



© SHOES

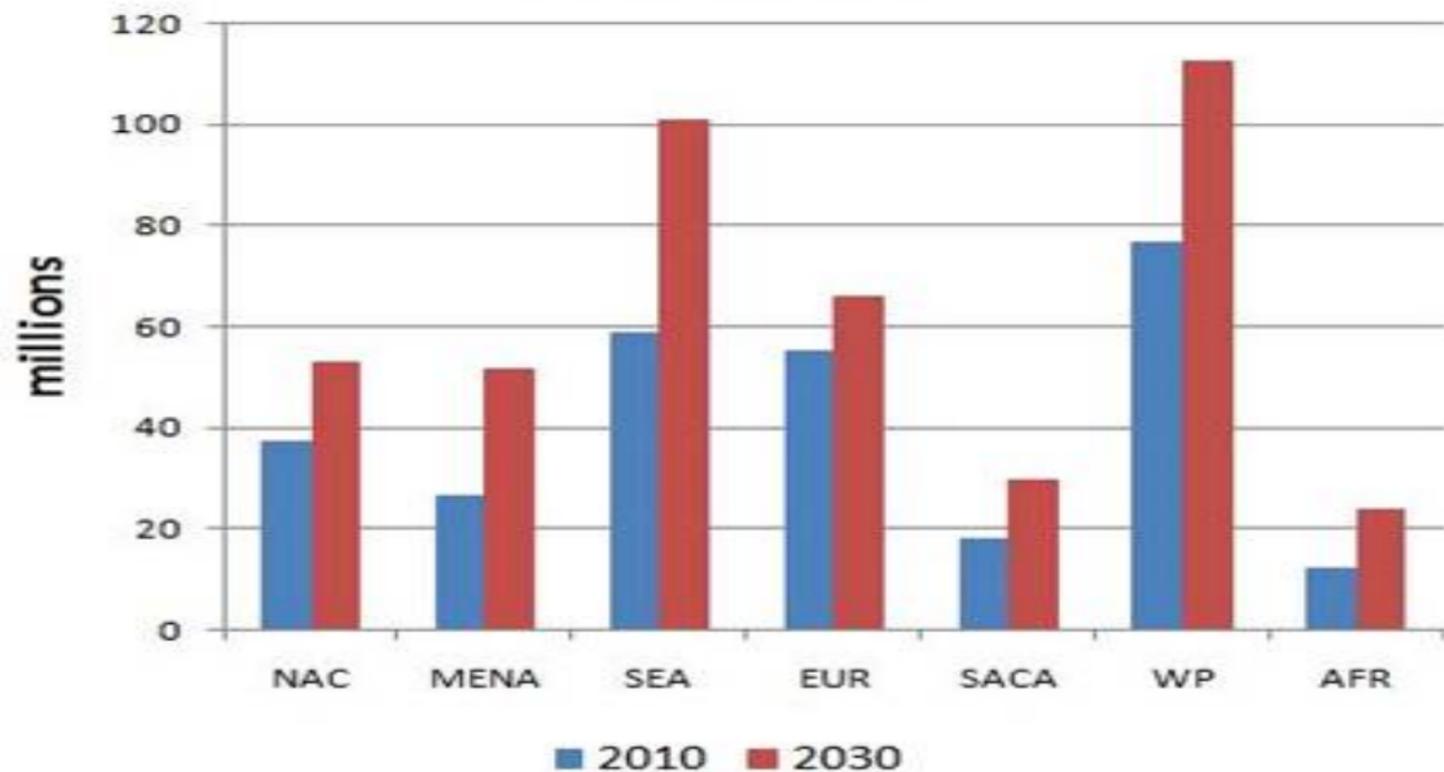


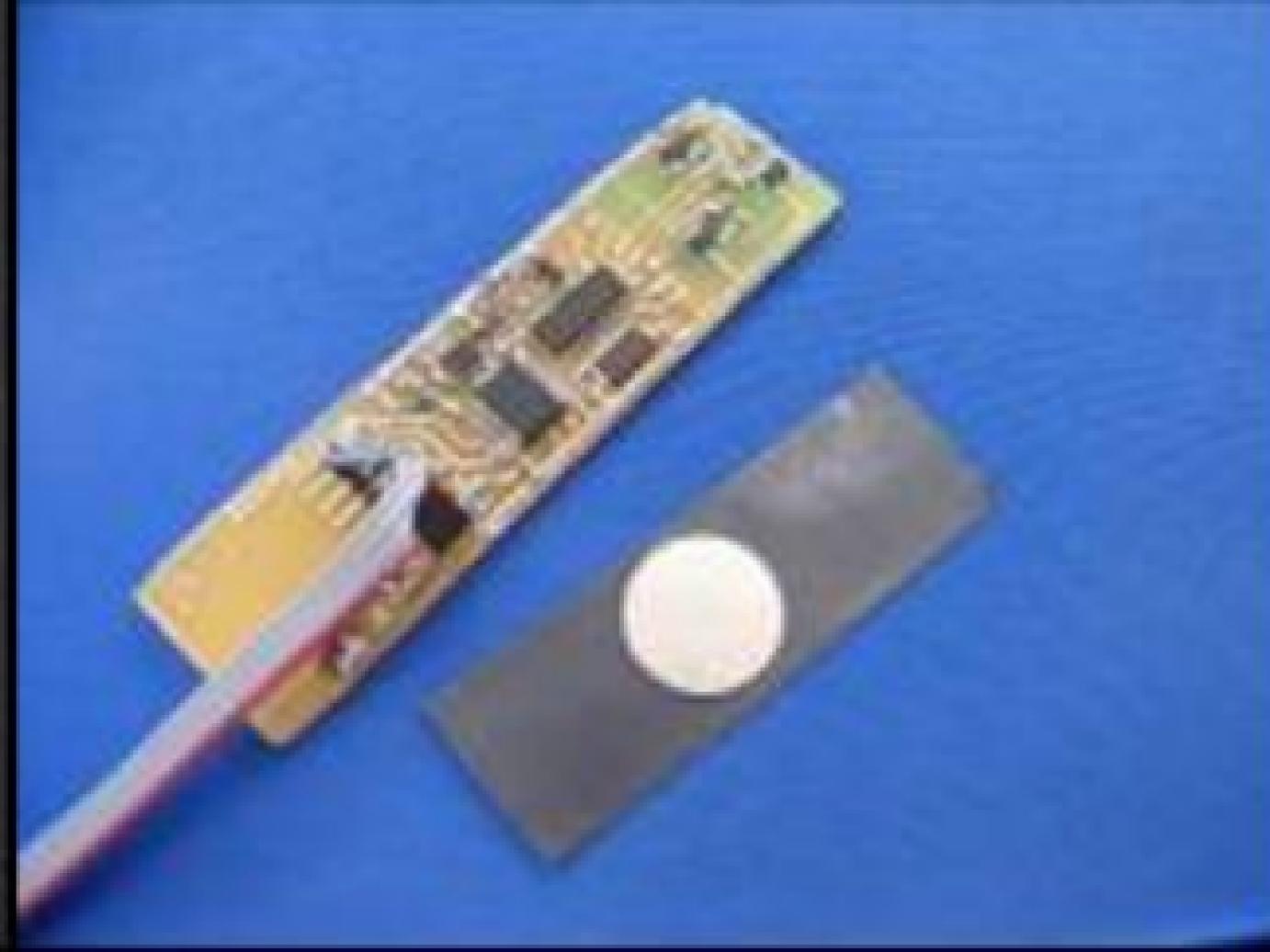
1. Publishable Summary.

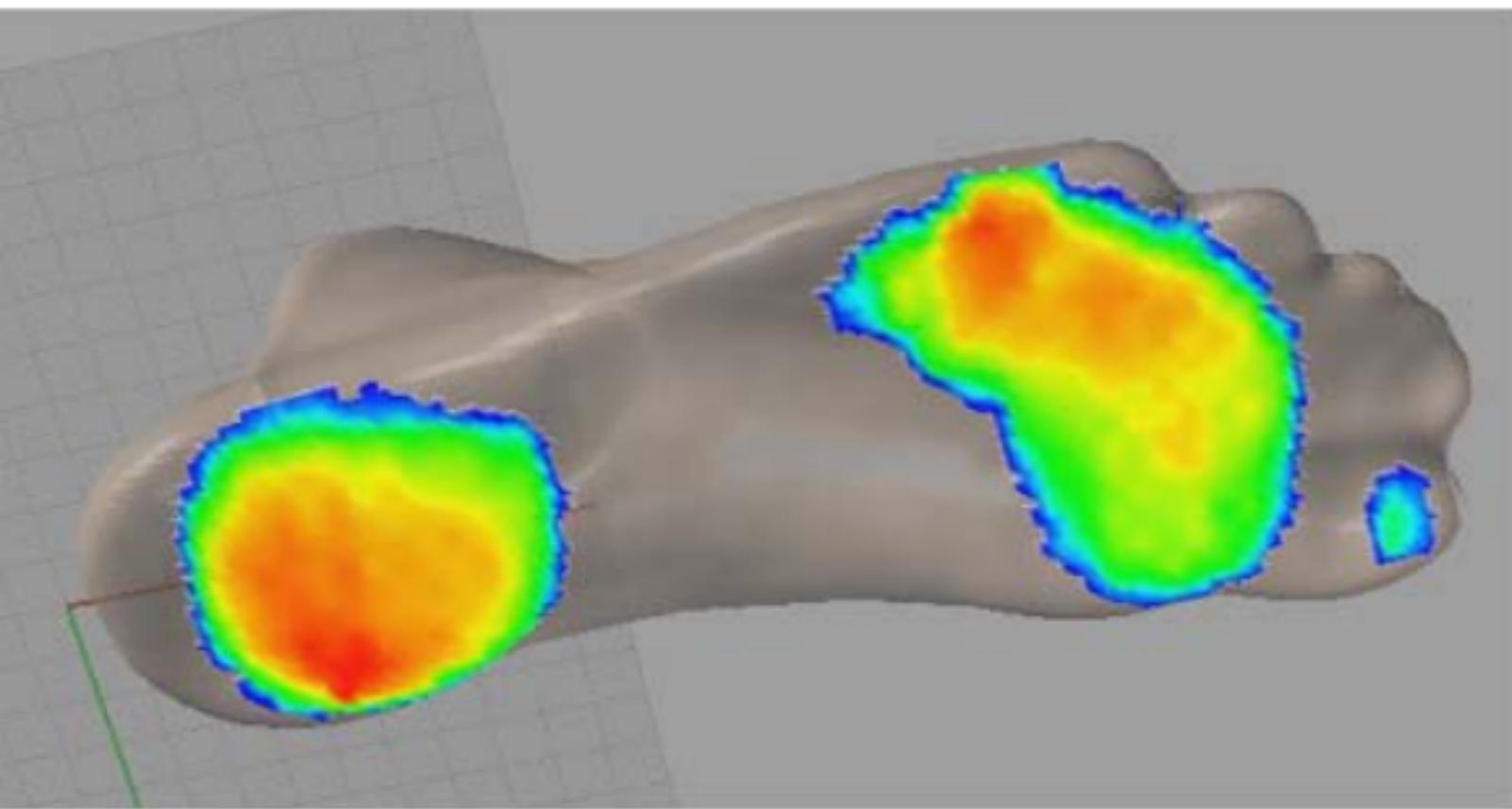
1.3 The following table summarises the results, expected impact and potential application.

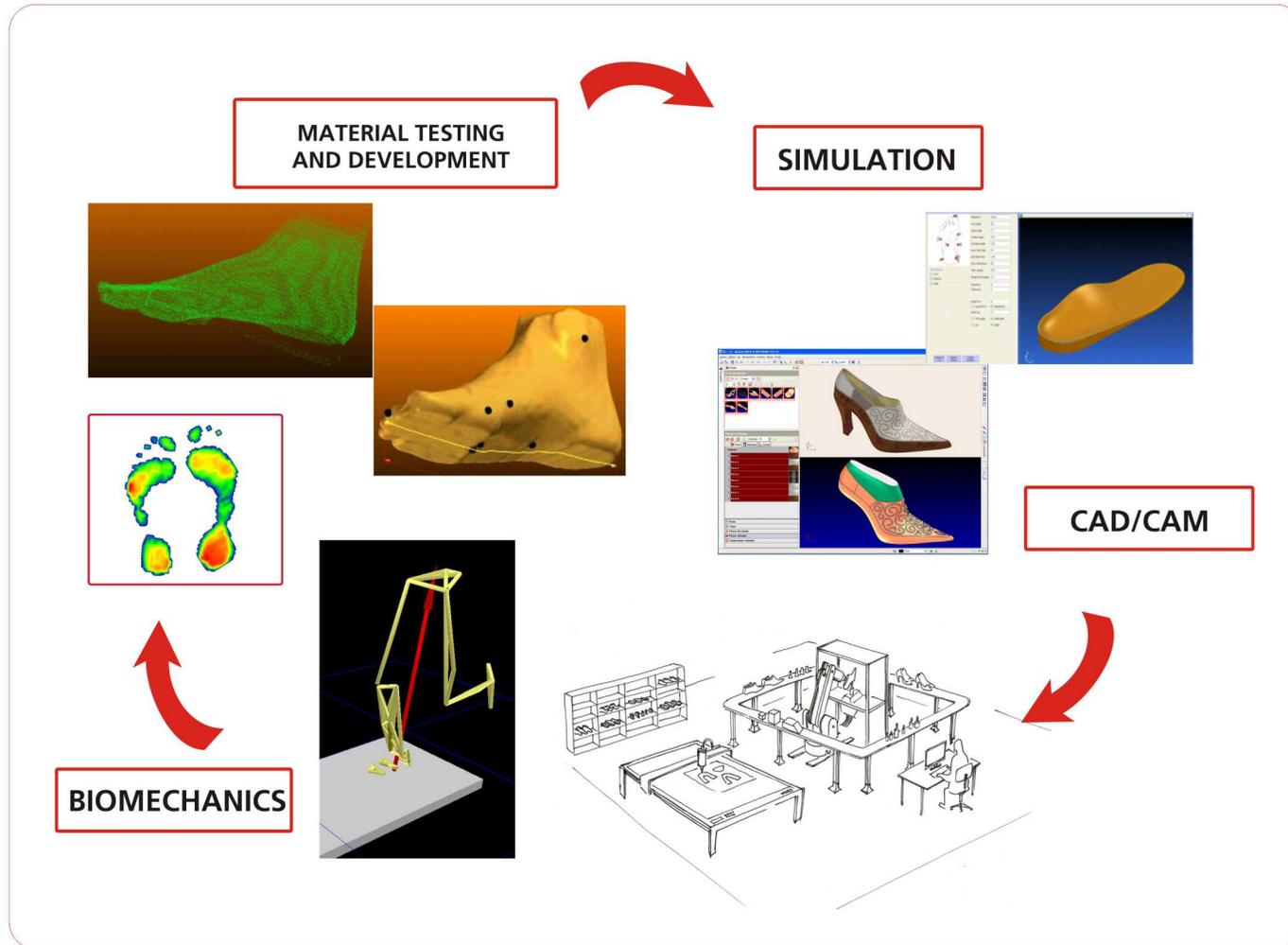
Project output/ result	Potential Application	Expected Impact	Partner(s) responsible for exploitation
Biomechanics algorithm	Use in new CAD design systems, shoe selection and diabetic feet treatment.	It will impact diabetic care services, orthopaedic shops and footwear makers, even fashion.	Universities and SMEs.
New shoe-insole designs	Direct exploitation for consumers	Increase market share and getting new clients outside Europe	SMEs
Simulator for materials combinations in insoles	Insole makers and shoe makers	New product	SMEs
Simulator of shoe-upper foot interaction	Integration into CAD systems and for biomechanical analysis and training	New product	SMEs
3D CAD for insoles, lasts, footwear with biomechanics KB module	Orthopaedic footwear and fashion footwear.	New product. KB design	SMEs under license from INESCOP and UNIVPM.
3D digitizer with pressure analysis and positioning feet.	Footwear makers, orthopaedic shops, biomechanics research centres.	New generation of device	AYCN, TYPSP, DUNA and SOLETEC
Portable gait and movement analysis	Orthopaedic shops, footwear makers, research centres	New generation device	AYCN
Monitor of activity and pressure	Clinics, research centres	New device	TPSP
Monitoring of fit for purpose	Clinics, RTDs, orthopaedic shoe makers	New device	A&CN
Procedure for last making	Orthopaedic shops, footwear for diabetic and customised shoes	New process	TPSP
Procedure for insole and outsole making by cryo/highspeed milling	Orthopaedic shops, footwear for diabetic and customised shoes	Increase market share	SOLETEC
Eng. Framework: Spain	Orthopaedic and fashion footwear	Increase market share	AYCN
Eng. Framework: Italy	Orthopaedic and fashion footwear	Increase market share	CNR-ITIA and DUNA
Eng. Framework: UK	Orthopaedic and fashion footwear	Increase market share	SOLETEC
Eng. Framework: Slovenia	Orthopaedic and fashion footwear	Increase market share	KOPITARNA

Prevalence of Diabetes Mellitus (Age 20-79) by Region, 2010 & 2030









-A system to integrate static and dynamic foot parameters and health information for comprehensive design criteria.

-Outsole + Insole design system

-Innovative 3D foot digitising system.

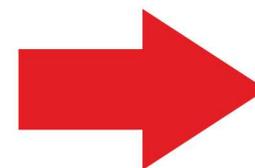
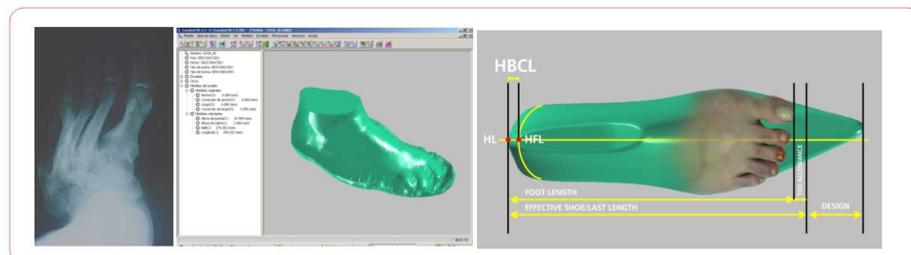
-A new approach to the sales point by means of user-friendly diagnosis technologies.

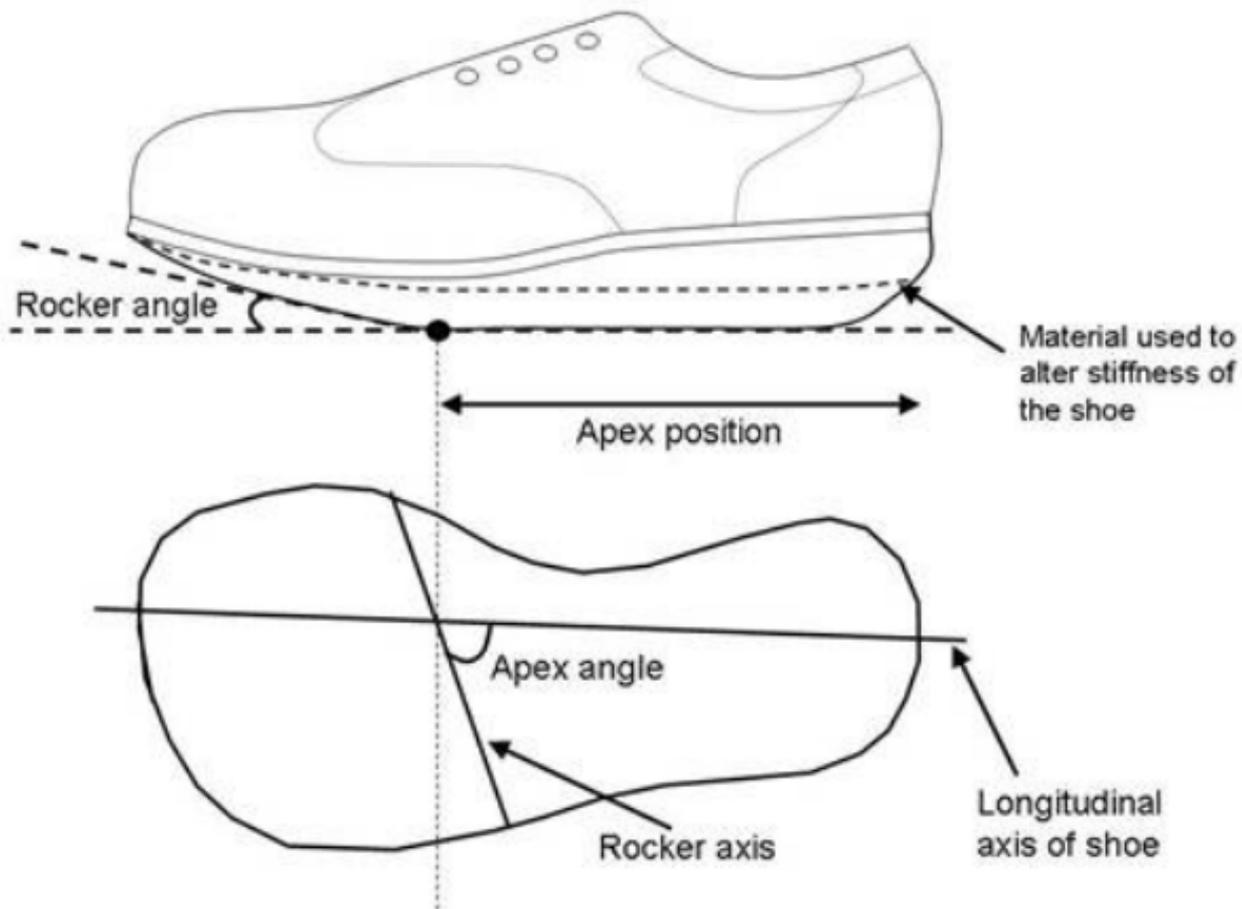
-A system to detect when footwear is no longer fit-for-purpose.

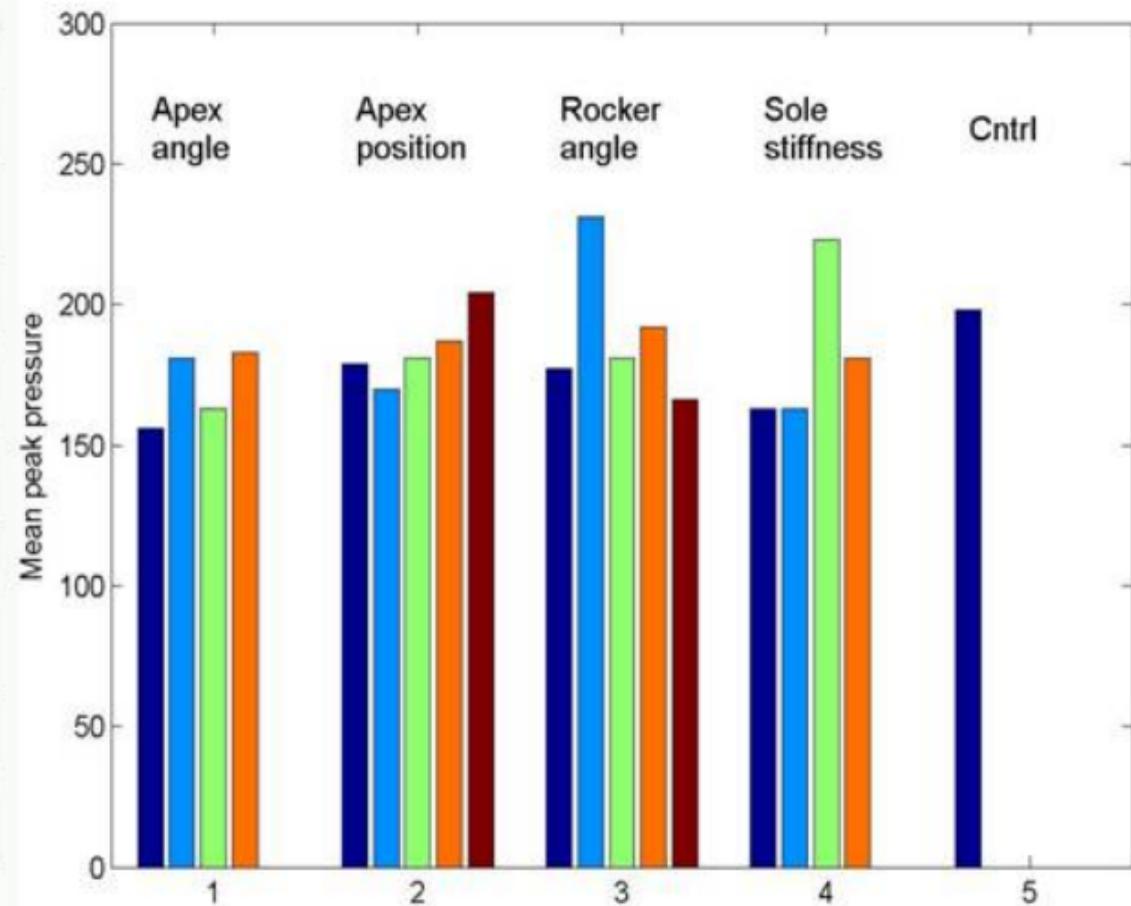
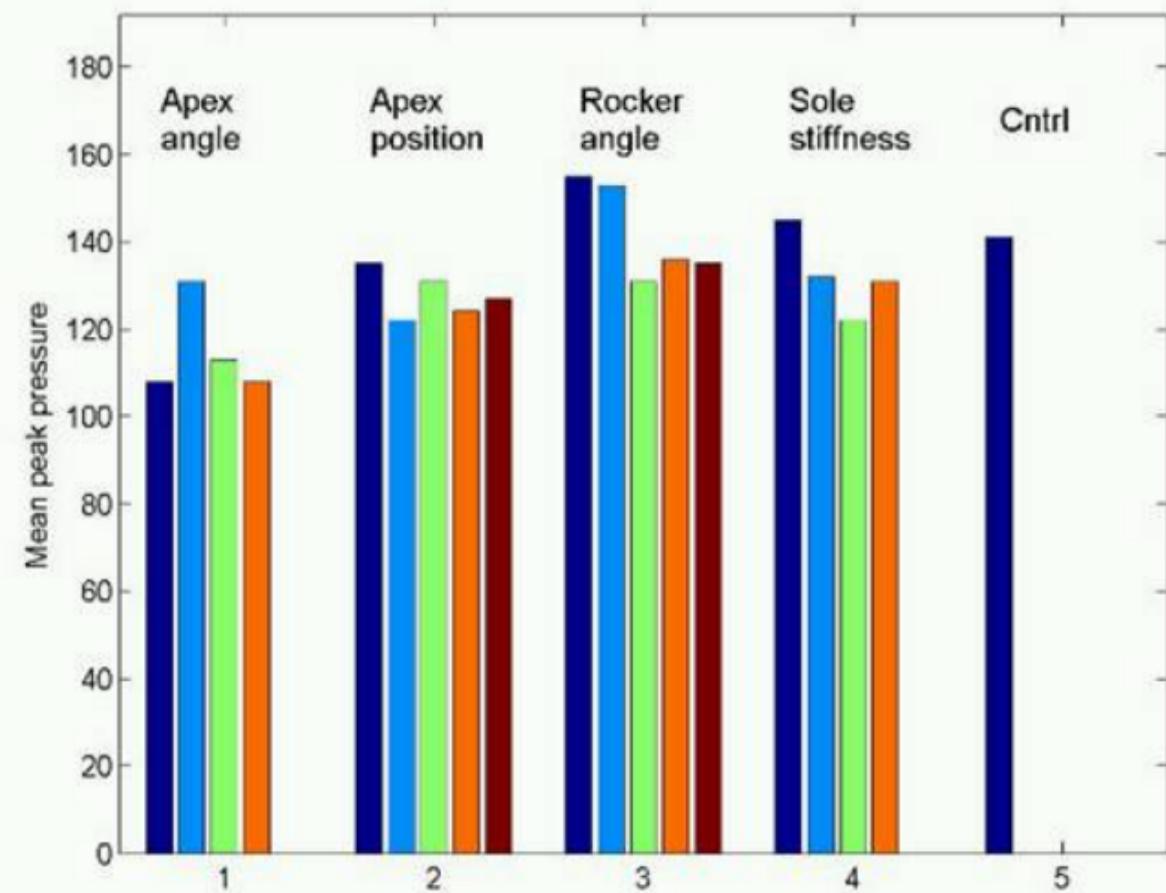
-Integrated product design based on comprehensive information (prescription).

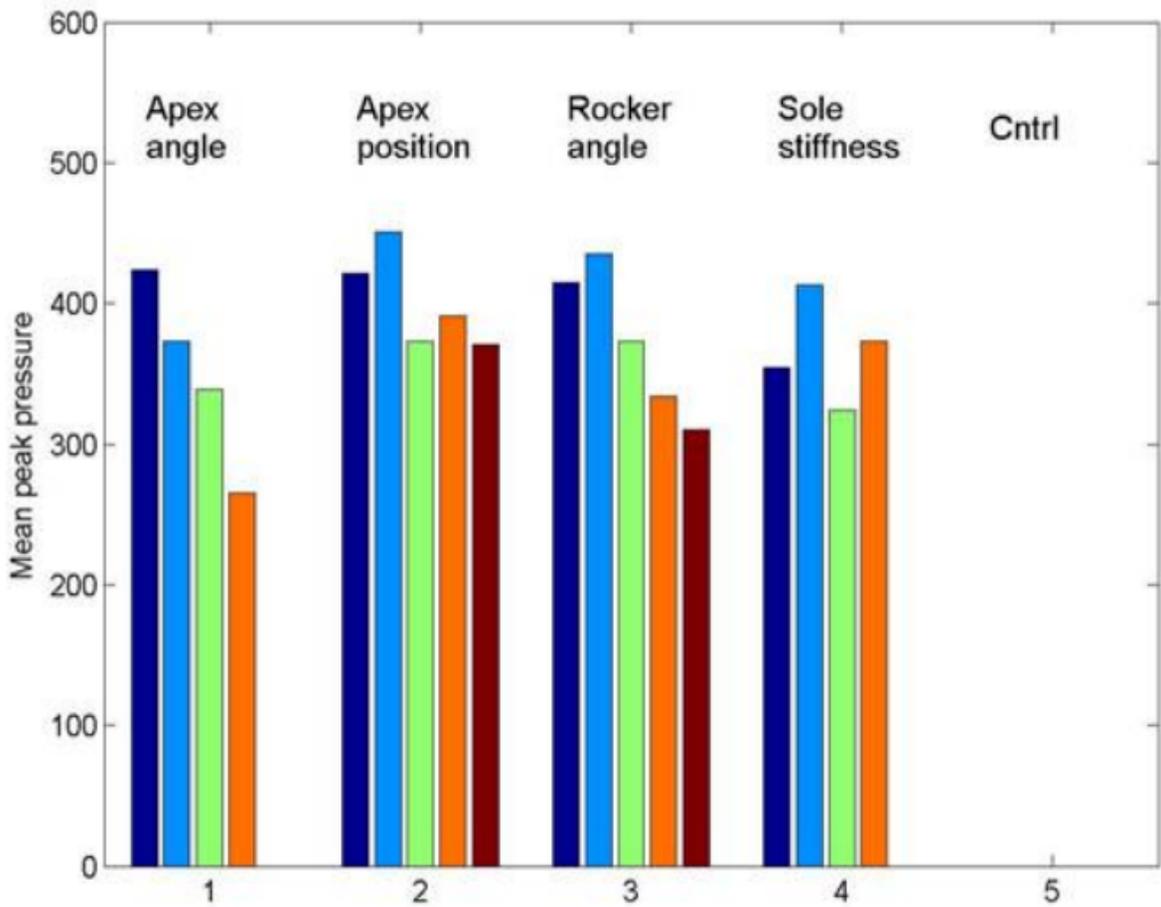
From real/physical models...

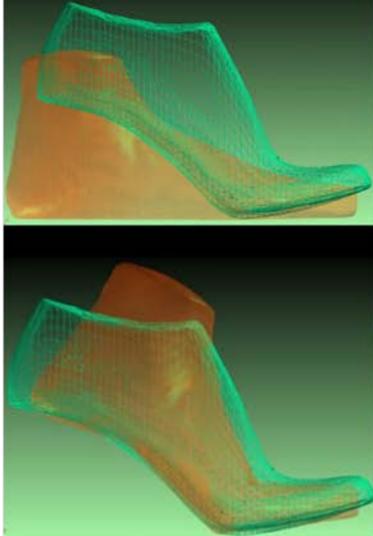
...To virtual models



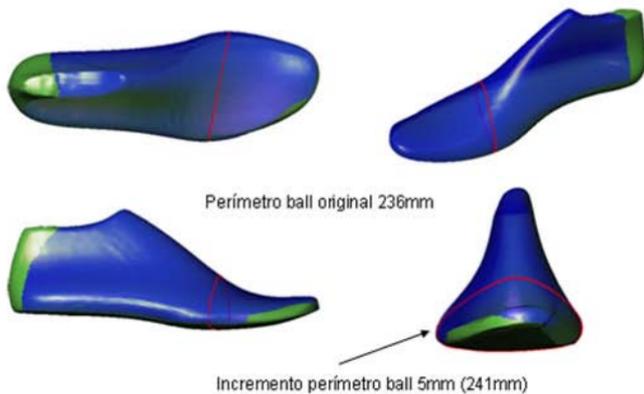




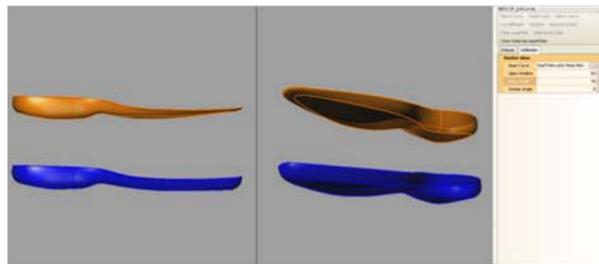
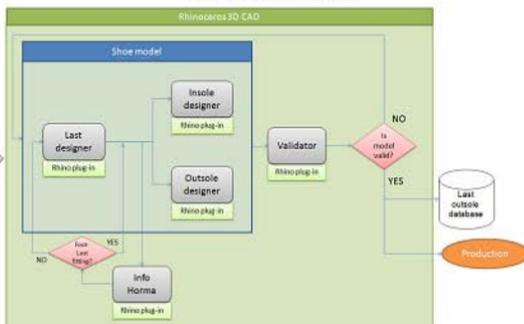




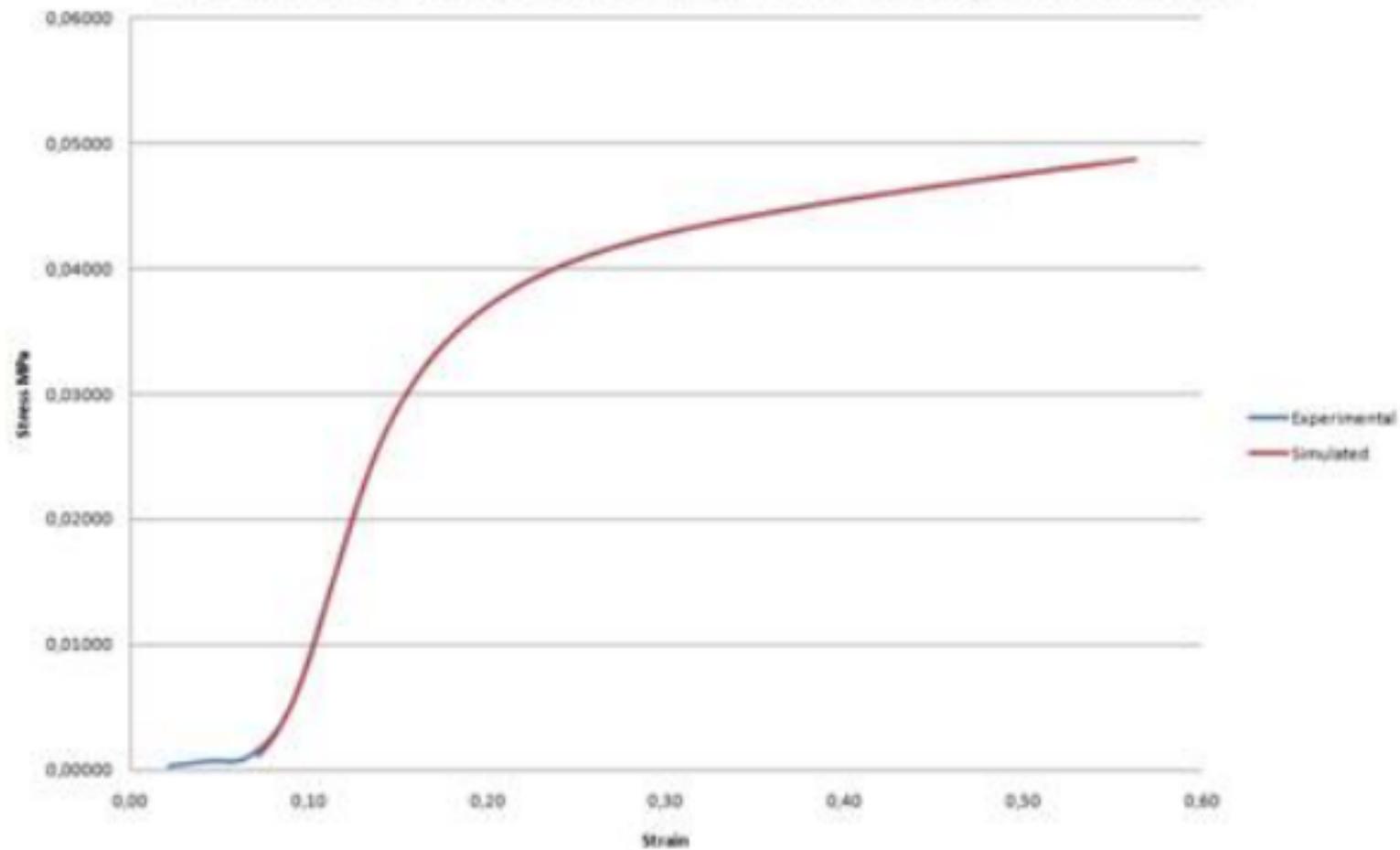
Horma rectificada curva ball +5mm



CAD Module architecture



Experimental vs simulated stress-strain curves for a single insole material



Experimental vs simulated stress-strain curves for insole combined materials

