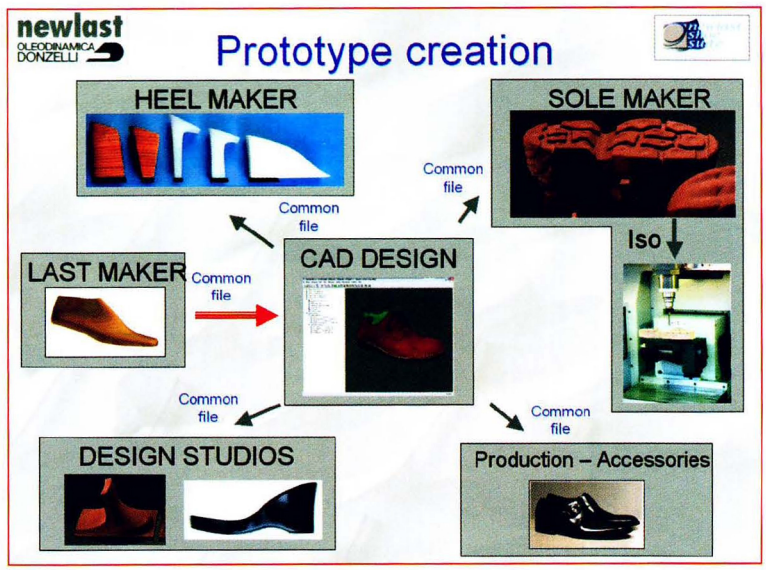
Can exchange files win the formatting war?



The past few years have witnessed huge technological progress in last manufacture. This has come about through the demands of fashion, a highly competitive global market, and the inventiveness seeking answers to these problems.

CAD technology has been a major factor in this movement. After some initial suspicions, footwear manufacturers today readily acknowledge CAD as an irreplaceable partner in achieving maximum results in both design and production.

The data-processing evolution in this sector has, therefore, been very rapid, possibly too rapid. It also occurred without being directed towards the manufacturing process as a whole, creating some unwelcome side effects.

Software companies produce CAD/CAM solutions for the design and manufacture of lasts, shoes, soles and heels. But they have failed to consider the last as the central reference point for the manufacture of all parts of the shoe. There has been no single language to facilitate exchange of information among the different parts of the process in relation to this key common denominator.

In search of a common language

Foreseeing communication difficulties within the industry due to the diversity of CAD/CAM technology, Newlast pursued a policy of total openness towards competitors in regard to possible agreements on format compatibility. At SIMAC in 1998 the company sought to create a dialogue among CAD producers. Unfortunately, nobody at that time felt ready to face up to the problem.

Software producers were content with a hybrid solution whereby they were forced to use exchange files according to the most widespread formats Iges or STL. These formats, however, create certain complexities requiring laborious adjustment. This, in turn, can affect the precision of data to be transferred.

The latest technology in last digitising recently introduced by Newlast is an optical scanner that is able to copy a finished last, sole or heel without support. This has created more pressure on the need to find a unified method of accurately transferring the last's data to the various areas involved in making the shoes.

The need is, therefore, for an information exchange format that is readable by all production systems. It is particularly important for the CAD design departments of shoemakers who are the main recipients of finished lasts. Recent market difficulties have also helped to make users more sensitive to this problem and keen to find a solution.

NHI—an exchange file for last manufacture

Under pressure from the principal Italian last-makers, Newlast and the Spanish company Horma 2000, major producers of software for last modification, reached an agreement to create a work file enabling communication between their two systems. In January of this year technicians from the two companies finalised NHI.

This exchange file allows manufacturers using CAD/CAM systems, such as Newlast Easylast3D or Horma 2000 Shoemaster Forma, to interact quickly and without problems. It avoids alteration risks during data transfer between applications in different production units. This will obviously be beneficial for any last manufacturers or shoemakers using the products of these two companies.

This is just the first stage. Today the system enables a problem-free dialogue between model makers and last makers. However, an important step still remains open: the transfer of last data to the CAD design systems of shoemakers and vice versa.

The next step will not be easy. Major international footwear brands perceive the potential benefits of integrated systems in a global industry and have been encouraging. The company is therefore working with important CAD footwear design specialists to create an exchange file that will achieve the same satisfactory results in that area as those already obtained by Horma 2000 customers.

Newlast has always been an innovator and feels that system-friendly exchange files are the way forward. There will be resistance, as many may think they have something to lose. However, the lack of compatibility between different CAD/CAM systems has been a negative factor for too long and it must be good for the footwear industry as a whole if this can be overcome.