



SEMPLICITÀ, SOSTENIBILITÀ E INTELLIGENZA ARTIFICIALE

A&T 2025

ABB Robotics_Marco Locatelli

ENGINEERED
TO OUTFIT

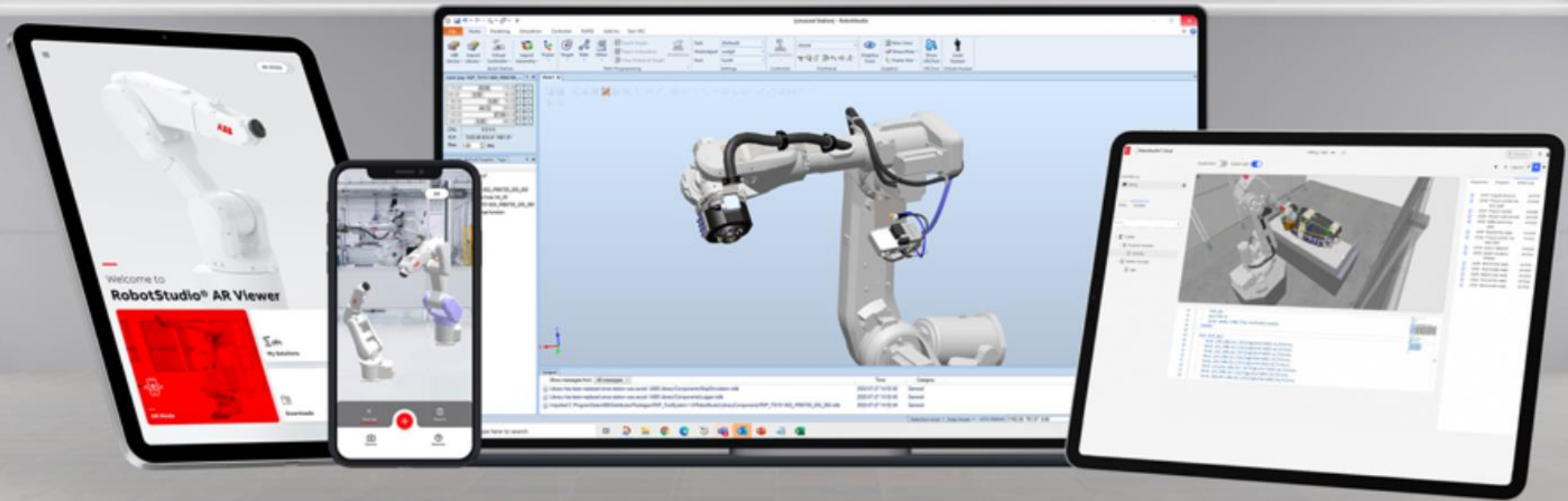
ENGINEERED TO OUTFRAN

Industries are the beating heart of the modern world. From energy, power and mining to building, transport, manufacturing, and more – they need to meet the global demand, be more sustainable, efficient, and manage transitions. To them, “running” is no longer enough – they need to outperform.

With our leading technologies in electrification and automation, we help all industries run at high performance and become more productive, efficient and sustainable to outperform.

At ABB, we call this **‘Engineered to Outrun’**.



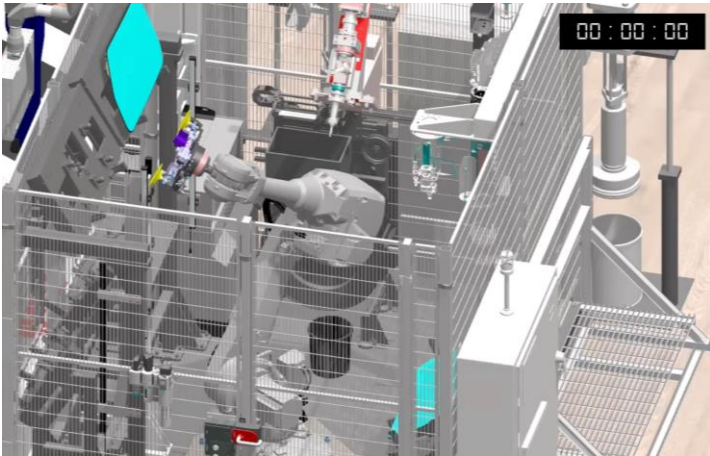


Software & Digital RobotStudio® Suite

RobotStudio® is a software suite that allows you to **program and simulate robot movements offline**, before they are implemented in the real world. This can significantly reduce the time it takes to set up and commission robots.

Semplicità, sostenibilità e intelligenza artificiale

RobotStudio's Automatic Path Planning



SEMPLICITÀ

Calcola il percorso ottimale dei movimenti robot nella cella in pochi secondi

- movimenti sempre fluidi e privi di singolarità
- tempo di ciclo ridotto fino al 50%
- consumo di energia si riduce fino al 10-15%

New generation OmniCore™ controller



SOSTENIBILITÀ

Consumo energetico ridotto consente di risparmiare fino al 20% di energia

- La nostra tecnologia di rigenerazione dell'energia ci consente di recuperare in frenata l'energia altrimenti dissipata

Artificial intelligence in Robotics

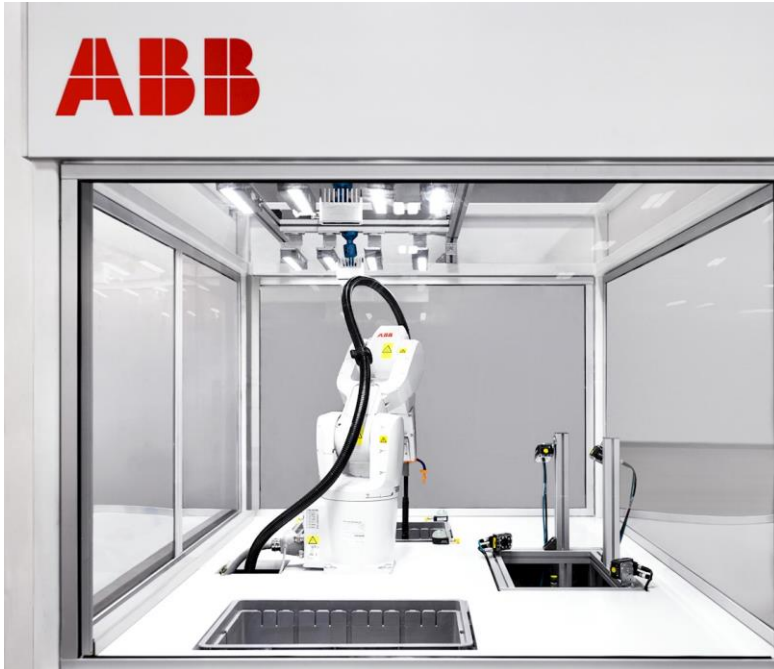


INTELLIGENZA ARTIFICIALE

- **Item Picker:** Ora è possibile identificare oggetti precedentemente sconosciuti, riconoscerli e associargli specifici punti di presa adatti
- **Visual SLAM** è una tecnologia di navigazione che combina l'intelligenza artificiale e visione 3D utilizzando telecamere standard.

Item Picker

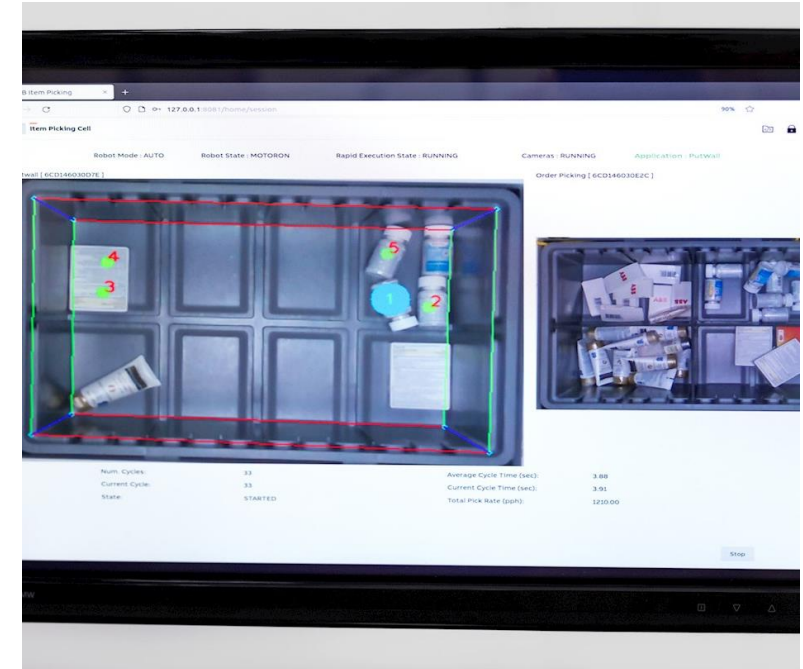
Integration



Flexibility



Simplicity



<https://www.youtube.com/watch?v=iwWPrBvIPcg>



<https://sdfocus.se/logistics/>

<https://abbcrossdocking.com/>

<https://amrconcept.robotics.abb.com/ms7n9u2/>

Visual SLAM

<https://www.youtube.com/watch?v=UMphtwFKLV0>



2000 Kg



± 5mm



8500 mm



AI enable on Vslam



Visual SLAM

<https://www.youtube.com/watch?v=KO7HP5m88qU>

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