



OVERVIEW

High speed spindle control from Optidrive.

Global Solutions...

wireless control for hundreds of applications

with Invertek Drives the solutions start here!

- easy to use and incredible performance
- leading edge design and technology
- highly committed to innovation
- products you can rely on
- global support and suppliers

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COMPANY

HIGH GAIN TECHNOLOGY

High speed machining solutions

Rugby, UK

An increasingly popular application for Optidrive Plus 3^{GV} over the last few years has been the machine tool spindle drive, where the high performance motor control and extremely high output frequency capability are key features to meet the demanding requirements in this market sector. The spindles themselves are used in a wide variety of industries and manufacturing processes, such as high speed milling and grinding for the aerospace, automotive and medical industries.

High Gain Technology, a leading European supplier of high speed machining systems have long recognised the Optidrive Plus 3^{GV}'s ability as a high performance spindle drive, providing a cost effective, easy to use solution.

Utilising the drives' 32kHz switching frequency, and the ability to operate at up to 2000Hz output frequency, spindle speeds up to 120,000 rpm have been achieved. The high switching frequency also provides the added benefit of reduced audible noise, with a quieter running motor, whilst the superb motor control has shown significant reductions in motor operating temperature compared to other spindle drives. This leads to increased motor and bearing life, an important factor as many applications operate for extensive time periods at high speeds and loads.

High Gain recently completed an application at Petford Tools Ltd, one of the UK's leading suppliers of large mould tools for plastics and composite components in the automotive and aerospace industries. The requirement was to supply a high speed machining facility on an existing Correa machining centre for the super finishing of alloy steel mould tools. Utilising an OPTIDRIVE PLUS 3^{GV} together with a Peron Speed A3 motor to provide the required 4kW SI power and 24000 rpm speed, High Gain were able to offer a package capable of silent, cool motor running over periods in excess of 48 hours. In addition, the spindle drive had to be interfaced with the machines own CNC control to provide the same functionality of the machines main spindle, a task easily achieved thanks to the inherent flexibility of the OptidrivePlus 3^{GV}.

The installation met all the demands of Petford Tools and according to Director, David Parr, continue to provide day and night high speed machining at faultless quality.

If you would like to know more please e-mail Dick Langley at info@highgaintechology.co.uk or visit www.highgaintechology.co.uk



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