

MONDI SCP REFERENCE

ECM SYSTEMS

 **ECM Systems**



BRANCHES OF REFERENCES

- **AMS** – Emission monitoring
- **Technology measurement** in combustion processes – **gas analyses**
- **Gas detection** and warning system
- **Technology measurement of liquids** in recovery line and caustification
- **Water analysis**
- Flame scanners
- Immision monitoring



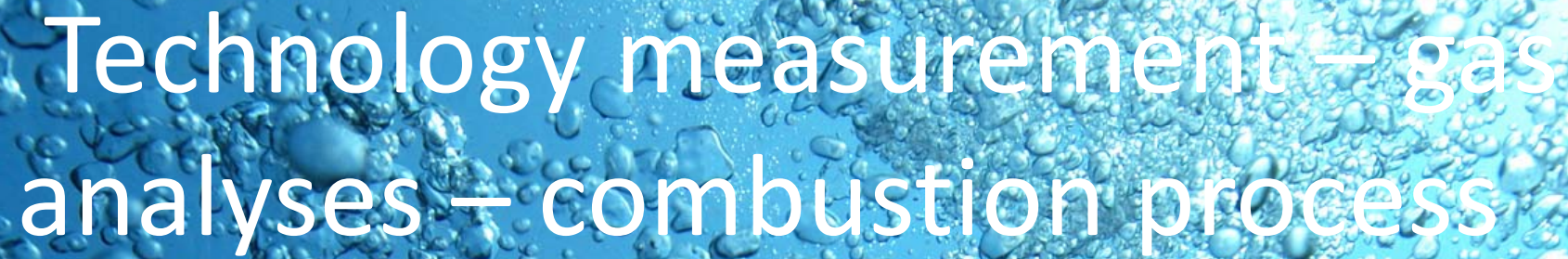
Moc a sila nočného priemyslu

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AMS - Emission monitoring

- **6x CEMS**
 - Recovery boiler 1
 - Recovery boiler 2
 - lime kiln
 - bark boiler
 - Energetic department steam boiler 1
 - Energetic department steam boiler 2
- Position: outlet duct system
- Measured parameters – CO, NO_x, SO₂, TRS, CO₂, O₂, C_xH_y, dust, p, t, flow



Technology measurement – gas analyses – combustion process

- 4 x automatized process systems
 - Recovery boiler 1
 - Recovery boiler 2
 - Lime kiln
 - Bark boiler
- Position. In boiler
- Measured parameters: O₂, CO, CO₂, t

Gas detection and warning systems

- Several independent systems:
 - recovery department
 - fiber line
 - water management
 - WWTP
 - fire department with warning and signalization devices
- Detected gases: CH₄, O₃, ClO₃, H₂S, NH₃
- Laboratory analyzers – sampling system for GC according to EPA18 (Sulphuric compounds)



Technology measurement of liqueurs

- 9x black, white, green liqueur.
- Safety measurement in divert mode on inlet to recovery boiler
- Position: Evaporation stage, RB1, RB2, caustification



Water analyses

- 22 x Water sampling systems
- including 3 samplers for high pressure liquids
- Position directly on pipe or near source



Water analyses

- 6x COD of waste waters
- Optical spectroscopy with flow through cells



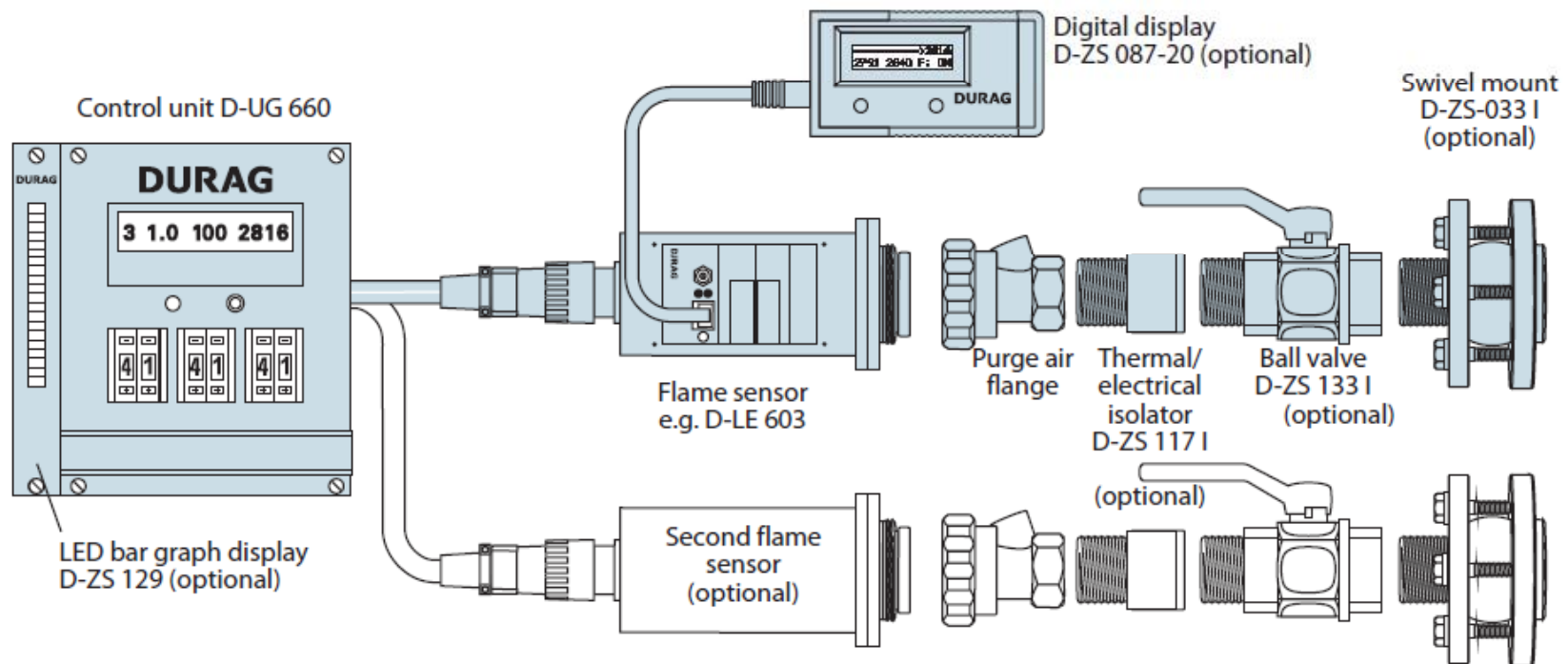
Water analyses

- Continual measurement
- pH, conductivity, t, Na+



Flame scanners

- Flame monitors
- Measurement of air flow blowing into boilers





Immision monitoring

- Monitoring containers for gas + meteorological probes
- Measured enviromental parameters: TRS, dust PM10 PM2.5, NO_x, SO₂, H₂S
- Mobile and stationary variants

THANK YOU FOR YOUR ATTENTION



ECM Systems