

# **Eurosilo Fuel Management System (FMS)**



Visualisation FMS

The FMS supports power plant operators with a supply planning and coal silo visualisation. The IT solution for coal silos which store several grades of coal. It is fully integrated with the silo Operator Control and Monitoring System technology.

The FMS functionality includes:

- Supply planning and scheduling
- Quality data capture
- Silo visualisation (qualitative/quantitative)
- Silo automation equipment programming
- Balances / forecasts / reports

To prepare the right blends at the right time, the FMS can be of great help. By visualising the different grades of coal in multiple silos, it enables the operators to plan the coal blending in the optimal way. By reclaiming the respective coal grades from each silo in a controlled and adjustable rate, the optimal coal blend can be prepared.

## **Eurosilo Air Monitoring System**

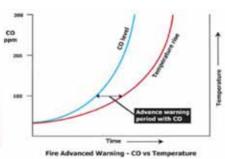


**Gas Detection Sensors** 

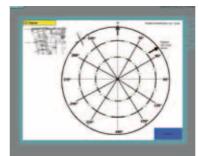
The air monitoring system ensures the necessary measuring of carbon monoxide, methane and oxygen for stored coal as stipulated in codes and rules, e.g. International Maritime Solid Bulk Cargoes Code [IMSBC Code] as well as other Fire Protection Agencies.

# Fire Advanced Warning: CO vs. Temperature

Measuring carbon monoxide is strongly preferred as detection method for oxidation (self-heating) in coal storage systems due to its advanced warning period over temperature.



### **Eurosilo CO-Monitoring System**



Visualisation CO-Monitoring

The carbon monoxide monitoring ensures an accurate system to pinpoint the changes in the measured carbon monoxide concentrations on the coal surface. Due to the

slewing movement of the Eurosilo Mechanism the coal surface is scanned regulary and a hot spot is detected in an early stage.

### **Preventing Air Inflow**



Slide Valve

By installing a slide valve, practically closing the reclaim opening of the silo, the air penetration is minimised.

#### **Eurosilo N<sub>2</sub>-Purging System**



The  $N_2$ -purging system embodies one of the safety systems, making it possible to purge the whole or just a section of the silo, thus enabling longer trouble-free storage periods for coal.

### **Eurosilo Foam/Gel System**

By using the skid mounted Foam/Gel system (filled with e.g. FireSorb®) it is now possible to only locally bring in foam or gel, focussing on the hot-spot location in the coal, enabling a dedicated and safe coal handling and storage.





Wear resistant flights Augers



Site Assembly, Erection & Supervision



Fully Cladded Hoppers with TIVAR® BlueLine



Tubular Structure to minimize dust settlement



Automatic Grease System



Gel-(Foam) Mixing Station



Silo Safety Access Indicator



Fully Automated Air Monitoring System



Advanced Control by Touchscreen



**POWER** 



**PLANT** 



LÜNEN

# **ESI** Eurosilo® BV

ULTIMATE STORAGE SOLUTIONS FOR BULK SOLIDS



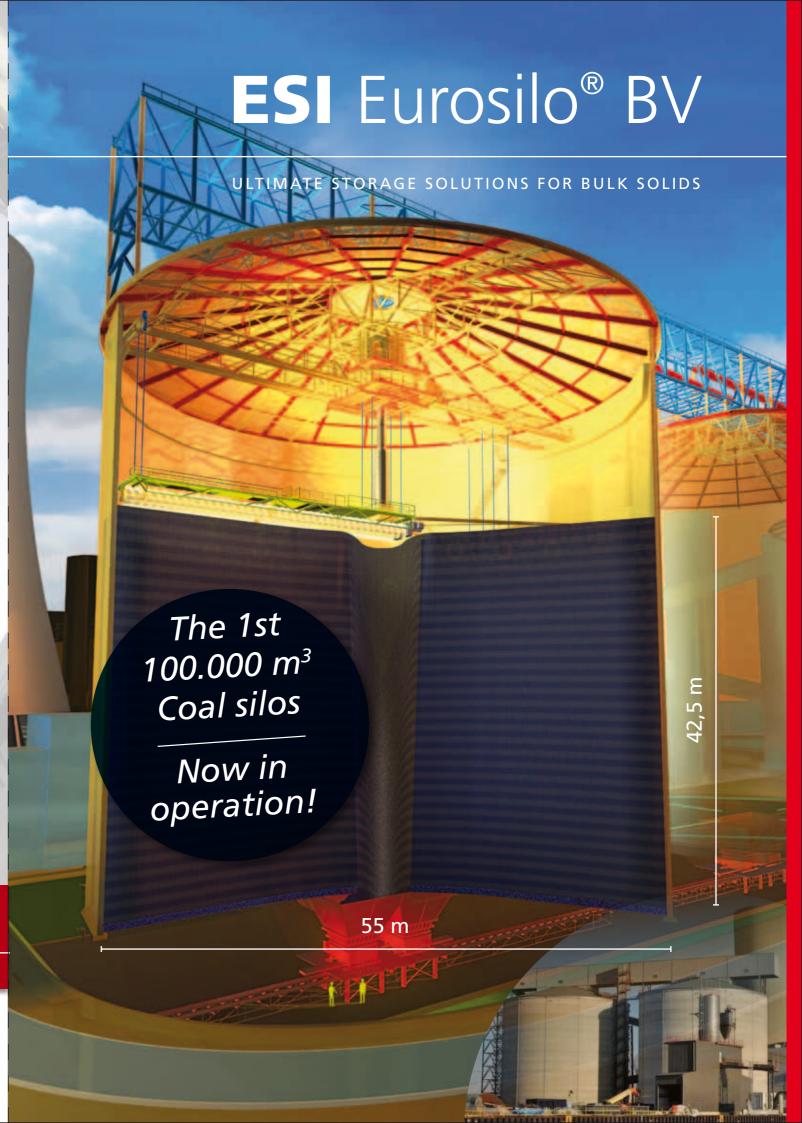


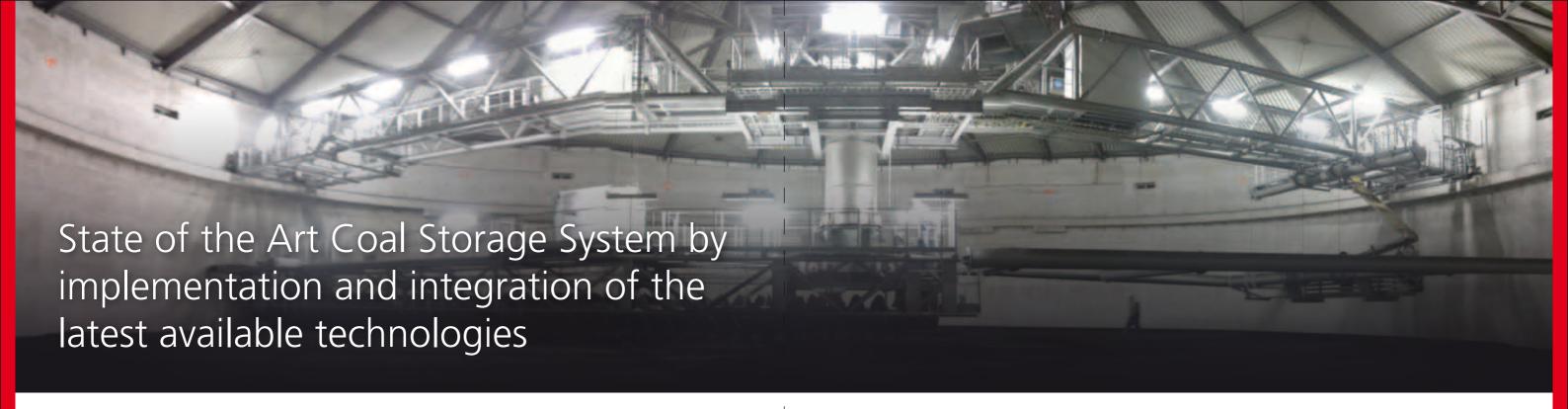
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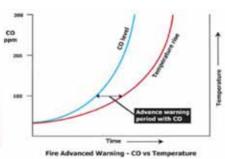


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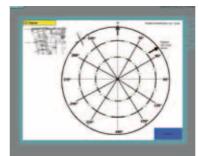
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