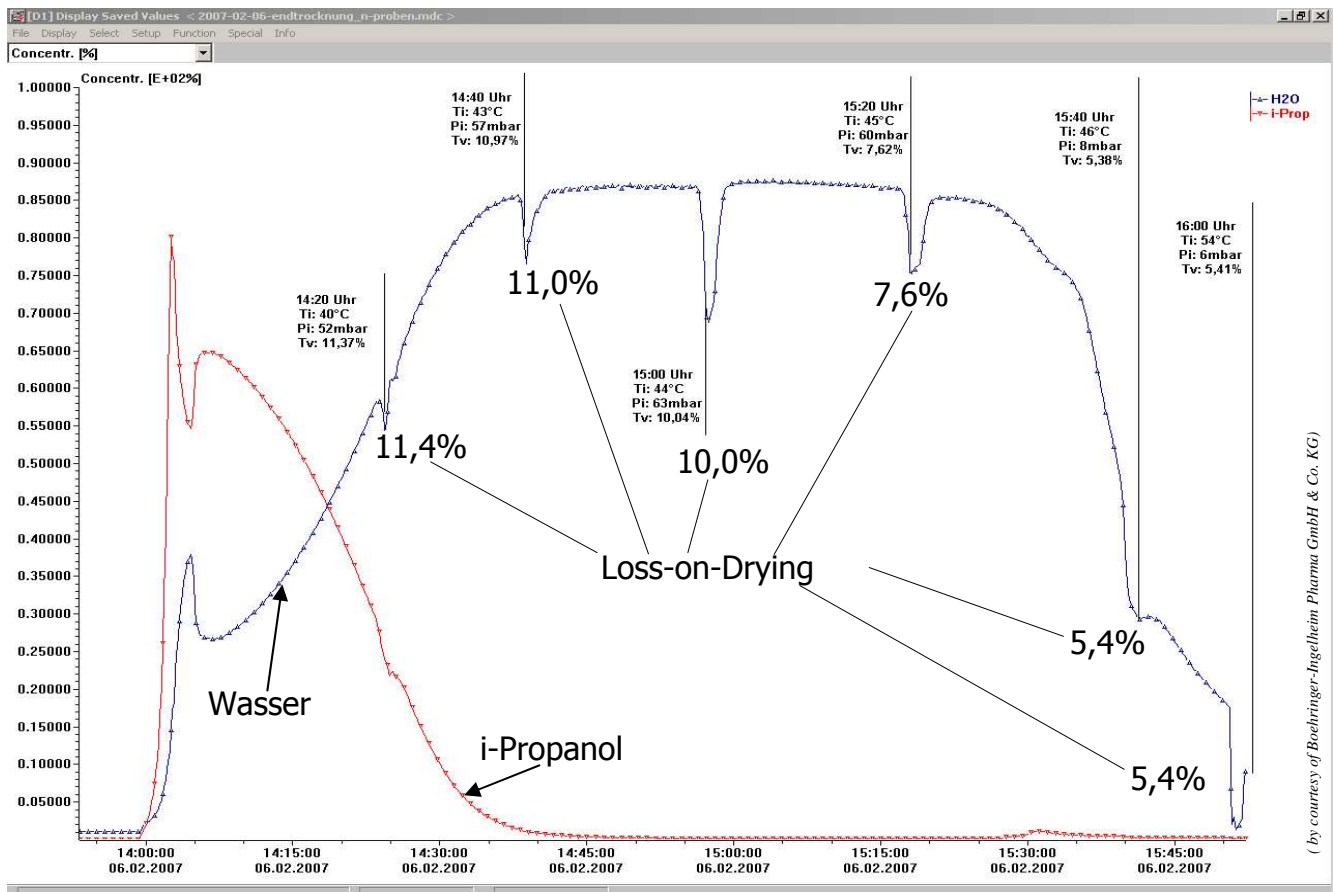


Online Process Mass Spectrometer for Drying Processes

manufactured by InProcess Instruments

- Continuous process tracking with multi component analysis
- No interruption of the drying process because of sampling
- Optimisation of drying / automatic end point detection
- Multi-port gas inlet for monitoring several dryers
- Suitable for various pressure ranges

- You can see what is evaporating!
 - You can see how much is evaporating!
 - Reduction of drying time!
 - Optimisation of product quality!
- You can detect malfunctions!



Online MS results (red and blue curves) of a vacuum drying process in a blade dryer compared to „classical“ sampling with off-line determination of the Loss-On-Drying (individual numeric values)

Online Process Mass Spectrometer

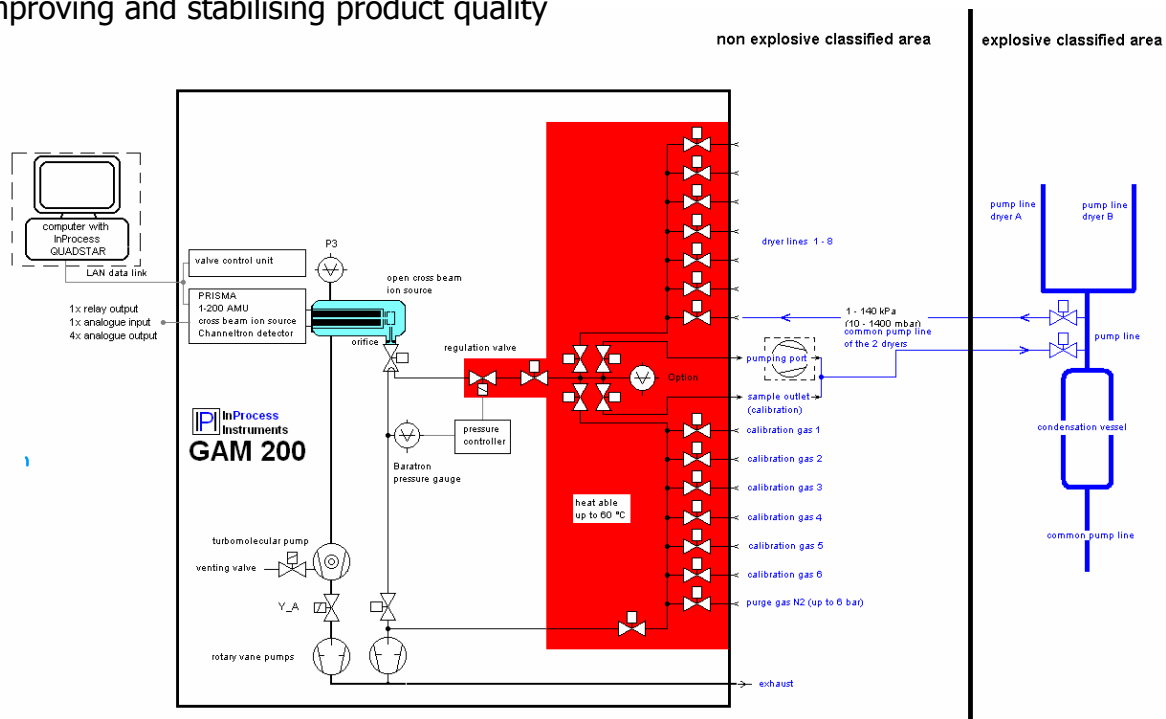
manufactured by InProcess Instruments

- Multi-component analysis based on quadrupole mass spectrometers
- Complete systems suitable for industrial applications
- Fully automatic operation
- Low operation and maintenance costs
- Also available as ATEX certified version

Fields of application:

- **Dryers/Vacuum dryers**
- **Bioreactors**
- **Reactor outlet air**
- **Protective gas monitoring**
- **End point detection**

Process optimisation and control allows for
 → saving energy and time
 → increasing plant utilisation and safety
 → improving and stabilising product quality



Conceptual and vacuum drawing of GAM200 (example)



Front



Interior



Back

subject to change without notice