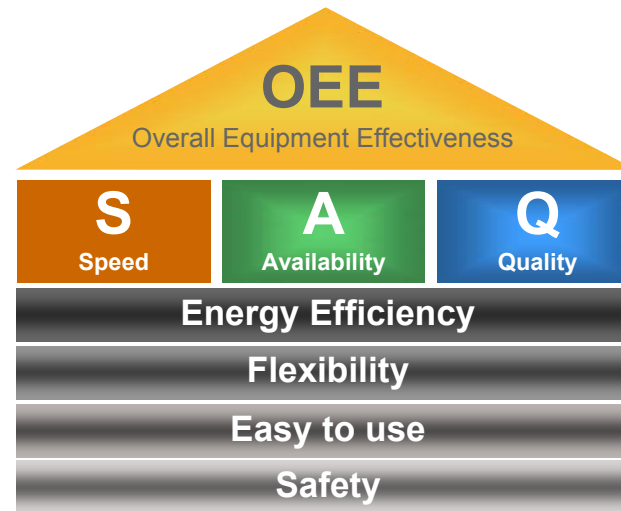


**ABB DMRO Press Automation**

# Press Automation products Twin Robot Xbar (TRX)

# Press Automation

## ABB approach

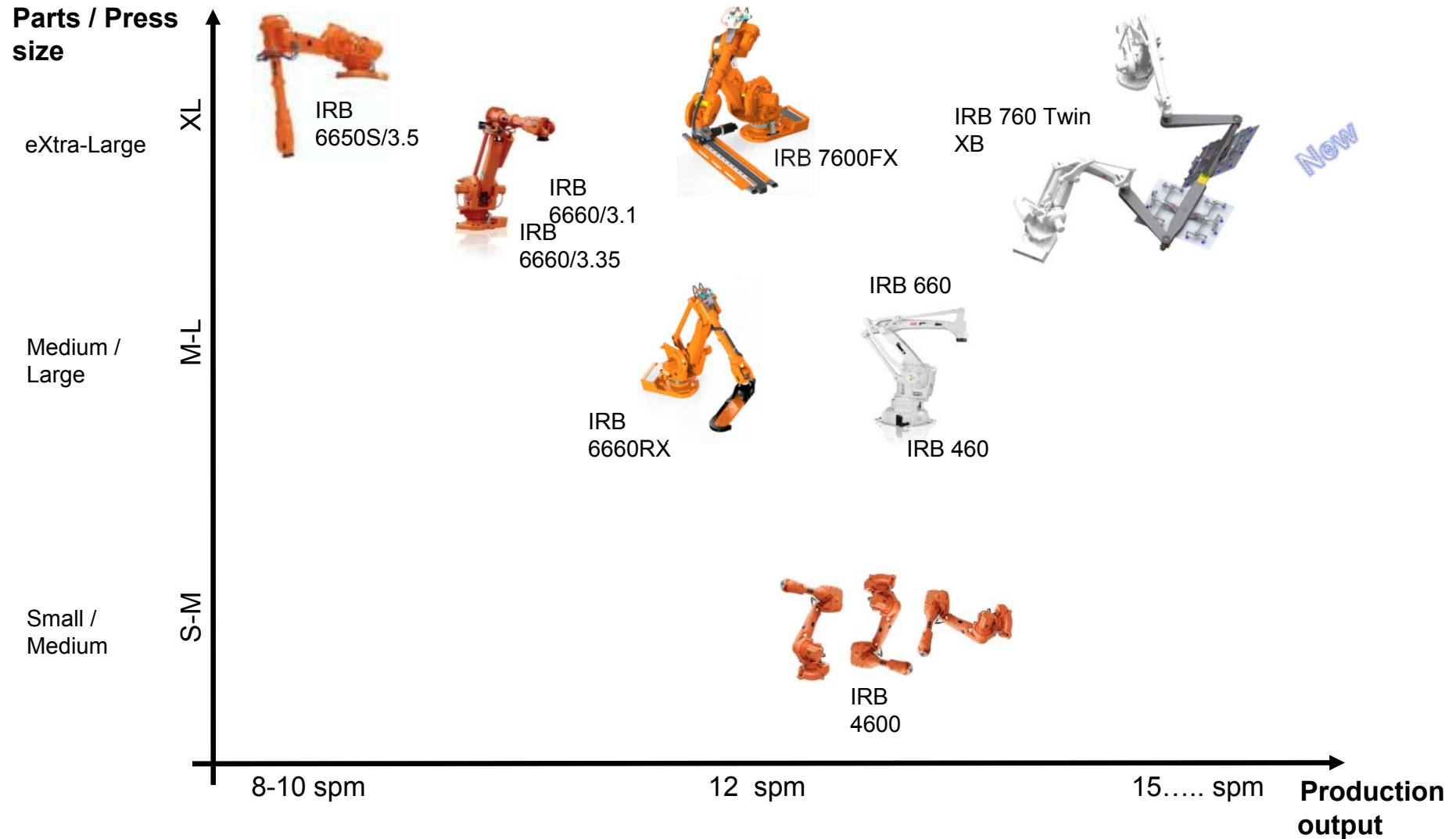


- Press-shop is one of the most capital intensive processes in auto industry
- Increasing output means a higher return over the installed equipment
- Upgrading existing lines (Brownfield's) is also a big focus for ABB



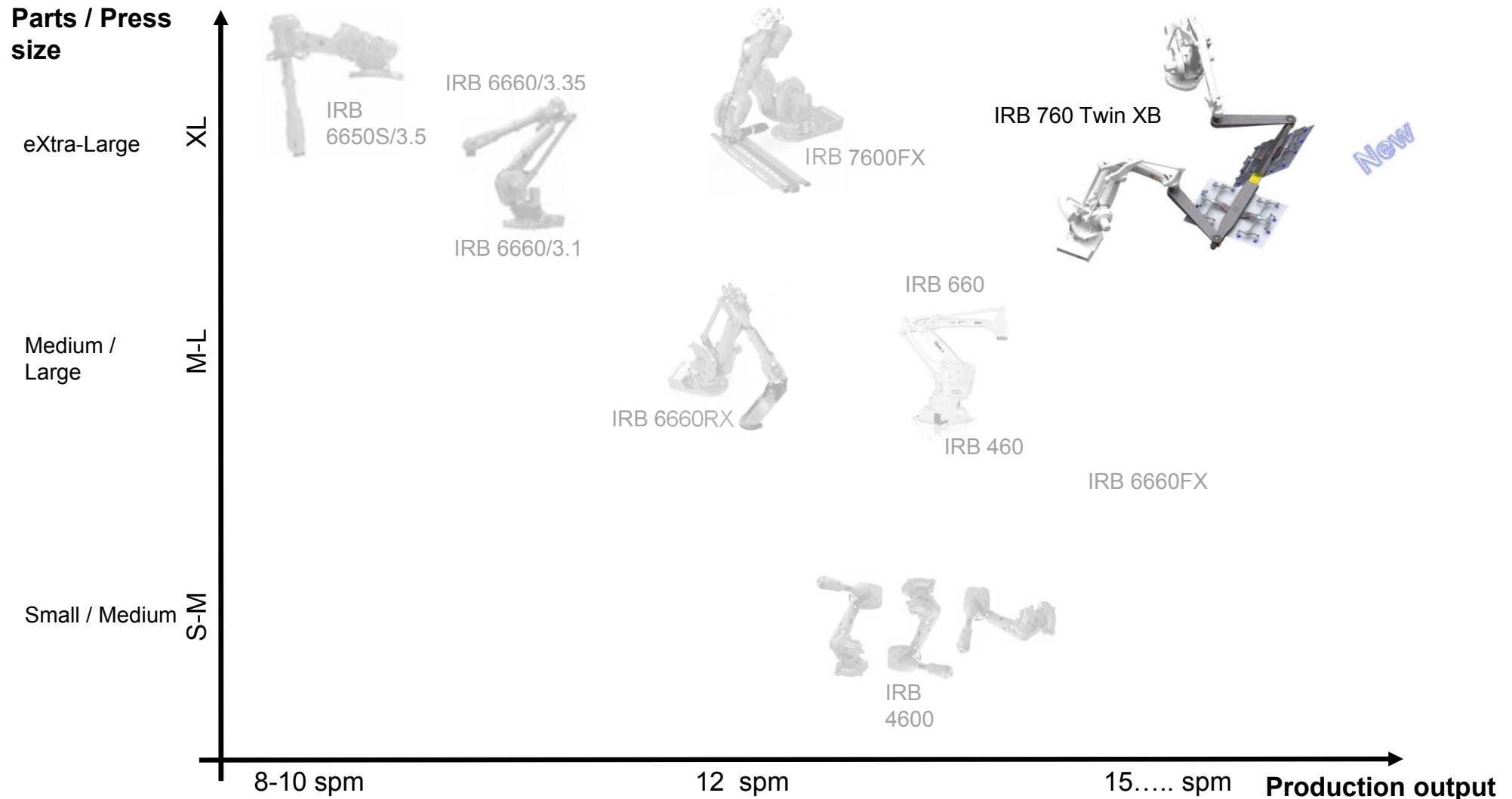
# Press automation: Robot solutions map

## The optimum solution for each customer need



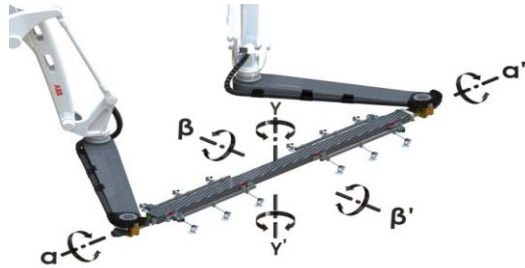
# Press automation: Robot solutions map

## The optimum solution for each customer need

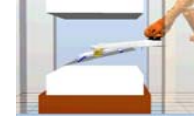
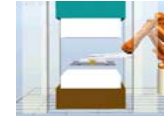


# XL High speed automation

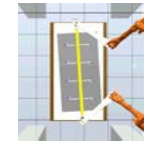
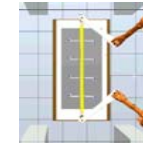
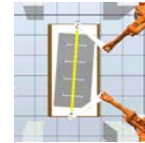
## Twin Robot Xbar – TRX. Crossbar orientation



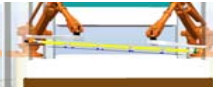
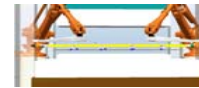
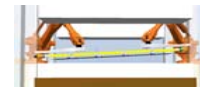
$\alpha-\alpha'$



$\beta-\beta'$



$\gamma-\gamma'$



$\alpha-\alpha'$  by 2 actuators for the crossbar

$\beta-\beta'$  by positioning of each robot arm

$\gamma-\gamma'$  by positioning of each robot arm

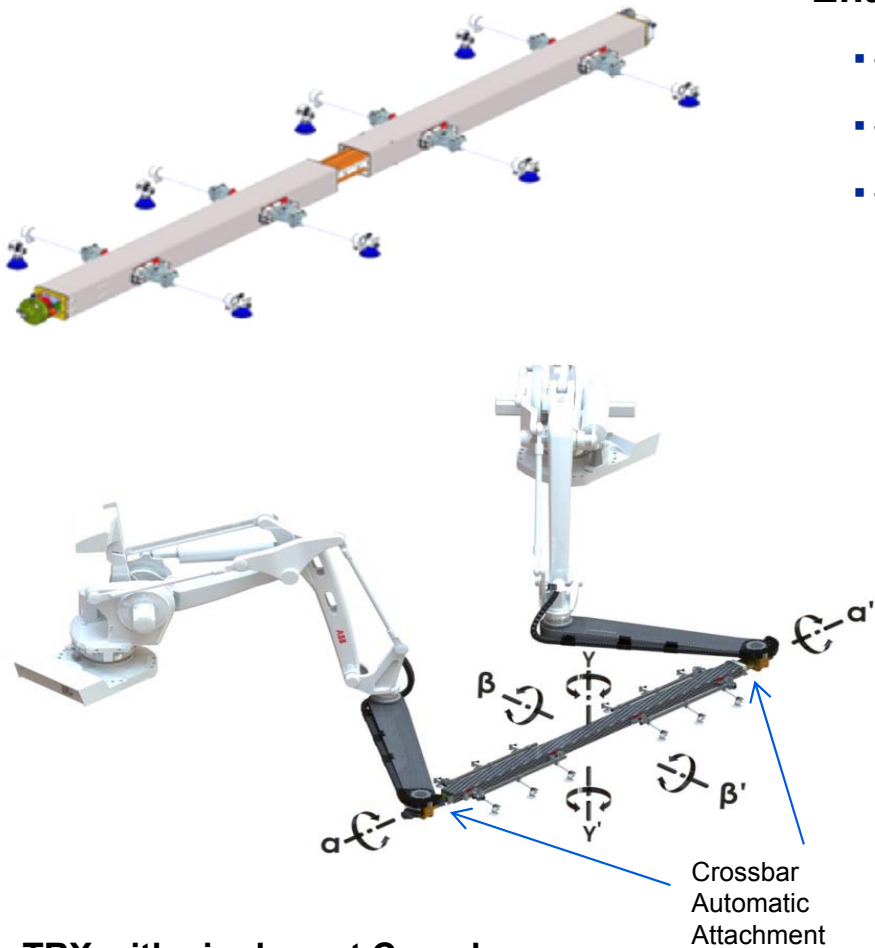


# XL High speed automation

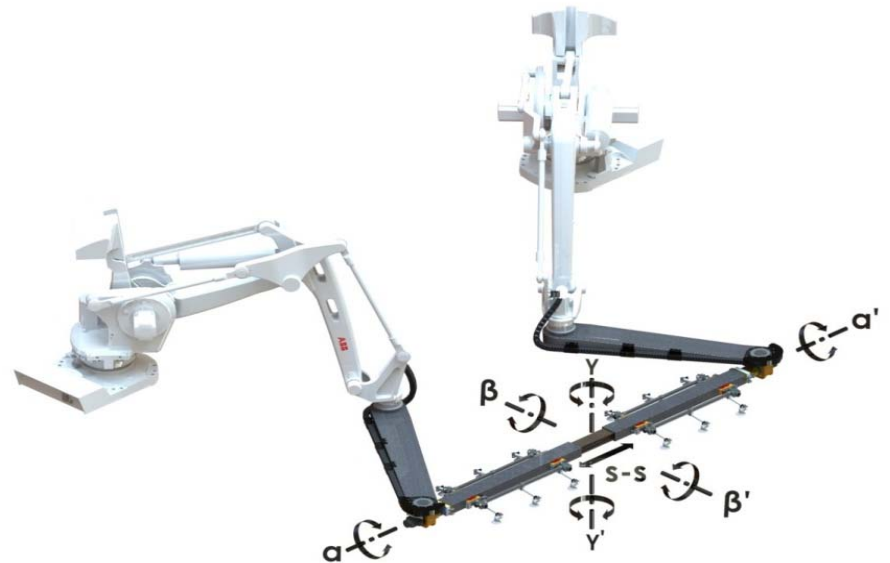
## TRX - Twin Robot Xbar

Enabled for different cross-bar functionalities:

- Single part
- Side shifting for double (multiple) parts
- Side shifting + independent tilting



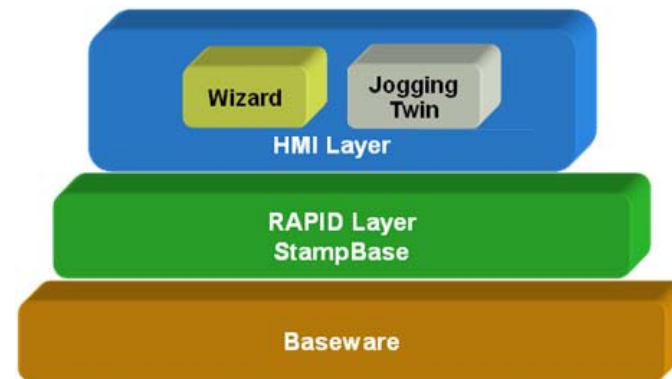
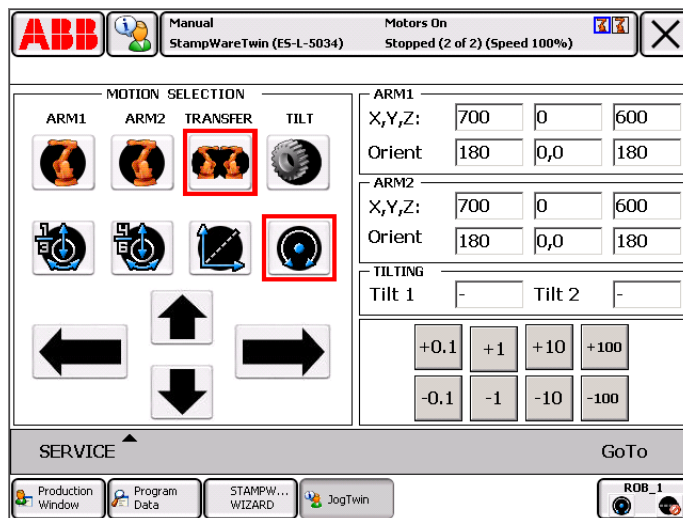
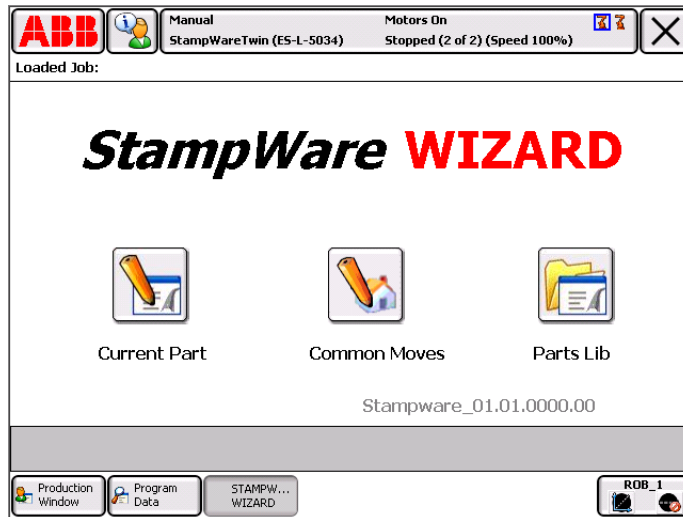
TRX with single part Crossbar



TRX with single part Crossbar

# XL High speed automation

## StampWare specific version for TRX: StampWare Twin



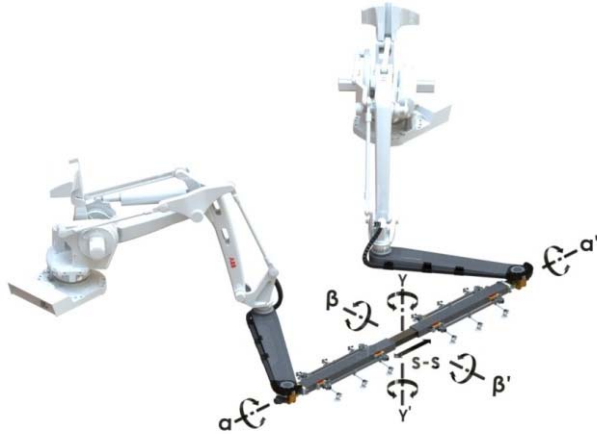
StampWare is a controller software designed to make you more productive by **minimizing the learning time and setup time of new production.**

The modularized program structure, the **program wizard** and the **graphical production window** - all together decrease the time for training that the operator and robot programmer need.

**Running in more than 1000 robots worldwide**

# XL High speed automation

## TRX - Twin Robot Xbar: Summary



### Top performance with Robotics values:

- Reliability
- Cost efficiency
- Maximum flexibility:
  - No press adaption's required =>
  - Same solution for new and existing lines
  - Enabled for different crossbar lengths

### Key features:

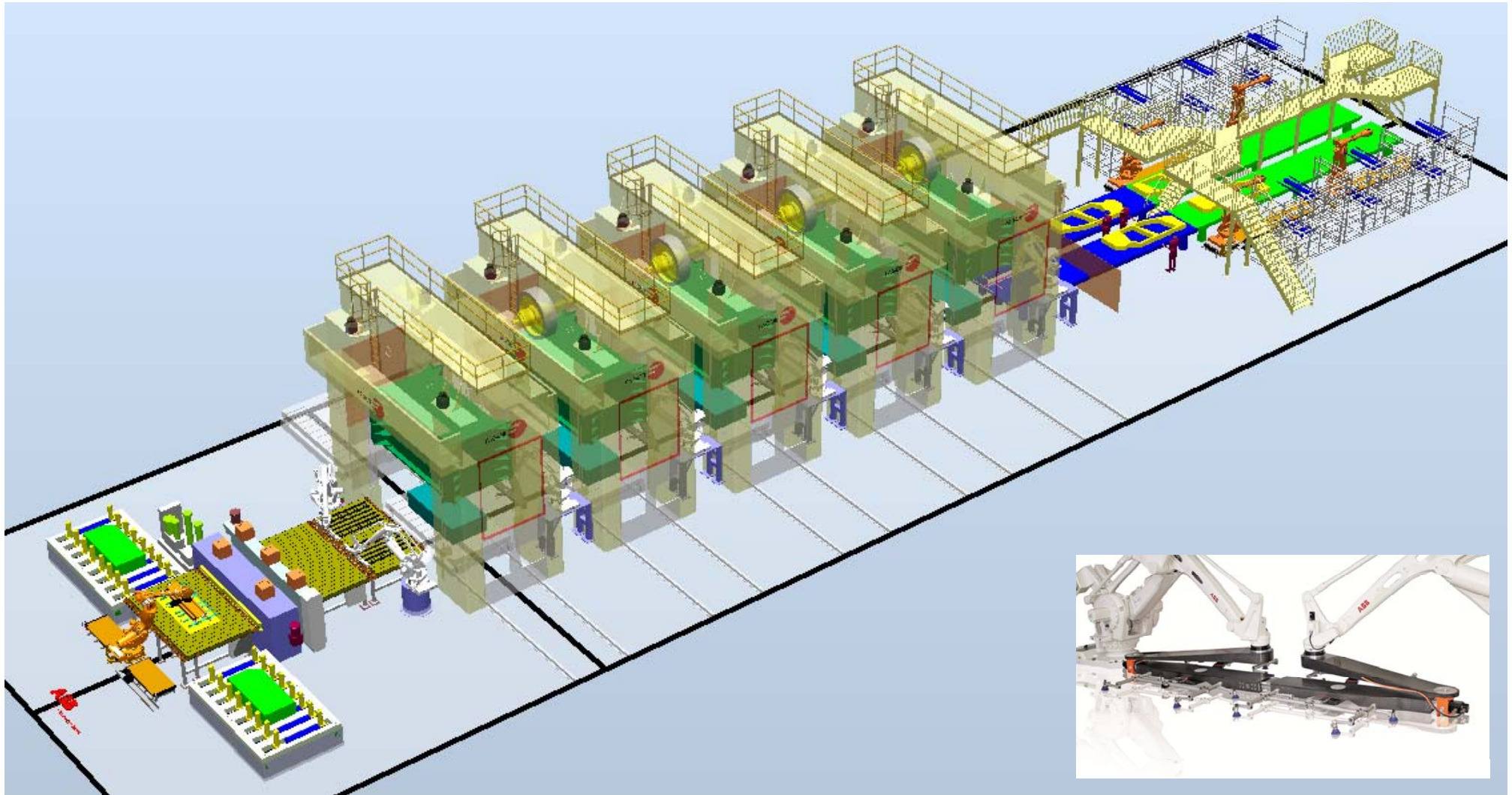
- Optimized power distribution efficiency plus the stability of a double subsection
- 10 actuators:
  - 8 Degrees from 2 IRB 760 (4+4)
  - 2 actuators for crossbar tilting
  - $\beta\beta'$ ,  $\gamma\gamma'$  and crossbar side shifting, obtained by IRB 760 arm positions
- Easy to use: StampWare Twin (Programming wizard)
- Enabled for 3 Cross-bar types:
  - Single part
  - Side shifting for double parts
  - Side shifting + independent tilting
- Crossbar change: In bolster or in inter-press zone
- One controller for twin robot system (multi-move coordinated)





# XL High speed automation line

## TRX - Twin Robot Xbar



Power and productivity  
for a better world™

