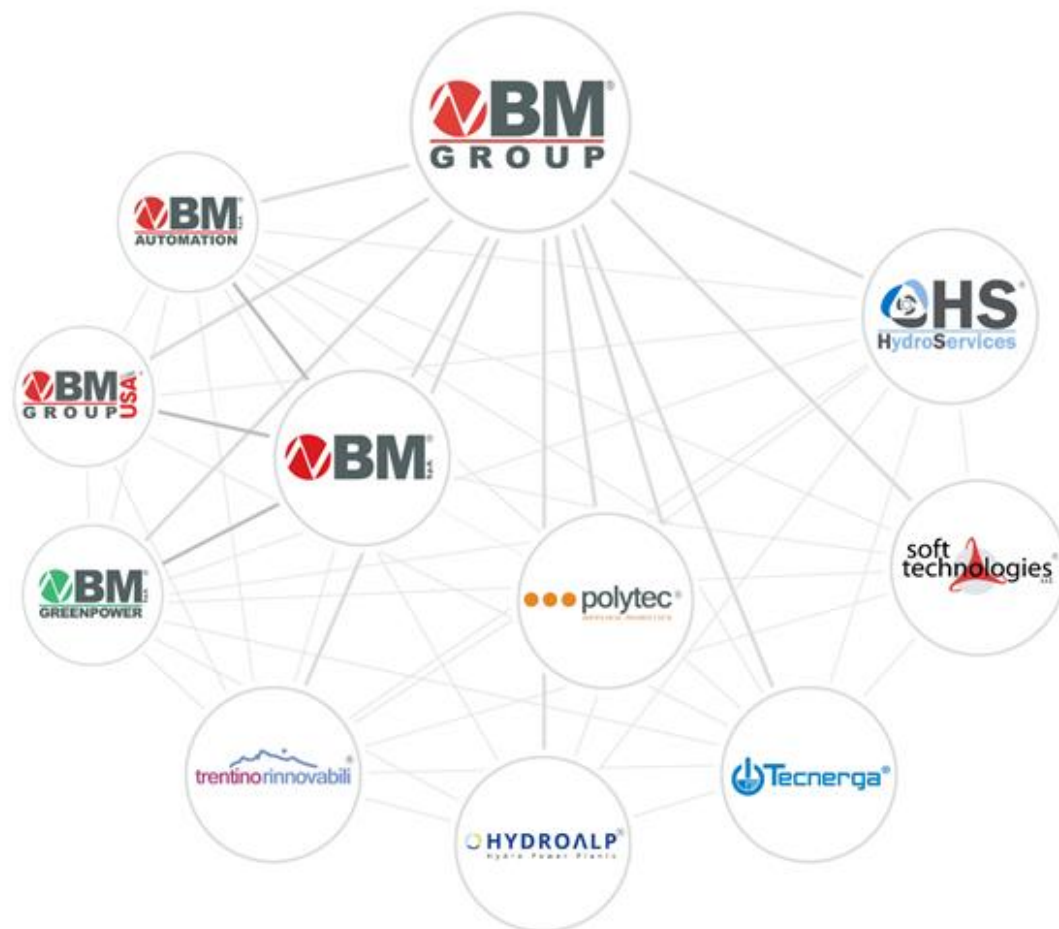


# INTEGRATED SOLUTIONS P R O V I D E R

A GEOMETRICAL AND THERMAL MEASUREMENT SYSTEM FOR THE  
DIMENSIONAL CONTROL OF BLOOMS SECTIONS

MICHELE VEZZOLA, BM Group, Italy

# WHO WE ARE

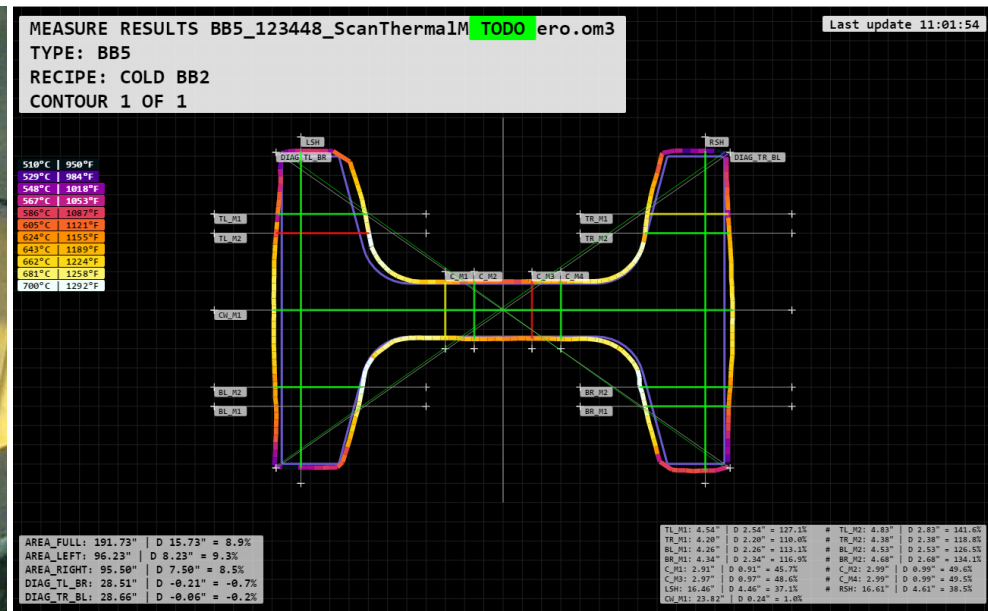


# WHO WE ARE: Robots for steel production



# THE SYSTEM : PolySHAPE

- Blooms section geometrical measurement
- Surface temperature map evaluation



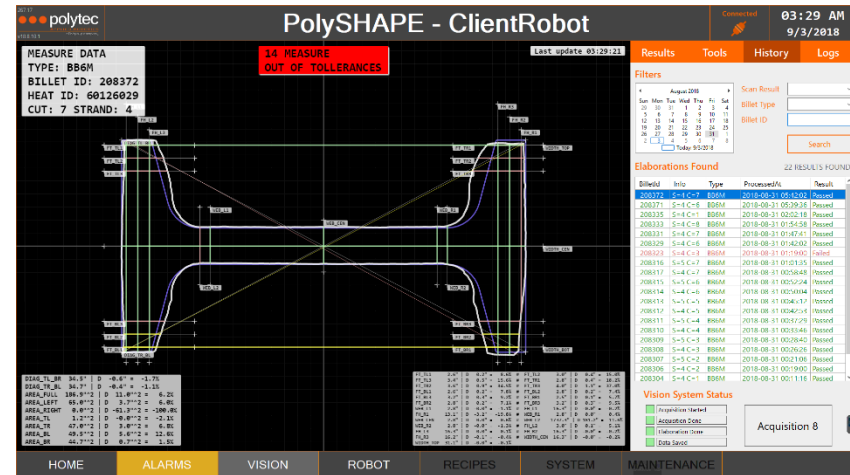
# THE SYSTEM : PolySHAPE

- video

# THE SYSTEM : PolySHAPE

## TARGET:

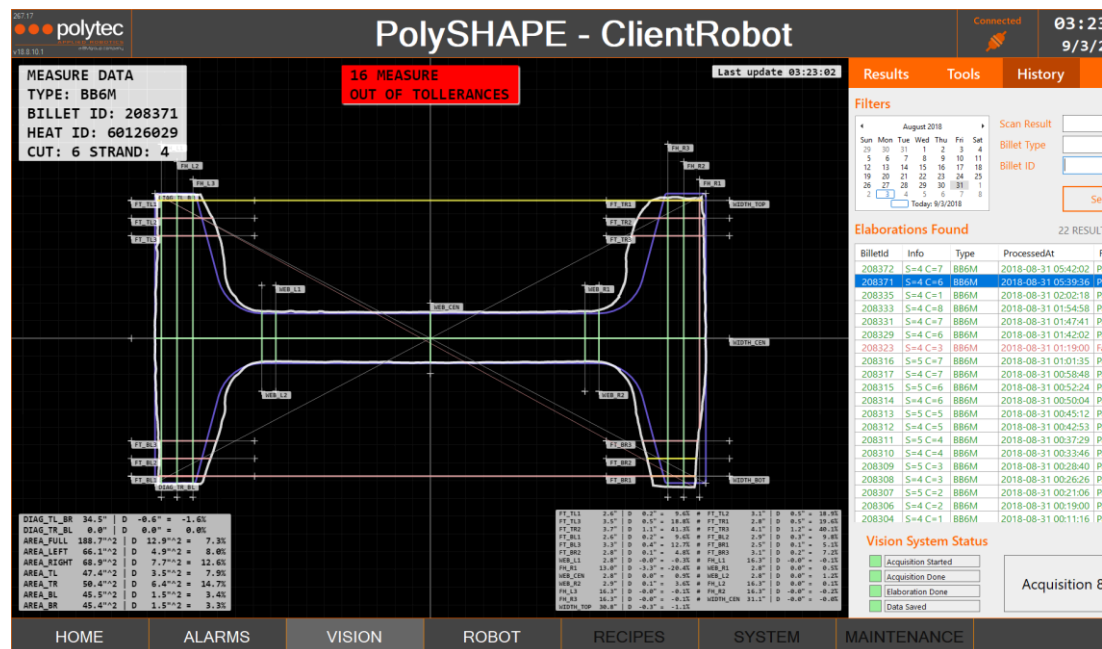
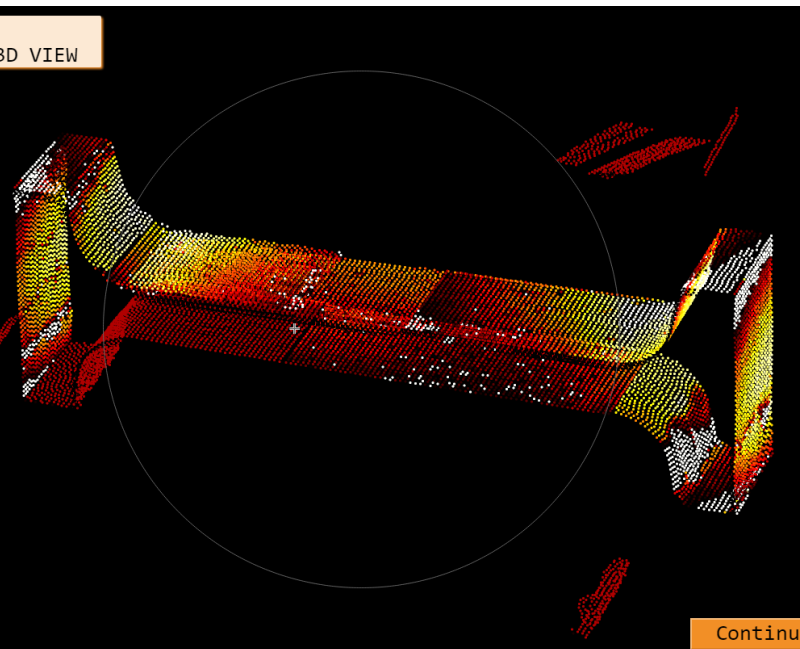
- Differences indetification between the real dimensions and ideal dimensions
- Actuating correction actions on CCM





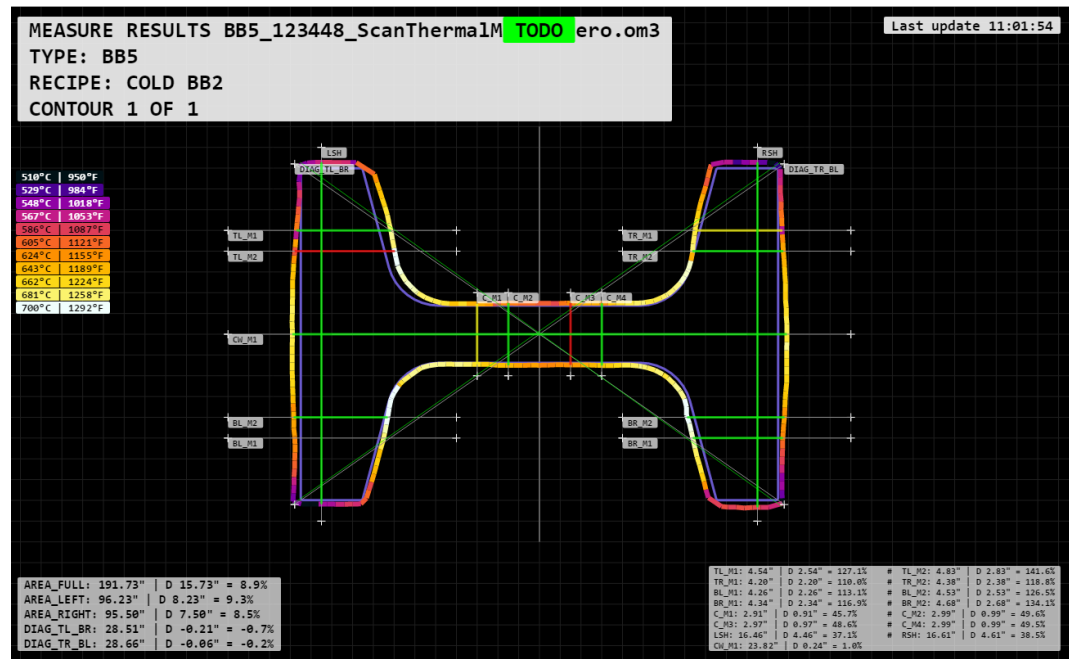
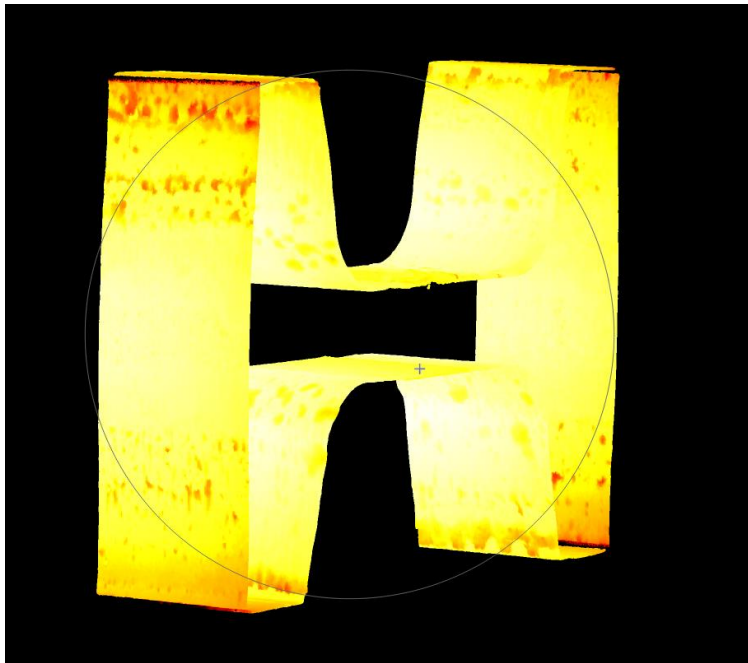
# THE SYSTEM : PolySHAPE

- Geometrical measure by laser scanner
- Total accuracy: +/- 2 mm for 1 m sections



# THE SYSTEM : PolySHAPE

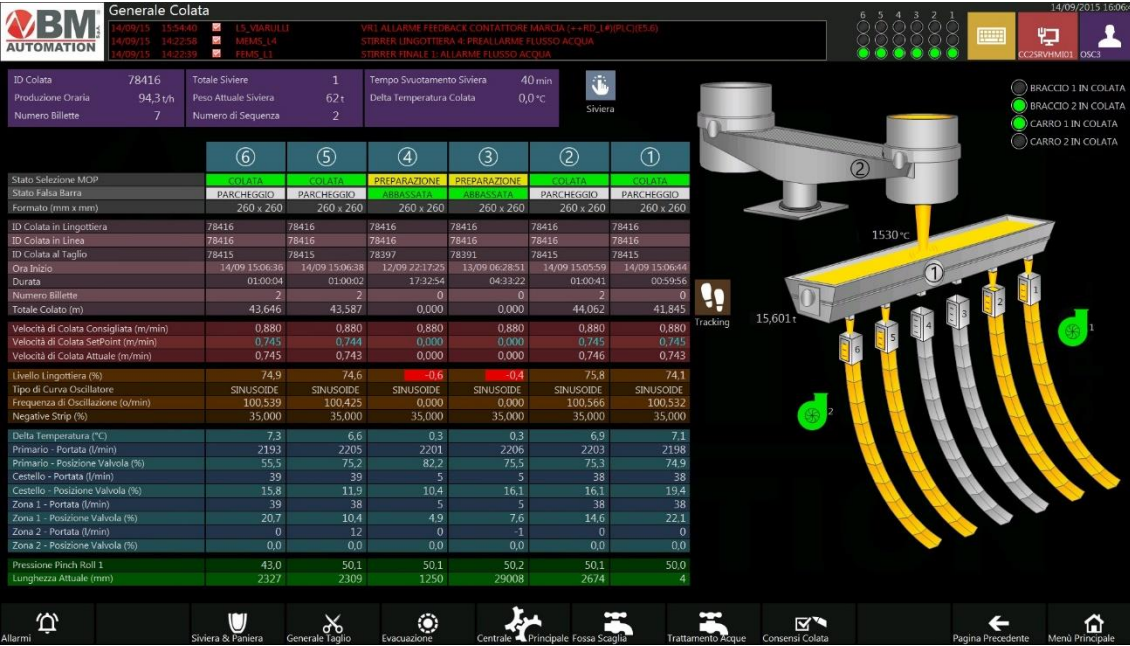
- Thermal measure by thermo camera
- Correlation between dimension and temperature





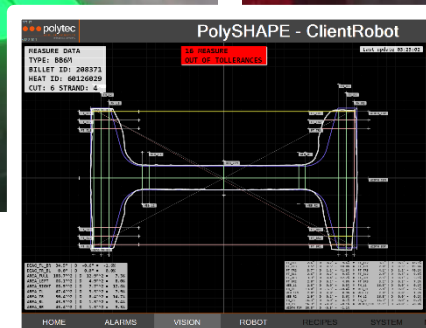
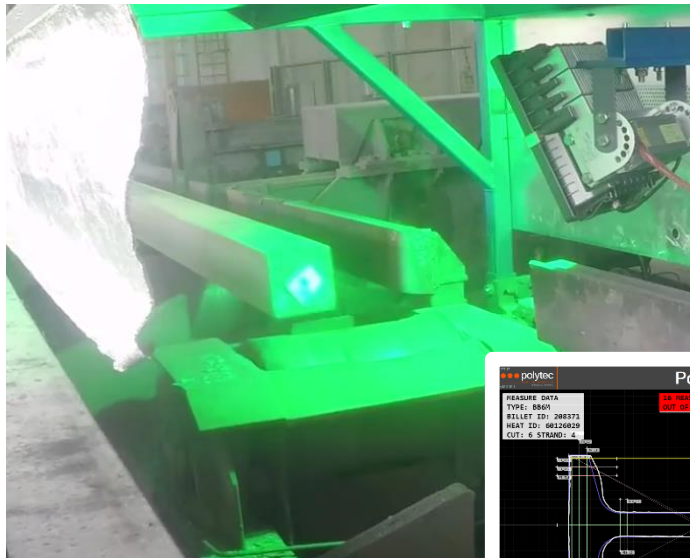
# THE SYSTEM : PolySHAPE

- Big Data analysis model for CCM parameters
- Blooms Dimension results prediction



# THE SYSTEM : PolySHAPE

- Detailed dimensional information for rolling mill



# CONCLUSIONS

- PRODUCT QUALITY EVALUATION
- CCM PARAMETER PREDICTION MODEL
- INFORMATION FOR ROLLING MILL

# INTEGRATED SOLUTIONS P R O V I D E R

THANK YOU

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