

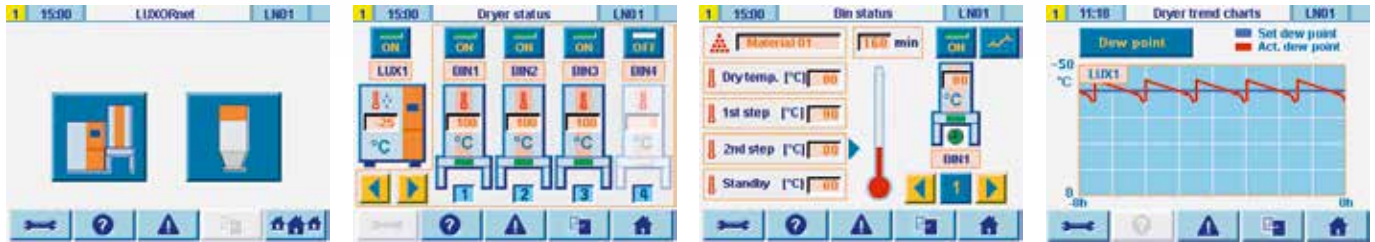
Ethernet-based integrated control systems

CONTROLnet

 think materials management



LUXORnet



Advanced control technology for the LUXOR A dryer range

LUXORnet features:

- Controls one dryer, up to 16 drying bins and a maximum of 40 material loaders
- Micro-controller with CoDeSys technology and CAN-Bus technology or PLC with Siemens S7 technology
- Intuitive operation with local colour graphic touch-screen or with remote WEBpanel
- DryingOrganizer material throughput monitoring and protection system
- ETA plus® – airflow control for need-based dry air quantity.
- Recipe management
- Fully programmable weekly timer
- Trend graphics and reports for documentation of the process
- Maintenance and diagnostic tools, such as operating hours counter and service interval counter, and messages
- Optional: dew-point controlled regeneration; closed loop controlled aftercooler
- Totally integrated in the CONTROLnet system via Ethernet port



LUXORnet can control up to 16 drying bins and incorporates a wide choice of modular conveying control packages. The integrated convey control includes all hopper loaders on the bins plus up to 24 material loaders on the machines and two blower stations plus one standby station. Other standard features include: line purging with material pre-selection, dry air conveying and emergency coupling between two conveying lines.

Ease and efficiency of operation is combined with highly economical plant utilisation.

METROnet



The ultimate system tool kit for complex plant conveying systems

METROnet A features:

- Conveying control supporting all aspects of material logistics:
 - up to 99 material loaders with 1 or 2 inlets
 - integration of proportioning valves and suction boxes with line purging and dry-air conveying
 - material selection from simple manual coupling stations to fully automatic METROLINK units
 - sharing of coupling stations between multiple conveying lines
 - up to 8 numbers of conveying lines (blower stations)
 - standby blowers with fully automatic switchover valves
 - supervision and control of silos and material storage bins
- Micro-controller with CoDeSys and CAN-Bus technology or Siemens S7 technology
- Operation by WEBpanel
- Tailored to precise customer requirements

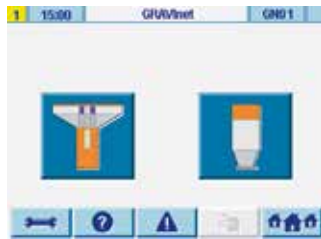
METROnet S features:

- Controls both 1 or 2 inlet material loaders (max. 24 single inlet)
- Up to four suction boxes with line purging
- Two blower stations
- Embedded microcontroller for operation and control with on-board network port

METROnet A and METROnet S are totally integrated in the CONTROLnet platform and can be linked to other controls via Ethernet connection.



GRAVInet



A new generation of controls for GRAVICOLOR mixing and dosing units

GRAVInet features:

- Intuitive operation by local colour graphic touch-screen or WEBpanel
- Embedded micro-controller for operation and control with on-board network port
- Full process control through IntelliBlend software – absolute recipe integrity by self-optimisation and automatic material calibration
- Vibration control for fast cycling injection moulding machines
- Recipe management
- Extended reporting capability at local level and to higher level plant data management systems

GRAVInet can control, manage and monitor a GRAVICOLOR unit with up to six material components. The optional integrated convey control in GRAVInet manages up to seven material loaders and one blower with filter for the conveying system. Can be used to feed the processing machine and, other equipment as well as the GRAVICOLOR.

Thus, for smaller applications, GRAVInet eliminates the need for a separate conveying control. By linking up various GRAVInet controls via Ethernet, complex system equipment can be monitored and controlled. For example, blower stations can be used simultaneously when conveying. Interprocess communication at work, optimising performance and reducing systems costs.



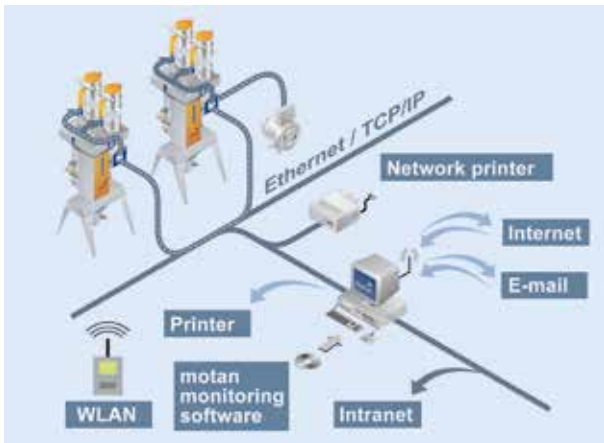
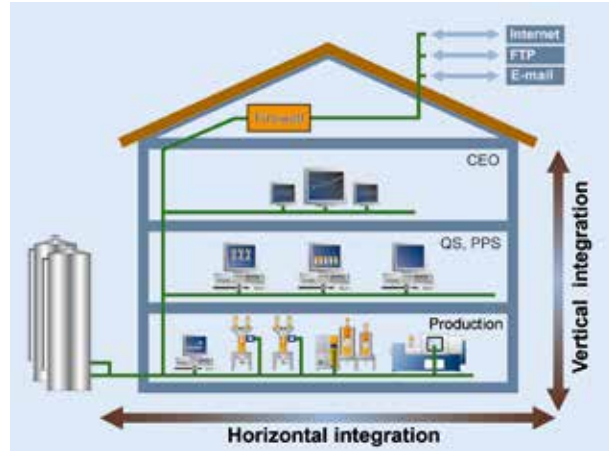
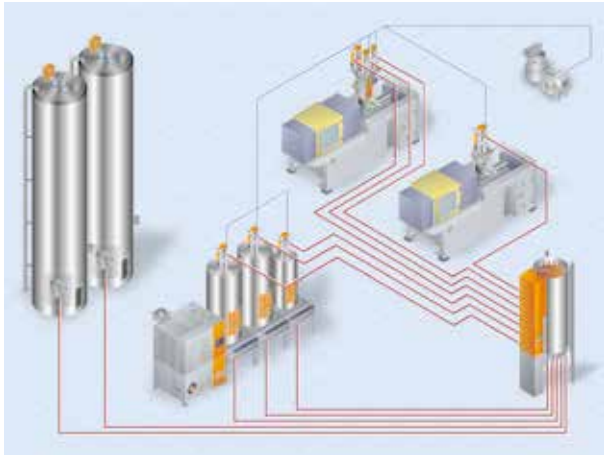
WEBpanel

Through a WEBpanel, any installed CONTROLnet control can be operated. The panels can be built into a motan unit or they can be freely located anywhere in the production facility.

WEBpanel features:

- Network-based independent operating panel
- Intuitive, touch-sensitive colour graphic display
- On-line help
- Standardised navigation structure

CONTROLnet



CONTROLnet is an integrated system of controls. Designed to operate, manage and supervise every stage of the raw materials handling process. It offers the processor a completely new level of management capability, helping to meet the ever greater demands for product quality and cost efficiency.

Plastics processors need customised controls. This is made possible by modern interprocess communication, enhanced data management and intuitive, simple operation with efficient monitoring capability.

LUXORnet, GRAVInet and METRONet controls for drying, blending, conveying and storage can be used as stand-alone controls or combined to form an integrated network. All controls can be operated through motan’s WEBpanel – a full colour easy-to-use graphic touch-screen.

Main characteristics

- Network technology using a common software platform for communication between all controls of the CONTROLnet range
- The decentralised CONTROLnet concept uses worldwide accepted standards such as Ethernet, TCP/IP, HTTP and e-mail
- Horizontal integration – ability to communicate with other units, e.g. one blower station can be shared between several GRAVICOLOR blenders
- Vertical integration – ability to link to and communicate with other Windows-based reporting and monitoring systems. Thus, data can be processed in common office softwares, such as Microsoft® Excel
- Operation and visualisation by system independent motan WEBpanels
- Optional integration to motan’s LINKnet host processing system
- Open architecture for applications using Internet-based technology – ready for future development

CONTROLnet

TECHNICAL DATA

Technical data LUXORnet and METRONet A

CPU:	“Embedded-Micro-Controller” system, power-failure-proof, with network connection Alternatively: Siemens S7 technology with network connection
I/O:	CAN-Bus-Slave module via CAN open
Network:	Ethernet port, RJ45 connector
Operation:	- With motan WEBpanel (specification see below) - With local colour graphic 5.7” display with touch screen, IP65 (front side)
Interfaces:	- Report data interface to network - Communication interfaces to motan WEBpanel and LINKnet - Interprocess communication to motan CONTROLnet controllers - Data interface to motan METROLINK (METRONet only) - Connection to silo (option - METRONet only)

Technical data GRAVINet and METRONet S

CPU:	“Embedded-Micro-Controller” system, power-failure-proof, with network connection
I/O:	CAN-Bus-Slave module via CAN/ESB
Network:	Ethernet port, RJ45 connector
Operation:	With local colour graphic 5.7” display with touch screen, QVGA, IP65 (front side)
Interfaces:	- Report data interface to network - Communication interfaces to motan WEBpanel and LINKnet - Interprocess communication to motan CONTROLnet controllers

Technical data WEBpanel 5.7

Panel:	5.7”, colour TFT, graphic display with touch screen, IP65 (front side), Microsoft® Windows operating system
Alternatively:	12” graphic display with touch screen, IP65 (front side), Microsoft® Windows operating system
Network:	Ethernet port, RJ45 connector at housing
Options:	- Integrated to front side of control cabinet - Local self-contained unit connected by direct wire (2 or 6m) - Freely located in network by external hub/switch
Interfaces:	Communication interface to motan CONTROLnet controllers

Other units on demand.

Subject to technical changes.

YOUR BENEFITS

- A new control standard for operation and management of systems
- Ethernet network access with every controller
- Freedom to choose from where the system should be controlled by networking WEBpanels
- System costs reduced by interprocess communication technology
- Flexibility and versatility; controls tailored to the individual installation
- Easy-to-use graphic controls; faster training, fewer mistakes
- Controls are integrated through a common operating platform
- Low cost expansion of modular system
- Future developments easily installed or retrofitted at low cost
- Enhanced data management and host processing
- Programmed maintenance schedules

**The CONTROLnet world –
network technology and inter-process communication for
the 21st century.**

To find your local partner, please visit our website.

