



“Smart robotics for high added value footwear industry”

(FP7-2010-NMP-ICT-FoF)

Iñaki Murtua
Tekniker-IK4

Footwear production features (I)

- European Footwear Industry figures
 - 26,600 enterprises, €26.2 billion in turnover
 - Direct employment 388,000 people
 - Lost around 4% of its workforce per year over the last eight years
 - Production index in 2008: 50% of 2000
 - 70% of the value added is produced by SMEs



Footwear production features (II)

- Reasons for lack of automation:
 - The high number of products *variants*
 - *Complex manufacturing* process
 - *Complex assembly* process
 - *Manual* quality control and packaging
- Consequence: *Extensive labour demand*



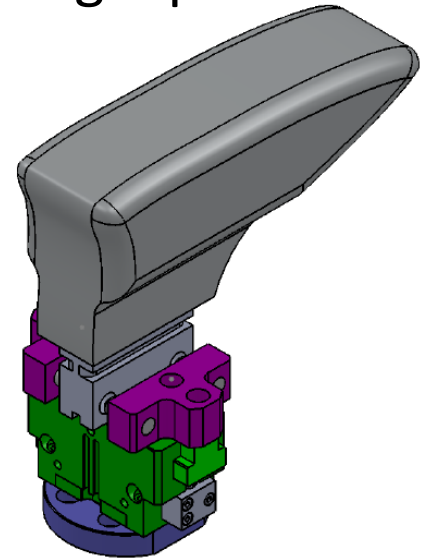
End-users needs

- Flexibility
- Quality
- Production process
- Efficiency
- Working conditions
- Reduction of cost



ROBOFOOT Approach

- Different programming approaches
 - CAD and sensor based programming
 - Manual guidance devices for Programming by demonstration
- Manipulation
 - Manipulation strategies and devices for non-rigid parts
- Sensor based control strategies
- Footwear Manufacturing
 - Last redesigning
 - Roughing, gluing, finishing operations
 - Quality assurance
 - Packaging



ROBOFOOT Consortium

