

Exhibitors on the grid

Now in its 13th year, Autosport Engineering is a two-day, trade-only specialist area within Autosport International for technical suppliers to the motorsport industry. Steed Webzell previews the exhibits

Autosport International has firmly established itself as Europe's largest and most influential exhibition for the motorsport industry's leading component manufacturers and suppliers.

In January 2007, over 300 companies met 27,000 visitors including 4,500 from overseas who are all either directly involved in, or connected with motorsport. Business estimated to be worth £310 million was influenced or agreed at the show.

Since 2003, Autosport Engineering has housed a specialist area dedicated to manufacturing technologies, reflecting the increasing demand for metalcutting, metalforming, tooling, software, metrology and associated products in the motorsport sector. It is a showcase for leading manufacturers of capital equipment and many familiar names will be present at the Birmingham NEC for the 2008 event which will run from 10-11 January.

Yamazaki Mazak (Stand E858), an official supplier to the Vodafone McLaren Mercedes Formula One team, will return to Autosport Engineering buoyed by its

successful 2007 participation. Visitors will see one of the latest Mazak Quick Turn Nexus machines demonstrating the versatility that has won the company so much motorsport business.

The QTN 250-IIIMY under power at Autosport will be shown 'machining' a demonstration part that highlights the machine's 100 mm Y-axis, 250 mm chuck and 4,000 rpm, 26 kW spindle.

MOTORSPORT CREDENTIALS

Hardinge (Stand E658) will reinforce its motorsport engineering credentials by exhibiting a range of high performance machines along with a Hardinge Motorsport-sponsored Honda Fireblade CBR1000RR Superbike and a Radical SR8 (2.6 litre V8 engine) racing car.

"The machines will demonstrate categorically that if you're involved in part manufacturing for the motorsport sector, there will be something for you on the Hardinge stand," says David Andrew, sales and marketing director at Hardinge.

Making its debut UK appearance at Autosport (Stand E408) will be Haas Automation's latest addition to the Toolroom Series. According to the company, the TM-3P Toolroom Mill combines the best of both worlds: it is easy on the wallet and has the power and flexibility of full CNC. Based on the shop-proven Haas TM-3, it also has many standard features that make it well suited to the production environment.

Visitors to XYZ Machine Tools' 36 m² space (Stand E664) at Autosport will see five machine tools that

Measuring success

"Autosport Engineering is a very important exhibition for Faro," says Andrew Tagg, regional manager for Faro UK (Stand E530/E629).

"This show will give us the chance to reach a broad audience and we will be demonstrating our whole range of measuring arms, from the new Quantum FaroArm to the popular Faro Gage."

emphasise the company's theme 'the smarter choice for prototype and low volume production' and their fit with the world of motorsport.

The machine tool distributor will feature the new XYZ Compact Turn 52 turning centre; an XYZ Mini Mill 560 compact vertical machining centre; XYZ ProtoTRAK SMX 2000 and SMX 3500 manual/CNC mills; and an XYZ ProTURN SLX 355 manual/CNC lathe.

Elsewhere at Autosport (Stand E1054), Deckel Grinders will be asking visitors: "Is your precision virtually perfect?" They can compare their machining centre accuracy against that of the Kern range of machine tools, which includes the Pyramid Nano, the Kern EVO and the Kern Micro, offering workpiece accuracy of ± 1 , ± 2 and ± 2.5 micron, respectively.

Heidenhain GB (Stand E551) is returning to Autosport Engineering for the third consecutive year. "The visitor profile at Autosport Engineering includes many engineering companies that are users of Heidenhain CNC controls, digital readouts, CNC probes and gauging systems," says managing director Malcolm Smith. "To reflect this, our stand will include more CNC related products as well as information on our digital readouts and extensive range of encoders and measurement related products."

ITC (Stand E452) will exhibit a number of new products that will include a PCD range of cutters for carbon fibre



Visitors to Baty International (Stand E946) will be able to see the Hawk Kawasaki British Super bike, as well as a range of metrology equipment from dial indicators and digital micrometers and verniers, through to the company's range of profile and vertical bench and floor-standing projectors and CNC multi-sensing vision systems. Many products will be offered for sale at special 'show rates'.



and metal matrix machining. Widely used among Formula One teams, the 2102 and 2111 Series of PCD ball nosed end-mills with solid carbide shank and PCD brazed tips provide enhanced tool life and productivity machining carbon fibres.

Roemheld visitors (Stand E426) will find the latest range of workholding solutions to suit all types of machine tool and table sizes as well as examples of how the demands of Formula One have led to Roemheld's expansion of its range of 5-axis vices.

The complex components associated with the motorsport sector are also driving extensive investment in CAD/CAM, and there will be no shortage of software vendors present at Autosport Engineering.

Among them will be Sescoi (Stand E651), which will be showcasing WorkNC G3 V19. 'G3' stands for third generation and signifies the introduction of the software's third completely new user interface. WorkNC G3 V19 boasts ergonomic operation in a single graphics environment, together with new toolpaths for 3-axis and 5-axis programming.

Information about geometric

entities, CAM entities and toolpaths, which go together to form the WorkNC 'Workzone', are grouped together in a new tree structure and toolbar alongside the graphics area. In just one graphics environment, users can create and interrogate geometry, visualise and verify the toolpath, and carry out model analysis, providing a far more flexible way of working.

Elsewhere at the show, CAD/CAM developer Delcam (Stand E536) will be looking to build on its recent successes in the motorsport industry. The company has recently seen its software adopted by manufacturers of engines and other components but remains best known in the industry for its PowerINSPECT inspection software, it being used to check vehicle conformity by the FIA and NASCAR.

Delcam's first major success

with engine manufacturers came in 2004 when its PowerMILL CAM system was chosen by Zytek Engineering. Since then, the two companies have worked together to develop novel machining strategies for motorsport engine manufacture, in particular for the finish machining of inlet and exhaust ports. The results have included reductions in machining times of up to 60 per cent, together with better quality and consistency.

A more recent success was at US engine builder Wegner Motorsports. Again, the main benefit of the software is in CNC cylinder head porting.

TIME SAVING SIMULATION

CGTech (Stand E1354) will feature Vericut simulations from many of the world's leading CNC machine tool makers, including Mazak, Mori Seiki, Makino, DMG, Hermle, Matsuura and Chiron, focusing on the more complex 5-axis and multi-axis mill-turn centres.

Vericut is firmly established in motorsport where the combined demands of short lead times, component and machine tool complexity mean that the industry is at the leading edge of machine tool usage. □

