WEARPLEX Beta Workshop: Electrode manufacturing

Jenni Isotalo
Roelof Aalpoel, Antti Tauriainen
Screentec Oy, Finland

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Introduction

Medical Electrodes

- Bio-impedance
- ECG
- EMG and TENS
- EEG
- Custom sensors
Introduction

» Flat bed screen printing  
   Sheet and R2R processes
» Heat and UV-curing  
   Sheet and R2R processes
» Lamination (cold and heat)  
   Sheet and R2R processes
» Mechanical cutting  
   Sheet and R2R processes
» Laser cutting  
   Sheet process (R2R coming H1/2021)
» Dispensing  
   Manual and automated sheet processes
» Mechanical parts  
   3D Printing
» Assembly  
   Electrical components, mechanical parts, connectors, final product assembly, testing
» Cleanroom  
   ISO 7
Textile printing
The camera system

Saving images and data for further control

Sheet code bar

Sheet limits

Printed sheet

Sheet code bar

Sheet limits

Reference Sheet

Sheet limits

Diff
Future developments for WEARPLEX

» Textile, primer and inks from the partners → Print trials, sheet-to-sheet at first

» Process development

» Camera development:
  » Later we want to do some statistical analysis and quality control
  » Develop the accuracy of the system when it come to a high number of layers
  » Make real-time registration with possible correction actions to the system.