



**J-TECH**  
@POLITO



25,000 sq.m.

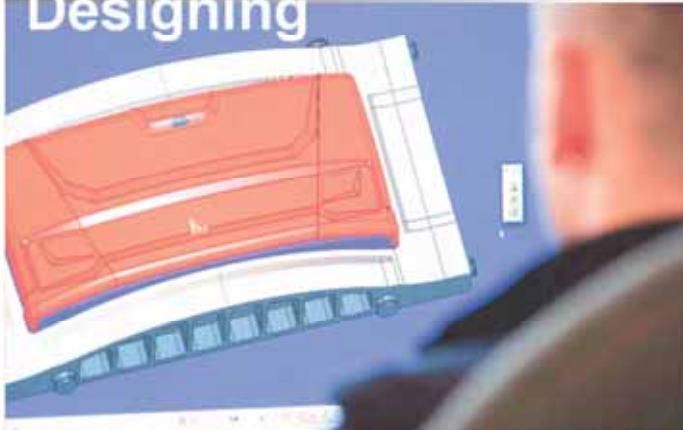


# We can be your partner in

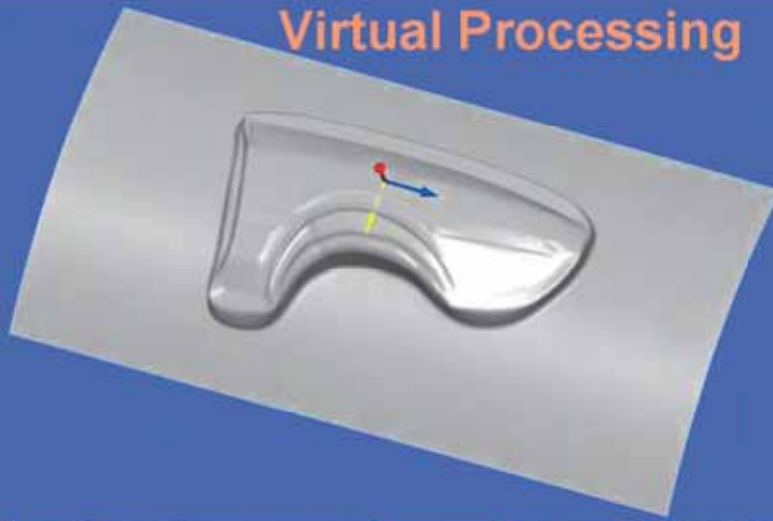
- Tool design and construction of forming tools for car body parts production
- Co-engineering and part development
- Forming simulation and feasibility study
- Forming tool machining and finishing
- Production of sheet-metal steel parts for prototypes and series
- Laser cutting and laser welding
- Assembling of sheet-metal parts and welded parts
- Testing and measurement of sheet-metal parts



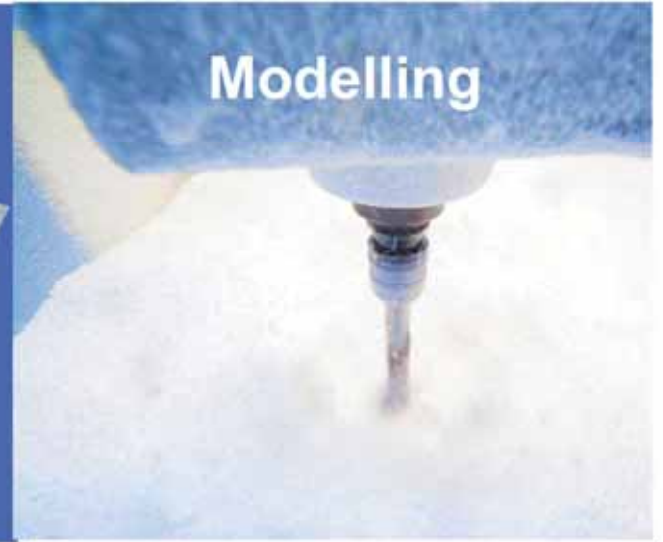
Designing



Virtual Processing



Modelling



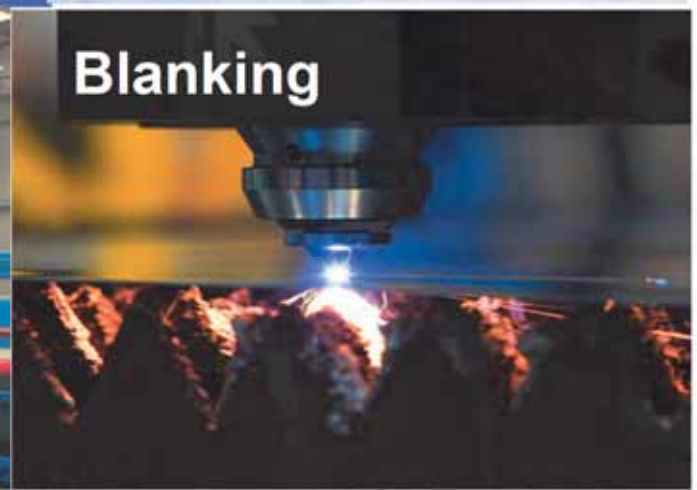
Milling



Automating



Blanking



Stamping



Trimming and punching



Verifying



euro dies

# Examples of production

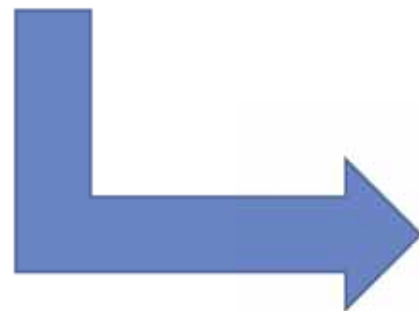


# Main customers



# Caso studio - Battery case

- *Leghe non tradizionali e dissimili*
- *Provenienza da processi di trasformazione differenti*
- *Stringenti specifiche geometriche e funzionali del prodotto*



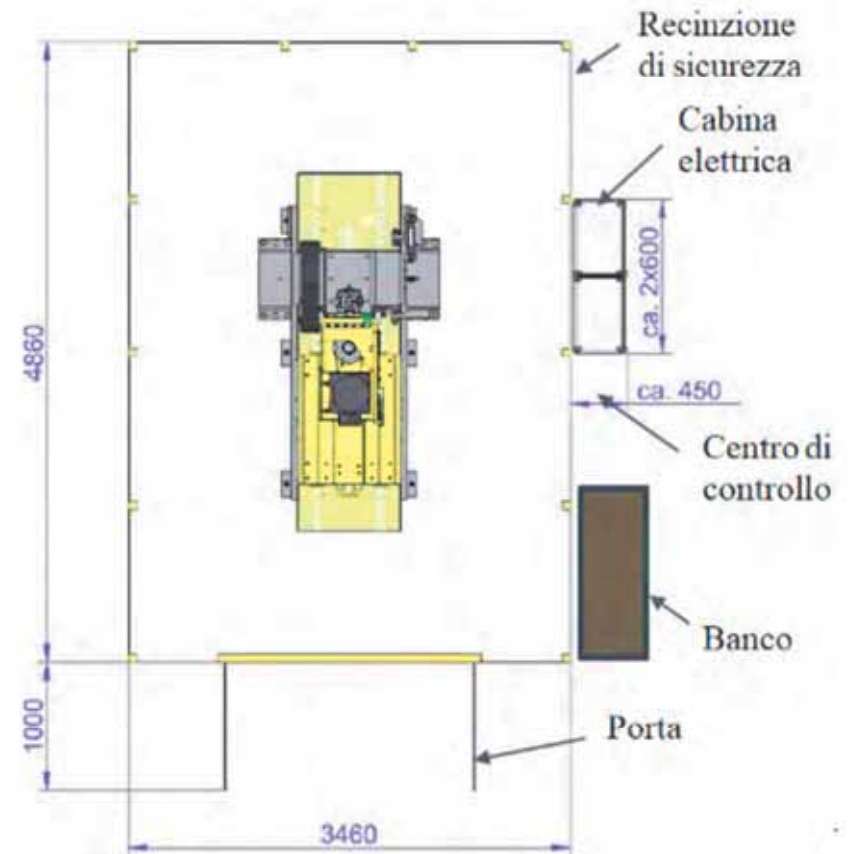
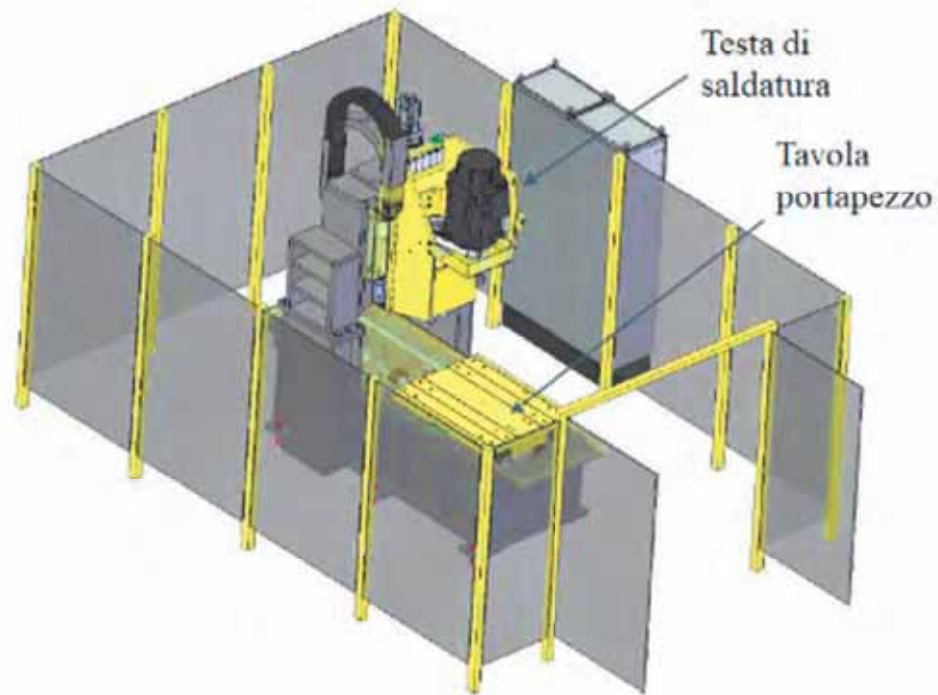
*Adozione di tecniche di saldatura innovative*

# Caso studio - Battery case





# Friction stir welding (FSW) machine



- coppia da 600 Nm (Stirtec)
- 100 kN forza verticale, 50 kN forze laterali
- saldature lineari
- saldatura di acciai, leghe di alluminio, titanio, rame, ecc...
- monitoraggio in-line della saldatura

# Scenario

**Dissimilar materials**



Saldatura per fusione  
(laser ed arco)



Saldatura allo stato solido  
(FSW)





engineering together