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**GROUP**

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BU spring presentation



A large red geometric shape, resembling a triangle with a slanted side, occupies the upper left portion of the slide. A thin horizontal line extends from its right edge towards the text.

# I. Global presentation



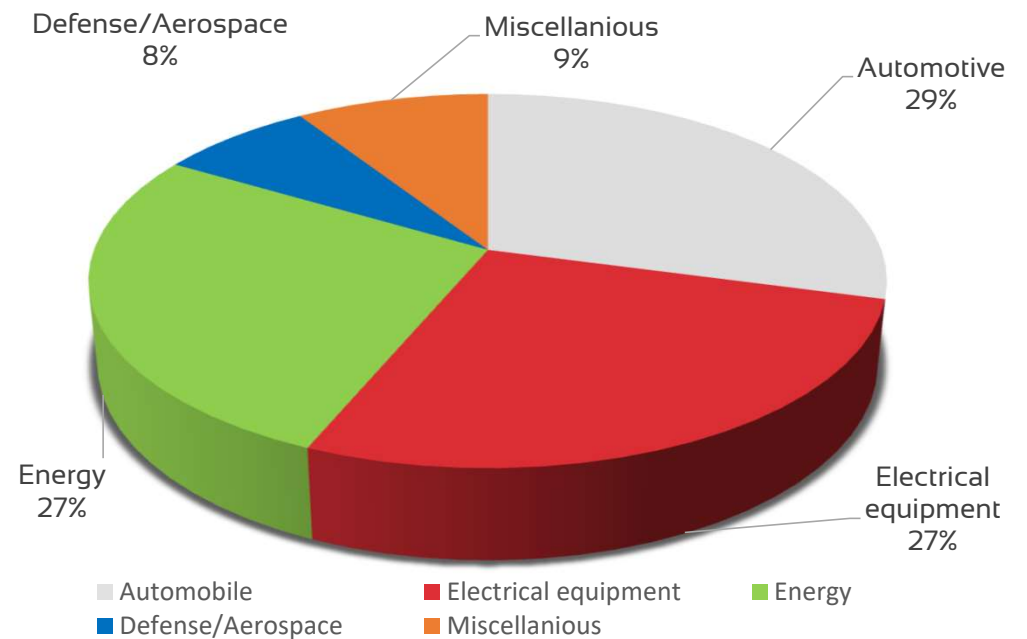


## BU spring's profile

### Main figures

<b>Surface :</b>	<i>6290m<sup>2</sup></i>
<b>Employees :</b>	<i>120</i>
<b>Turnover :</b>	<i>17M€</i>
<b>Quantity of part delivered :</b>	<i>+200Mpcs / year</i>
<b>Quantity of customers :</b>	<i>260 customers worldwide</i>
<b>Quantity of reference :</b>	<i>More than 2000 active references</i>

### Business repartition





# What is a flat spring ?

## Functions :

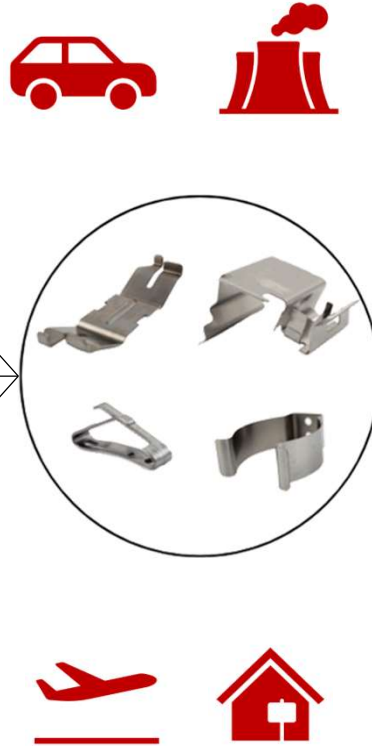
- Spring effect
- Complex part
- Guaranteed force ...

## Applications :

- Clips
- Fasteners
- Electric contacts ...

## Material used :

- Stainless steel & Carbon steel
- Copper alloy
- Iron nickel alloy...



## Main advantage :

Multi-slides process (mechanic or numerical cams).

- ➔ Cut and bended in the rolling direction.
- ➔ Part width is the same than material roll width to reduce the material scrap
- ➔ Such a better bending quality





## 2. Knowledge & activities



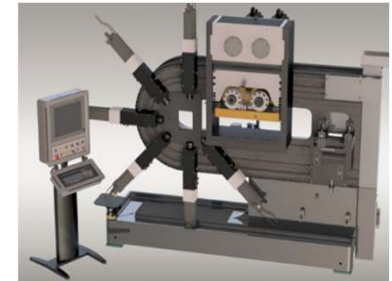


## BU Spring activities – Medium and High series

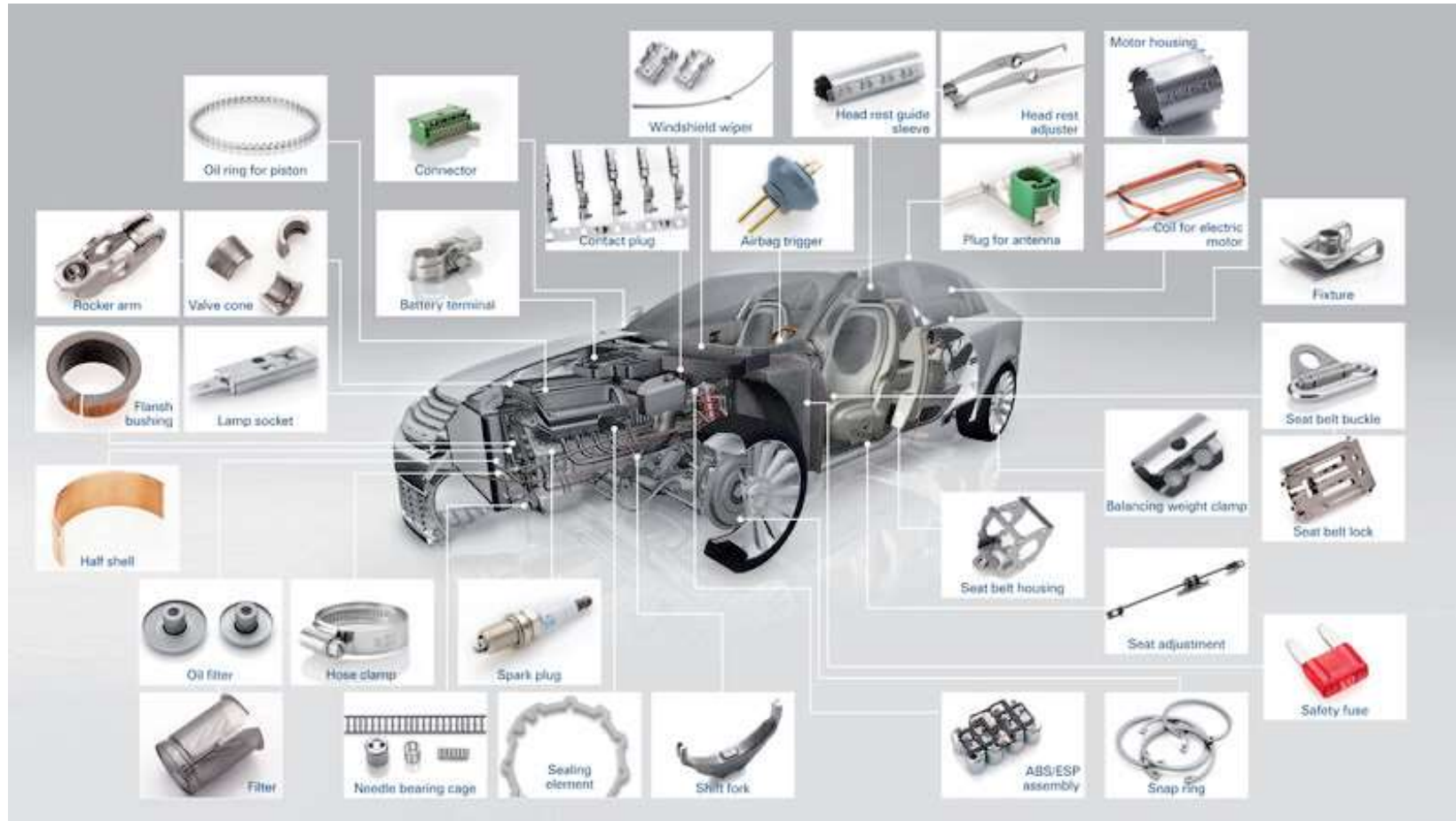
UP1



- Dedicated to **High and Medium** runners (>500Kpcs/years).
- **60** employees.
- Main activities: **Automotive** (50%), **Electric equipment** (35%), **Other** (15%).
- Processes: **Multi-slides** technology:
  - 40 multi-slides machines (35 Bihler & 5 Numerical pressmac)
- **Additional** processes:
  - 3 furnaces for stabilization.
  - 1 furnace for setup.
  - 1 degreasing line.



# Automotive market for multislade technology





# Home appliance market for multislid technology







## BU Spring activities – Small series

UP2

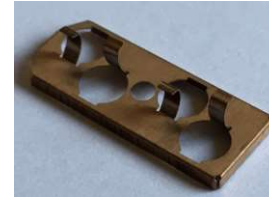
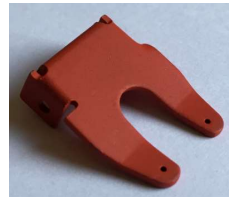
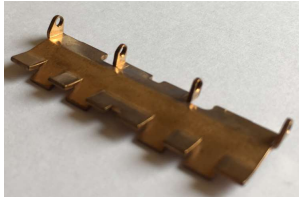


- Dedicated to **Small** series (from 1 to 100Kpcs/year).
- **22** employees.
- **Diversified** market served: **Electric, Medical, Energy, Defense...**
- Processes: **Progressives, standards** and **specifics** tools.
  - 25 presses 6T to 80T.
  - 2 taping machines.
  - 1 manual cutting machine.
  - 3 assembly stations.



## BU Spring activities – Small series

UP8

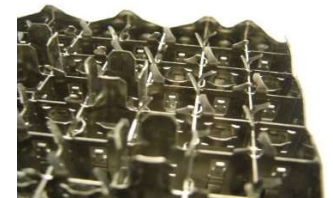


- Dedicated to **Aerospace** market.
- **5** employees.
- Processes: **Progressives**, **standards** and **specifics** tools.
  - 20 presses 1T to 40T.
  - 1 drilling machines.
  - 1 manual cutting machine.
  - 1 tribofinishing machine.



## BU Spring activities – Small series

UP3



- Dedicated to **Nuclear** market.
- **25** employees.
- Production of **Nuclear Power Plant Components**.
- Processes: **Transfer** and **Progressive** tool.
  - 10 presses 20T to 320T.
  - 1 dedicated degreasing line.
- **Additional** processes:
  - 1 dedicated control unit (100% visual control).
  - 1 dedicated packaging area.
  - 2 dedicated automatic optical control machine.