



Conveyor Control & Management System (CCMS)

Our Conveyor Control Management System uses the power and versatility of the ICMS module to provide safe conveyor operation. The CCMS System has been designed to meet the requirements of the many and varied conveyors in industry. It may begin with a simple control relay and end as a system encompassing all the features listed. Many of the CCMS features are exclusive to Bramco Group utilising one six core cable.

The Bramco Conveyor Control and Management System (CCMS):

- complies with statutory regulations and various standards
- has advanced technical features is cost effective relative to competitive systems
- has superior inbuilt safety features

This system contains individual add-on components that form the building blocks from a simple control relay to a fully integrated control and management system.

Build up Systems

System 1 - Basic Stop, Start and Sequence

A single Signal Line Control (SLC) relay and terminator with pullkey is used to provide stop, start and sequence along the length of the conveyor. Depending on core sizes, this system is capable of operational distances of at least 25km (15.5 miles) and 5Km (3 miles) in explosive atmospheres.

System 2 - Basic Monitoring and Control

By incorporating a ICMS Module instead of the SLC relay, this system provides all the monitoring and control features. (see page 2).

System 3 - Comprehensive Monitoring and Control with Backup features

By combining the SLC relay and ICMS systems together provides the user with a back-up Stop System (CCMS) as well as permitting operation of the conveyor in the event of a fault on one or other circuit.

System 4 - Communication and Pre-Start Warning

By fitting Amplifiers and Pre-Start Warning sounders to either System 2 or 3 gives the addition of communication and Pre-Start Warning.

System 5 - Broadcast Fault Messages

With the addition of a Master Communications Amplifier at the conveyor control electrical panel, voice synthesis may be included allowing any and all conditions/faults relating to the conveyor to be broadcast along the conveyor. Initialisation of the Synthesiser is from any Amplifier via the System Status Button.

System 6 - Telephone

By adding the Bramco Telephone Interface Module (T.I.M) to the system, dial telephone capability is available along the conveyor from any Amplifier which is fitted with dial push button controls.

Greater flexibility can be built into the systems by:

- A.Utilising the power and capacity of the ICMS to a number of short conveyors, considerable cost benefits can be achieved. This is possible by using only one ICMS unit for the short conveyors with an SLC2 relay on each conveyor for stop start control.
- B.The Communication/Pre-Start Warning package System 4 may be added to System 1, or a Communication package as in System 4 may be added to an existing conveyor installation as a Stand Alone Communication Pre-Start Warning System.





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Features

- Single cable which may double as the conveyor pullwire or stop mechanism.
- Complete mains power isolation of the system from any stop/start station location along the system
- Two hundred and fifty monitored locations/stations with multiple points of either analogue or digital form per location/station
- Multi-remote screens available along the system for interrogation, system status and control
- Smoke detection around the drive heads of conveyor installations
- Multi-point temperature monitoring and/or control
- Remote power supplies for Flameproof Installations
- Fail safe operation
- Identification of any and all faults on the system at any one time
- Approved/Certified for use in hazardous (gaseous) areas. (5Km max distance)
- PLC and Monitoring system compatibility
- Gas warnings in both visible and audible forms along the system
- Control of conveyors of up to 30km length from one system
- Control and sequencing of other entities along the conveyor system
- Hardwire backup for stop/start stations and emergency stop requirements utilising the sixth wire
- Broadcast Communication System with monitored Amplifier status or readiness
- Pre-Start Warning individually monitored on Amplifier and PSW100 units and PSW400 units
- Optional Pre-Start Warning sounders as a cost saving measure where Amplifiers are not required
- Optional voice synthesiser for fault broadcast activated either automatically or from each Amplifier
- Optional PABX dial facility from each Amplifier.

NEW ICMS V5

The Bramco Group's Integrated Control and Management System (ICMS2) provides a cost effective electronic control for mining systems such as conveyor control packages.

The ICMS offers a variety of features linked to a micro-processor based controller incorporating advanced modular software to provide a totally flexible and powerful system.

Bramco offers built in live diagnostics and remote phone system Interface.

ICMS2 Control Module - System Upgrade Features:

- 32 bit microprocessor with next generation firmware V5 provides much improved operating speed and an incredible array of new functions
- Unique Brambus operating platform with industry first built-in diagnostics – providing unprecedented levels of system monitoring, performance reporting, isolation and management of errors – from multiple locations
- Upgraded data communication and system mapping monitors every addressable device on the network in real time
- All new Master Controlling Colour Touch Screen 5.8" (A01402) and System Interface which provides an enormous array of monitoring and programming options and status information – all from one point and one screen
- Advanced PLC Interface function via Ethernet to Modbus ASCII Interface. Many PLCs want Modbus TCP as an interconnection protocol. We provide access for multiple modbus ASCII units with one ethernet interface
- Fully backward compatible for existing users - all latest advantages can be engaged and suitable for 110-240VAC supplies.



All New ICMS
Colour
Touchscreen

