

Cruise control

A new workstation is proving to be a welcome relief to all those who spend all day in front of their computers. Mike Farish reports

The words 'sit back' are usually coupled with others such as 'relax', 'take it easy' or even 'do nothing'. In contrast, 'concentrate', 'focus' and 'work better' tend not to figure. But that looks set to change. An innovative chair and desk combination developed in Japan and that completely reverses previous ideas about appropriate posture for working environments has now been introduced to the European market. Instead the Cruise Workstation has been designed to embody a 'low-seat, rear-tilt' approach that is claimed to enhance comfort and reduce stress in ways that promote concentration rather than relaxation.

The workstation is the product of several years' research and development by the

Okamura Corporation, which now employs around 4,000 people worldwide in a range of activities that include the design of office furniture and the operation of medical research facilities. Both have come together in the new workstation, whose attributes are claimed to derive directly from the way its configuration interacts with the physiology of the individual using it.

Specifically, the Cruise obviates the near right angle formed by the torso and upper legs of someone working at a fixed desk in a traditional upright posture. It does this through a combination of elements. The first is a chair whose seat can be lowered so that its height can be just 370mm and whose back can recline 23 degrees from the vertical. The second is a desk whose surface can be tilted

ten degrees downwards to allow the user's arms to reach a keyboard without having to arch up and then down again. The desk itself is also enclosed at the rear and sides by mesh screens that create an enclosed space free of external distraction. The result is, quite literally, a 'laid-back' posture for the user, which is claimed to make working easier and more effective.

Someone who finds the arguments put forward by Okamura entirely convincing is Levent Caglar, senior ergonomist at FIRA International - the furniture industry research association based at Stevenage, Herts. Caglar says: "When working with computers, especially for extended periods, adopting upright static postures at fixed height desks can, and eventually will, result in back problems." He

explains that such a posture has a series of negative consequences - it restricts blood supply, compresses the abdomen and reduces oxygen intake, thereby ultimately diminishing the supply of oxygen to the brain. The inevitable consequences will be diminished comfort, alertness and productivity.

But by, as Caglar puts it, "opening up the angle" between legs and torso, the Cruise obviates the primary cause of this deleterious interaction between physiology and psychology. As such Caglar, who has subjected the concept to some intensive scrutiny, is confident that the workstation combination really would make anybody using it "think better."

Nevertheless, at comfortably over £2,000 in price the Cruise is not likely to feature as part of the furniture of the average office. It is not a point that Caglar disputes, but he says that the reality is that the workstation is an aid to creativity and hence will be used by creative types - "designers and software developers" are, he suggests, very much the sort of individual who would benefit from using it.

Moreover there is some experience from Japan to support this view of things. The workstation has been in use there for a number of years and, in fact, was recognised as an example of innovative design at the prestigious 'red dot' design awards in 2006. But, much more importantly, there is some

corroboration of the benefits the workstation can provide from the experience of actual users.

IT service company NTT Data Corp, for instance, has installed four of the workstations in a deliberately secluded area to allow its engineering staff the focus on finding the solutions to particularly complex problems. It reports that "there has been a noticeable change" in the way that the staff involved carry out tasks: "Deadlines are met, stress levels seem down and the overall morale of the office has an upbeat feel to it."

Elsewhere - and in a rather different sort of environment - Kyushu University, one of Japan's major academic institutions, bought a couple of the workstations to help facilitate creativity on the part of students in its Faculty of Information Science and Electrical Engineering. Again the investment seems to have paid off. It reports "positive feedback" with students coming into the department late at night specially to have the opportunity of using the workstation in preference to working at home.

So, it really does seem that it is possible to sit back, relax and work harder and more effectively that might otherwise be the case. But the good design often works by inverting previous assumptions and establishing a new paradigm. Here is an instance that should make anyone with an interest in the ergonomics of efficiency sit up - or should that be 'sit back' - and take notice. ■

