

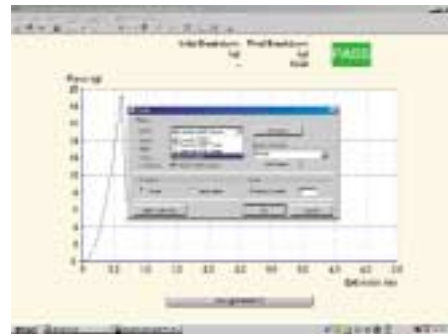
Get the most out of your Investment in software

By popular request – How to E mail test reports straight from your Hounsfield system!

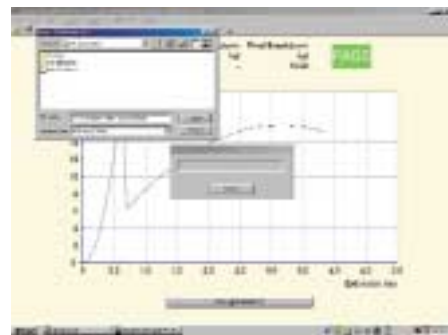
Immediately e mail test reports, Pass/Fail status and SPC trend charts to line managers, MDs, Colleagues across your Group and customers.

Step 1: After completing a test or batch of tests in TEST ZONE select FILE from the main tool bar. Select PRINT REPORT from the drop down menu.

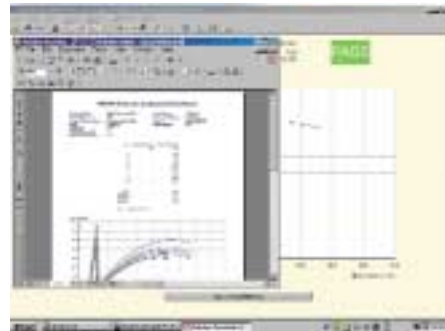
Step 2: Select ACROBAT DISTILLER as the Printer Name. Select OK.



Step 3: Through the on screen dialogue box, specify the file name for your report and the destination directory where the file is to be stored on your hard drive as a picture file (Type PDF format). Select OK.



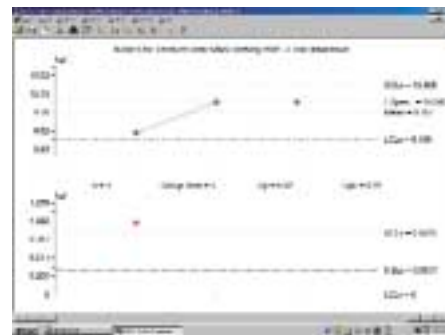
This process automatically causes the Adobe Acrobat application software to open up and display your test report on screen. Check your report and print if required.



Step 4: Select FILE and EXIT to exit the Acrobat environment and return to QMAT PRO to continue testing.

As soon as you want to e mail your report open a new e mail in your OUTBOX in the usual way, there is no need to close the Hounsfield software, and simply attach your test report. It is simple and takes seconds.

This process can be repeated to e mail statistical charts such as histograms, regression and SPC trend charts from within the Hounsfield File examination software.



Next Standard will detail the power of the copy and paste functions and analysing curve data points in EXCEL.

Information on Acrobat Distiller function – Call Hounsfield and ask for Paul Denman.

Support: For further help with report formatting, printing and e mail or practical guidance on getting the most out of your software, call Hounsfield and ask for Terry Adams.

Training: To arrange QMAT PRO training for existing users or new operators call Terry Adams (Training, Service, Calibration department). Get the most from your Hounsfield system!

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The Standard

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Putting the squeeze on rubber

The versatility of rubber means it is used in everything from gloves for neurosurgeons to Jumbo Jet tyres supporting up to 390 tonnes. Ensuring compounds and components have the right characteristics for the intended purpose is the job of manufacturers such as Dunlop Aerospace Precision Rubber – aided by the latest test equipment from Hounsfield.

The name Dunlop has been synonymous with rubber ever since John Boyd Dunlop invented the pneumatic tyre in 1888. Today Dunlop Aerospace Precision Rubber manufactures critical sealing solutions for the Aerospace, Automotive and Industrial markets to withstand a diverse range of service environments. Often operating at extremes of pressure or temperature, they must give safe, reliable service.

Accurate data on the strength and performance of both raw materials and finished components is essential, not just to check supplies and manufacturing, but also to provide customers with records of quality.

Upgrading test facilities at Dunlop Precision Rubber to achieve a state-of-the-art fully integrated system required the addition of a H10K-S 10 kN tension/compression testing machine, 500L laser scanning extensometer, various tensile test specimen holders and grips, a temperature chamber and QMAT PRO test software.

The 500L extensometer uses a Class 2 laser to automatically read extensions of up to 3000% at an accuracy of 12 microns. Because the laser extensometer is non contacting, there is no risk

of equipment damage during tensile testing to destruction and testing can also be continued within the environment chamber at extreme temperatures.

Equally impressive is the H10K-S 10 kN machine which can easily be configured to any form of test from tension, compression and tear to puncture, friction and delamination, but it is the addition of the QMAT PRO software that transforms testing into such a powerful management tool. This allows results to be checked against standards for any market worldwide, while data can be compared, formatted and emailed, stored or printed within minutes.

According to Dunlop's materials technical team leader David Sykes, it was a combination of all these factors that led to the choice of Hounsfield equipment. "The equipment is also easy to use, very reliable, and gives us accurate results," he adds.



Whether for hydraulic hoses, airtight seals – or tyres – accurate rubber testing is essential

Faxback for more information

Title: _____ Full Name: _____

Job Title: _____

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Please add me to The Standard mailing list Please remove me from The Standard mailing list

Please send me more information on the following:

- Testing.....
- (please specify your material or product)
- Extensometers
- Temperature Chambers
- Navigator metals testing software



Demountable Temperature Chambers

Vehicle components that deteriorate in desert or arctic conditions can have serious consequences, while packaging that fails to deliver the promised convenience food after a spell in the microwave could cost companies millions. But whether it is for safety or commercial reasons, manufacturers from a diverse range of industry sectors have been turning to Hounsfield for a temperature chamber to be added to their test equipment.

Chambers are available for all major brands of testing equipment and custom-built units can be produced for specialist requirements. A series of 3kW elements can raise temperatures inside the chamber to over 300°C, while injection of liquid nitrogen can reduce temperatures to -70 °C.

The ability to conduct tension, compression, shear, deflection and peel tests over such a range has applications across a wide number of industry sectors. *"The chambers are attracting interest for testing everything from metal automotive components and rubber gas seals to polymers for packaging microwavable frozen foods,"* says sales and marketing director, Martin Wheeler. One of the first customers has been MIRA, the Motor Industry Research Association, which uses a chamber on its 10 tonne H100K-S tension/compression machine.

Installing the chamber is a simple operation and when not required it can be easily removed for testing to resume at ambient temperature. Kits include all necessary connections and tools as standard and Hounsfield can also supply self-pressurising vessels for the safe storage of liquid nitrogen if required.



Tooling for can tests is the cats whiskers

There was a time when cans were all made from steel and used almost exclusively for preserved food. Today they are made to a vast range of specifications for everything from drinks to deodorants. Assuring design performance and maintaining quality during manufacture is easily achieved with Hounsfield's test machines and specially-developed tooling.

Designers and marketing experts are demanding more than ever from the basic 'tin can' in terms of materials used, loadings expected and performance features. Yet with these expectations comes the occasional failure – such as the 'handy' ring pull that needs a large screwdriver to prise it away from the can.

Accurate testing during design and manufacture avoids these problems – which is why commercially-astute manufacturers are turning to the latest test equipment to ensure reliability. Hounsfield's new generation equipment can be operated directly from a standard PC using QMAT Pro software. The company's T-series tension/compression machines are available with a range of tooling specifically designed for testing the can materials, ring pulls, opening lids and even labels, adhesives and packaging.

Just one machine can perform pull, tear, puncture, peel and burst tests – all to the selected standard(s) such as ISO, EN, ASTM or JIS. Tests can be



Proving what can be done needs reliable testing

configured to show a Pass/Fail result for ease of use in, for example, quality control, or the results can be used for close analysis such as during prototype development.

The data generated can be stored, printed or emailed to colleagues, materials suppliers, designers or customers. Food chain and pharmaceutical applications are typical sectors where the traceability provided is invaluable in meeting commercial and legislative requirements.

Diary dates 2002 – Where to see us this autumn

2 - 6 Sept	Road show – Ireland	8 - 10 Oct	Exhibition – Rubber Expo, Pittsburgh PA USA
4 - 5 Sept	Exhibition – Packex Process, 2002 Dublin, Ireland stand no R11	14 Oct	Showcase – ASTM D-13 Textile Showcase, Norfolk Va USA
14 - 16 Sept	Exhibition – SPE Thermoforming Division, Nashville, Tennessee, USA	15 - 19 Oct	Exhibition – CITME 2002, Beijing in China
15 - 19 Sept	Exhibition – Fakuma Friedrichshafen Germany	22 - 23 Oct	Exhibition – MDM Medical Design & Manufacturing, Minneapolis MN USA
16 - 20 Sept	Exhibition – BRNO International fair, Czech Republic	22 - 23 Oct	Exhibition – MDM, Minneapolis USA
25 - 29 Sept	Exhibition – Imak Tatef CR int. Exhibition centre, Istanbul, Turkey	3 - 7 Nov	Exhibition – PMMI Packaging Expo, Chicago IL USA
30 Sept - 4 Oct	Exhibition – Interplas2002, Birmingham UK stand no 3345	4 - 8 Nov	Exhibition – HET Instrument, Utrecht Holland
1 - 4 Oct	Exhibition – Makropack, Utrecht Holland	5 - 6 Nov	Exhibition – SAMPE, Baltimore MD USA
1 - 5 Oct	Exhibition – Columbia Plast, 2002 Bogotá Columbia	6 - 9 Nov	Exhibition – Chile Plast 2002, Santiago Chile

Aerospace Test House chooses Hounsfield

Statistics prove that flying is by far the safest form of transport. Maintaining that record depends on the precision of work by companies such as Surrey-based Expert Heat Treatment or EHT. The company heat treats and tests components for suppliers in the aircraft industry and has chosen a new Hounsfield machine and software to provide it with accurate and reliable test data.

A sister company of Hoyt Darchem the specialist white metal bearing manufacturer, EHT's core business is to heat treat aircraft components to precise tensile, hardness and/or impact strengths and return them to customers accompanied by a test result certificate. The components can form part of anything from landing gear to engines.

In addition to ISO 9000 status, EHT has to meet customer approvals from companies such as Boeing, British Aerospace, Rolls Royce and Westlands, so it is vital to have precision and reliability both in its treatment and testing facilities. The company had used a Hounsfield H50K-M 5 tonne machine for the past 10 years and chose to replace it with a Hounsfield H50K-T 5 tonne machine, complete with Test Navigator, the brand

new specialist software for the metals industry. Test Navigator is similar to QMAT Pro software in its flexibility and ease of use yet contains features that are specific to metals testing.

EHT's technical manager David Rowe said, *"We chose Hounsfield because we have had 10*

years of good service from the existing machine and the company has always been very accessible for technical support." EHT had also asked other manufacturers to quote for supplying a new machine, yet found Hounsfield offered the best package to combine specifications and value.



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Engineers for the future

If the quality of education is a measure of the health of a society, then the future looks extremely positive for the Republic of Ireland, judging from the work of Cork Institute of Technology. The Institute continues to build on its 200-year history and is today at the forefront of producing engineers in all sectors, from biomedical to aerospace and construction.

Engineering courses are offered across all levels of further and higher education, but what makes Cork Institute so successful is its prominent and active links with industry, combined with investment in first-class research and development facilities for students.

Major public exhibitions are a regular feature in the calendar. Displays include commercial organisations, the research projects of students and the work of the different departments of the Institute. Such occasions provide students and the Institute with valuable industry contacts while the commercial exhibitors can examine the innovative, fresh ideas that newcomers bring to the industry.

Underpinning this is the quality of the Institute's facilities, which is typified by its investment in a comprehensive range of Hounsfield test equipment. This includes an H25K-S 25 kN, 2.5 tonne test machine, an extensometer and various other items. The equipment is used for testing metals, polymers and composites both as part of the teaching of materials science and for students' research projects.

At a time when many in education appear content merely to propose, trial and debate about the best way forward, Cork Institute has taken action – with impressive results.



Good industry links and good equipment have brought teaching success for Cork Institute