CEC MADE SHOE: Custom, Environment and Comfort made shoe

Programme: Sixth Framework Programme

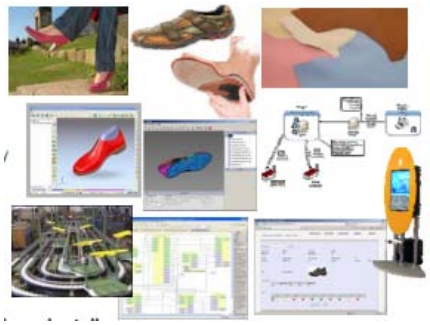
Duration: Project launched in 2004 and ended in 2006 (48 months)

Objective: moving the footwear sector from a product/process centred approach to a human-centred approach represented by 3 dimensions of human being: Comfort, Environment, Custom; in order to transform the traditional "concept" of the shoe into a new "device" capable of satisfying the demands of the consumers along three dimensions, particularly:

- **Comfort:** Focus on the foot in all aspects of walking, running, standing, well being, etc.;
- **Environment:** Focus on 100% nature friendly materials and process sustainability, to move the sector to eco efficient and sustainable products, processes, materials and organizations;
- **Custom:** Consumer involvement through the focus on style and fashion.

The activities

New concepts for the shoe product: research applied to new product concepts and their development, related constituents and constructions, including life cycle analysis, biomechanics and physiological criteria integration, aiming at the creation of the "intelligent shoe" as an active and sustainable device.



Processes and core technologies: research applied to flexible and quick response processes in the design, manufacturing and selling phases of the product life cycle, including internal logistics and management Materials: research applied to the development of new materials and components to be used in all kinds of shoes complying both with style and fashion requirements and engineering needs, organized along three lines of development: bio materials, health / comfort materials and active materials

Information and Communication Technologies: research applied to create and implement an electronic infrastructure between consumers, shoe retailers, footwear manufacturers and the whole value chain of footwear business.

Results

- New shoes typologies: Prototypes and sample runs of the Bio, Active, and Snap Shoes;
- Families of advanced materials specifically adapted for (new) footwear applications;
- CAD / CAM / CAE software programs for the development of the new shoes;
- New manufacturing technologies, machines and systems;
- New software architectures for traceability, supply and retail chain management.