



SAFETY ISSUE REGARDING THE INAPPROPRIATE USE OF THE SPINDLE EARTH WIRE

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As part of Westwind's continual observation procedures, it has become apparent that some OEM's are not using the spindle earth wire or wires correctly. The earth wire is fitted as a safety precaution and inappropriate use may place the end user at risk; this could result in a condition where the spindle body or cable screening could be at an elevated electrical potential while accessed by the operator.

Many OEM's use a contact drilling interface and use the earth wire as a method to supply the spindle with the signal. If this system is not designed correctly then any internal short within the spindle will not trigger the appropriate safety cut-out on the drive. Westwind recommend that all OEM's should carry out a risk analysis on their contact drilling interface circuitry as a precaution.

Westwind has raised this issue with the drive suppliers who have issued the following advice: When a contact drilling interface causes the earth to have a high resistance, the degree of electrical protection is reduced and subsequently may allow degradation of the spindle or wiring to the point where a major machine alarm or failure occurs., it is only when the current level is higher than the limits set in the drive that the drive will raise an alarm condition.

If further assistance is required, please contact Westwind Technical Support: wwinfo@westwind-airbearings.com