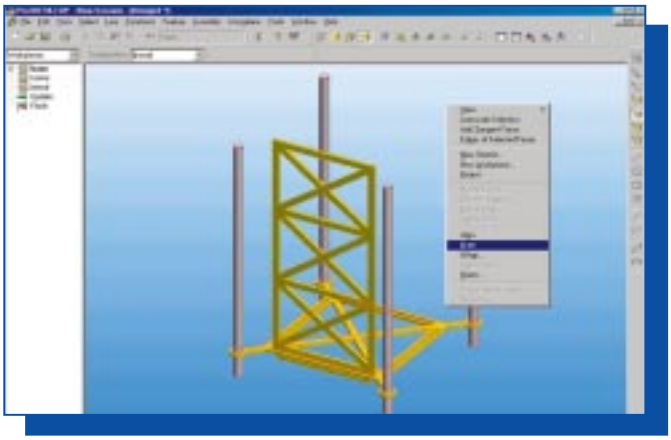
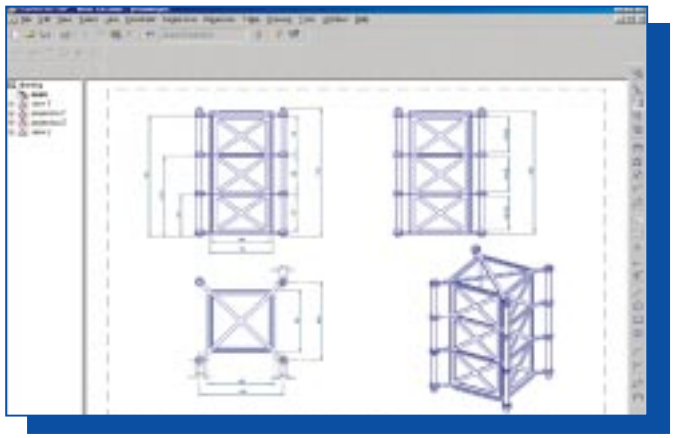
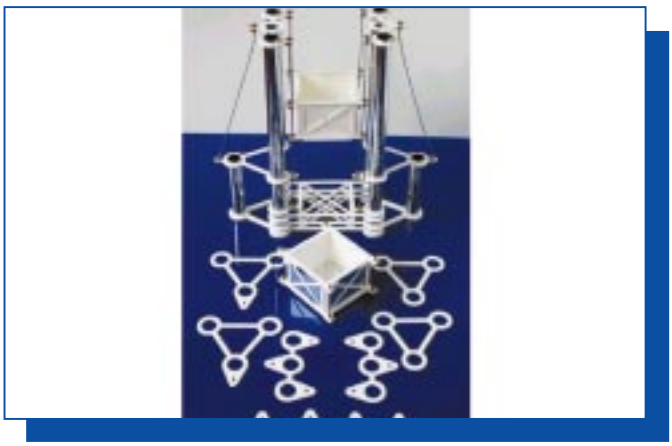
Desktop Architecture and

Manufacturing with CNC equipment offers unparalleled opportunities for designing and making, but it also presents significant challenges not the least of which is deciding on suitable contexts or projects. Working with a team of teachers and students at St Michael's Secondary School in Billingham, TEP's Stephen Stott has developed the highly original concept of *desktop architecture*. This involves designing and making small scale products whose design inspiration derives from leading-edge building design - challenging pupils and students to develop a 'design aesthetic' based on trends or styles such as modernism, minimalism, art deco style etc







the TEP Milling Machine

The overall result of this exercise, proven by both teachers and pupils, was a stunning range of products echoing complex and sophisticated architecture, but produced throughout using simple two-dimensional sections cut out on the TEP milling machine. Teachers viewing demonstrations and outcomes at the recent Design and Technology show (NEC) were unanimous in their view that this work represents a significant and important advance for CAD CAM in schools. The initiative also provides something the TEP milling machine has been waiting for – a clear illustration of how a relatively basic 2-D machining facility can lead to highly sophisticated 3-D products.

It is particularly pleasing to note that the work so far has passed the 'curriculum reality test'. A number of pupils have participated, and the modular focus of their work has led to them all being able to manufacture a worthwhile and personally rewarding product. The initiative has also tested the TEP machine to its limits and shown how output can be maximised by careful planning.

The success of *desktop architecture* has led TEP to invest in rolling out and expanding this initiative. Major new publications and teaching materials are currently under development. Progress will be reported in future editions of News and Views.