Machine Tool / CNC Monitoring

We are currently in talks with an EU Company who specialise in 'Machine Tool Monitoring'. This would have full integration with the Redant system and add many benefits, giving the user the a complete picture when used with our shop floor data capture and finite scheduling modules.

As you will be aware, there are numerous different CNC controls available, some very basic on older machines, and the 'all singing and dancing units' on newer machines.

Fanuc controls having an 'I' in the controller's name means they are ethernet connection ready and these do not present a problem. Fanuc do allow 'rebranding' of their controls and some of these units may no have the 'I' in the name so it's worth checking if it is an actual 'I' controller.

Many controls now offer the **MTConnect standard (ANSI/MTC1.4-2018)** which would be fully compatible with the monitoring system. More and more manufacturers have this option available and it is becoming the standard for future communications. However, this is not always a **free** option from different manufacturers. Hurco for instance offer it free whereas Mazak charge in excess of £1800 per control to have it enabled.

Going from customer's experiences, the cost of having the MTConnect option added is relatively small compared to the price of the CNC machine tool itself. In some cases, it is a simple software upgrade and can be negotiated free as part of the order. This has proved successful in lots of cases. Adding it later can be costly.

Connection to Siemens controls can be very expensive also, in excess of £2500 per unit. As above, then it is worth getting the MTConnect added free as part of a new purchase rather than have it added later.

Mazak machines using the Fusion client are compatible although the data available only covers the basic outputs. Fusion Client is used by Mazak for their own monitoring system and is available on most units.

Haas controllers are compatible using an RS232 to ethernet link.

Other controllers can be linked using a Digital I/O interface to pick up basic signals for the monitoring.

If you would like a definitive review based on your current controllers then please submit us a list of each unit including its full name / version. We will analyse this and submit a full report detailing what connections are available and at what cost is involved.