



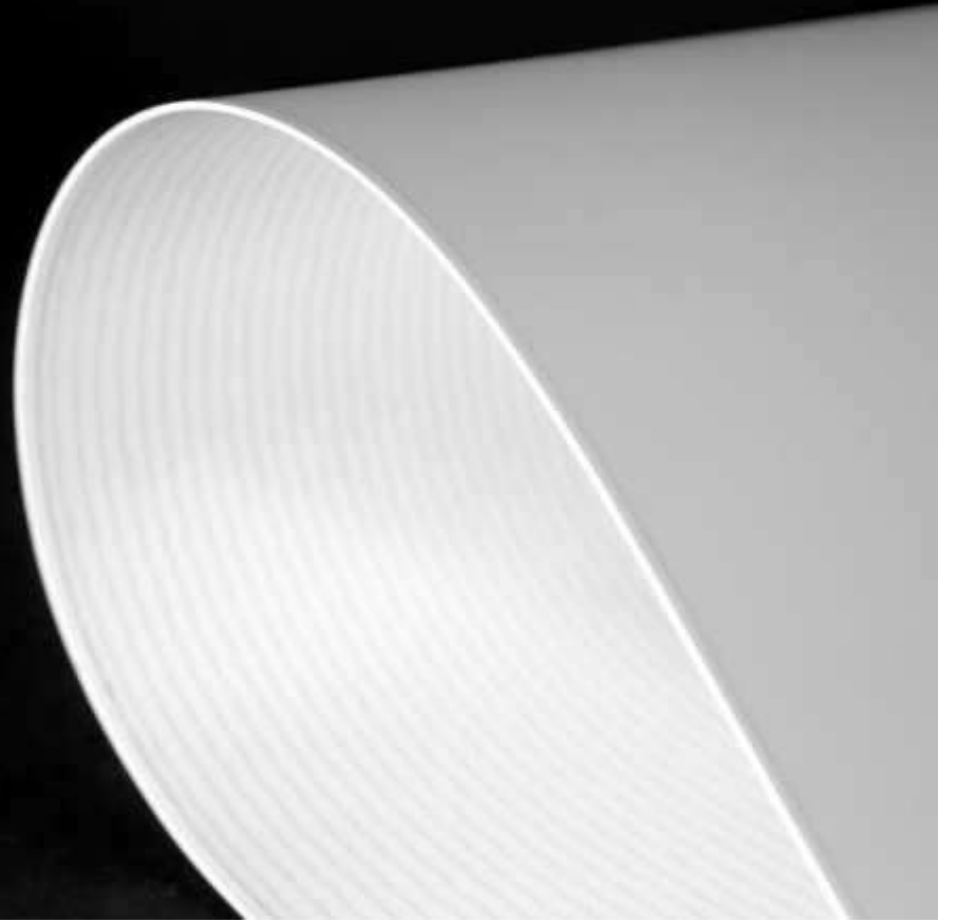
# ESBELT 4.0

06/2018

Lara Aragonés-Continuous improvement

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# COMPANY INTRODUCTION



# ESBELT, S.A

European manufacturer founded in 1970, with central headquarters based in Barcelona, industrial facilities in Manlleu, and supplier of:

- Conveyor & power transmission belts
- Cleats and guides.
- Round & vee belts for lightweight conveying.
- Machinery for Fabricating Conveyor Belts, Profiles and Extruded Belts
- Buckets

Esbelt is a strong internationally oriented company with exports representing more than 75% of its total billings.

Esbelt, S.A is the holding company of 4 subsidiaries:



**Esbelt GmbH**  
Neuss - Germany



**Esbelt SAS**  
Toulouse, France

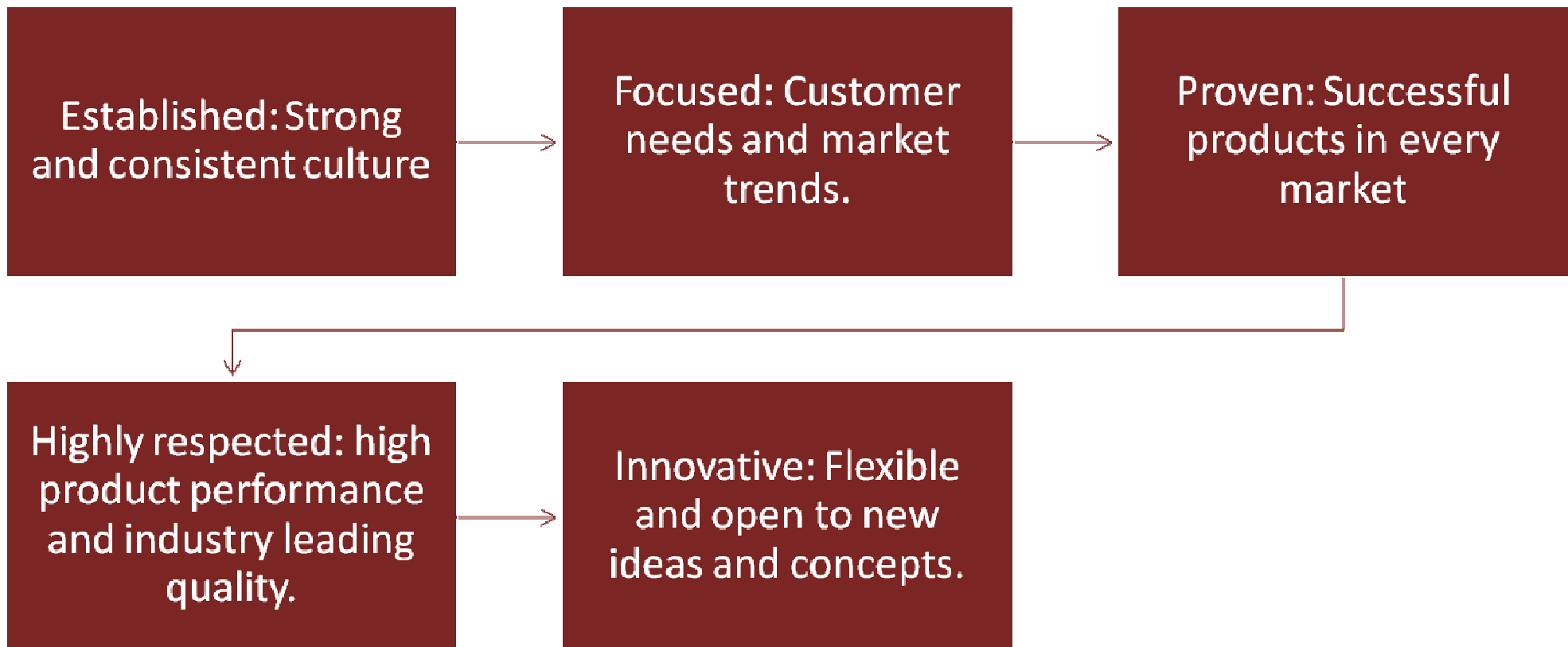


**Esbelt Corp.**  
St. Louis, Missouri - USA



**Esbelt APS**  
Odense - Denmark

# COMPANY ASSETS



# WORLD WIDE PRESENCE

Service points in more than 80 countries in all 5 continents



# CHARACTERISTICS

## Customer-centric organization

- Consultative selling.
- Industrial flexibility
- Hot-line in: English, French, Chinese, Spanish, Russian, German, Japanese, Catalan.

## Compromised with standards & regulations

- ISO 9001, ISO 284, ISO 340, ATEX, FDA, 2002/72/EC

## Broad range of products

- Industrial, agricultural, general purpose, food oriented belts, process belts, complements & machinery

## Online information

- Always updated information in [www.esbelt.com](http://www.esbelt.com)

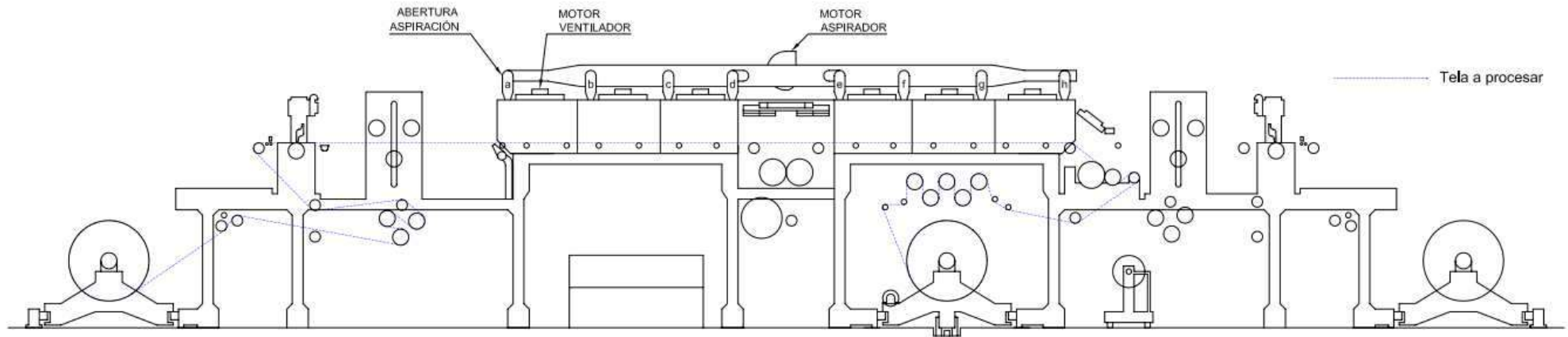
# ESBELT 4.0



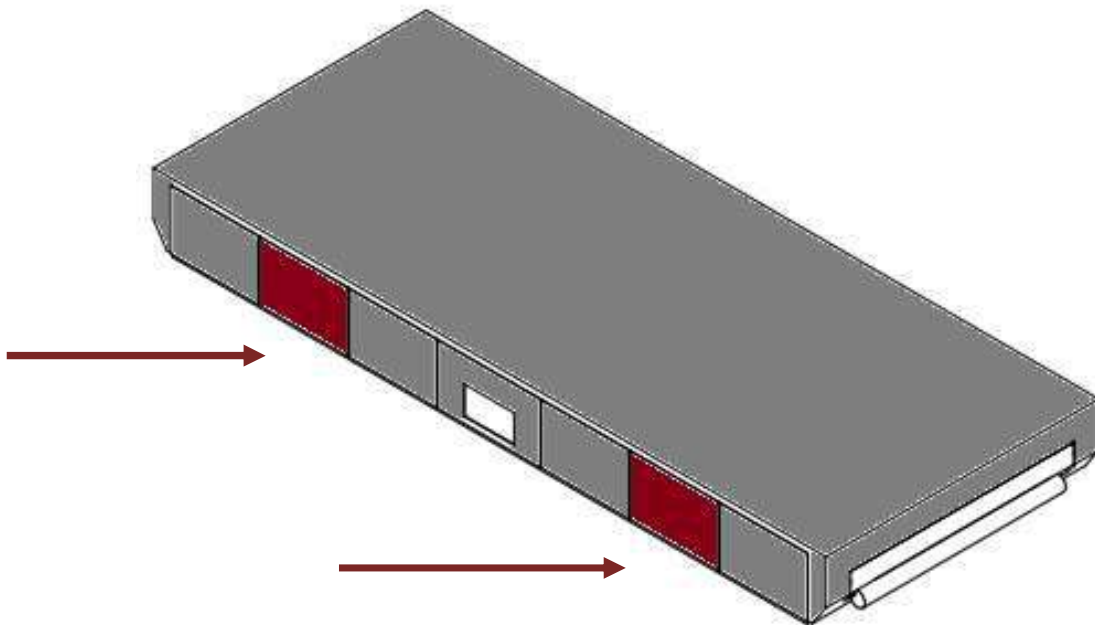


# ESBELT SCENARIO

- Process production: Fabric + PVC + temperature = conveyor belt.
- Problem: unknown temperature stability inside of the oven ( 12m x 3m)
- Lack of information in each point of the oven. This certain instability of temperature inside the oven can lead to quality problems.



# FUTHERMON SOLUTION



Monitor the temperature of the oven every 30 centimeters every second, without wires:

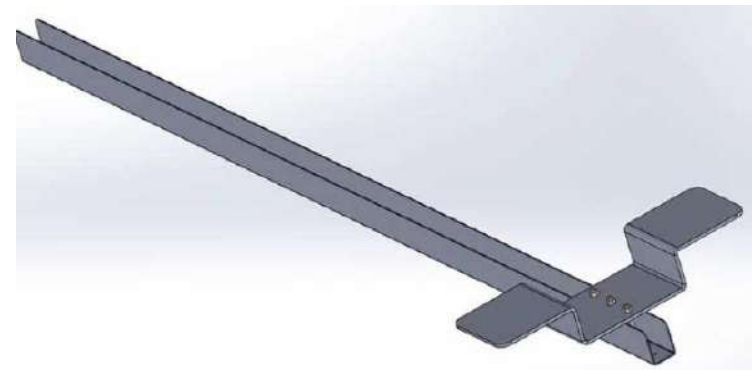
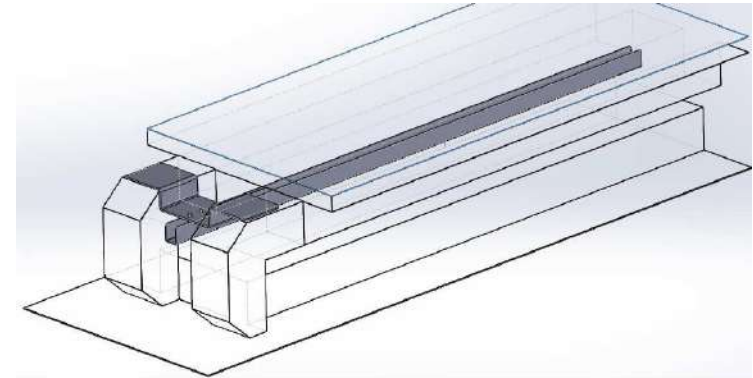
- Set of sensors distributed in 2 of the modules of the oven.
- 2 nodes in every module with 4 sensors each.
- Wireless sensor sending information throughout LoRa standard communication

# HEATMAP



# TURN KEY SOLUTION & BENEFITS

- The solution provided from AEInnova to Esbelt was:
  - Designed solution
  - Treatment of data and visualization
  - Electrical design
  - Mechanical design
  - Installation of the solution in place.
- What furthermore has brought to Esbelt:
  - Data traceability
  - Historic temperature at each point for each production.
  - Quality analysis in case of non quality production.
  - Data parametrization for productions



# **esbelt** Your belt manufacturer

We add value with product availability, service and advice. We believe in loyalty.

We respect our customers with fair pricing and optimal solutions.

We are fast, responsive and strong in R&D.