

# Carrying Power

CAD2 serves up a powerful mobile Workstation that won't break the bank for those that prefer to carry their CAD tools around with them

Working from home takes on an entirely new meaning around this time of the year. The last couple of months has seen a wealth of National sporting events dominating day time viewing - from the Test Series against New Zealand, to Wimbledon, Ascot, Henley and, of course, Euro2004! Excuses for sickies fall a bit flat after the first couple of days, and the average sports enthusiast needs to convince his boss that productivity may not necessarily diminish even when it is pursued at home.

Hence the growing popularity of powerful laptops that can take CAD tools out of the office. Of course, there may be other reasons why designers should wish to escape the rigours of the office, but those reasons seem to elude me just now.

A deterrent to many of those seeking more flexibility in their working environment was the high cost of laptop worksta-

mobile computing. It is based on Intel Pentium 4 Processors with up to 3.40GHz on an SIS M645DX Motherboard, with 512Mb DDR Memory modules, dedicated 128Mb Graphics and an Ultra Fast 7,200rpm hard disk, plus a number of other powerful features, enabling it to handle CAD software requiring serious levels of performance - and a built-in webcam!

## CAD2 D470V MOBILE WORKSTATION

The most impressive feature, though, that immediately strikes the potential user, is the 17 inch display - taking up the whole of the top lid, and providing an easily read display in full colour with wide viewing angles. Downloading large models, so that they can be taken away and worked on at home, can be seriously impaired if they have to be downsized and viewed on far smaller screens than the one's used in the office. Native screen resolution for the

system cannot keep it supplied with data and instructions fast enough. Consequently it sits there at 50% usage with spare clock cycles waiting for the system to catch up. To take full advantage of the power, Intel has introduced Hyper-threading, which treats the processor as two separate virtual processors. These are defined under the Task Manager as CPU1 and CPU2 - but only if you are running the system under Windows XP professional. And, of course, software that allows you to run with 2 processors.

Image rich applications like CAD require powerful graphics handling applications, and this is provided in the D470V by ATI's Mobility Radeon 9600 M10 graphics subsystem that has 128Mb of dedicated memory, which should be ample for the most demanding CAD applications.

Aiming, once again, for the ultimate in mobile power, CAD2 has opted for the fastest hard drive currently available on laptops that use 2.5 inch disks - 80Gb



tions - more than double the cost of standard devices. At Solid Modelling, therefore, I was delighted to find a powerful and fully featured portable workstation that seems destined to fulfil the needs of many at a very reasonable price. CAD2 is the hardware specialist arm of AceCAD, based in Derby, a company that provides a range of both hardware and software solutions for the CAD industry.

The machine in question is the D470V, which brings a new level of power to

TFT LCD display is a standard 1440 x 900, and, although this can be increased, users will have to pan and scan to view the entire display.

Usability is also improved by providing a full sized keyboard that includes a numerical keypad - essential for applications that demand a high degree of data input.

Although the D470V is fitted with a powerful processor, like workstations with similar Intel capability, a good half of the power lies unused because the operating

with a spindle speed of 7,200 rpm. The standard 4 x DVD burner is also state-of-the-art, with the added bonus that it can be used with both +R and -R standards. Both are currently in use in the market, with the industry leaning, perhaps, more towards -R. Most DVDs normally only support one or the other.

Audio-Visual devices feature quite prominently in the D470V. Besides the built-in webcam - situated just over the top of the screen - suitable for using the workstation

for video-conferencing, live recordings and other multi-media applications, it comes with high quality audio capability with a built-in subwoofer module (providing .51 digital surround-sound output) and an optional TV tuner. It also has composite video input that allows camcorders and similar devices to be plugged directly into the machine.. All in all, a complete audio visual system, that can turn the machine into a complete VCR system, allowing users to download films and TV programmes straight onto hard disk. In view of the opening paragraphs, the less said about the ability to view TV channels whilst you are working, the better, except that indolence is further encouraged with the provision of a remote control for the TV tuner!

Computer accessories tend to come with extra cables, plugs and carry kits. Much of the fuss and bother that these incur can be eliminated using the built-in card reader and fire wire capabilities. Communication uses the latest technology, Bluetooth and Infra-Red for wireless LAN, Internet and peripheral connection - and a couple of USB ports.

## CAD2

The CAD2 D470V is just one of a range of laptop and desktop workstations, each incorporating the latest high performance technology to provide some of the most powerful CAD



tools available, its OpenGL benchtest performances outstripping those from the its better known competitors. Designing and building the models at its Derby location, and offering a high level of support, it outguns the opposition in price performance as well.. The CAD2 D470V, for instance, in spite of its capabilities, costs just £1495 plus VAT!

It's current range includes the Imagine and Insight workstations, Insight using dual processors to provide extreme levels of CAD performance. The company also sells monitors, CAD printers and plotters, audio visual systems, CD and DVD drives and storage devices from leading manufacturers. **CU**

[www.cad2.com](http://www.cad2.com)