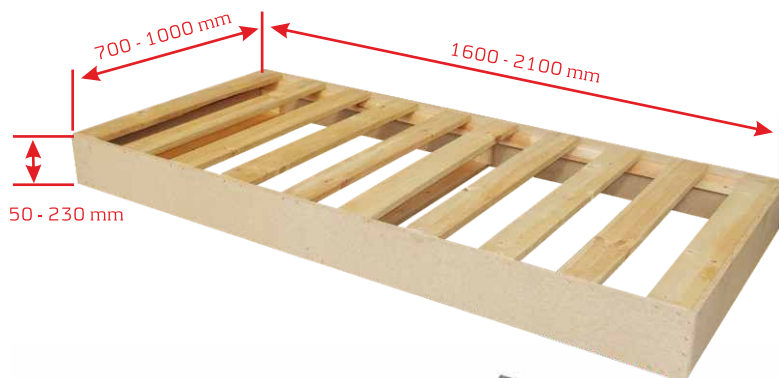


Robotic cell for automated bed frame assembly

Application:

different variants of hotel / bedroom bed frame

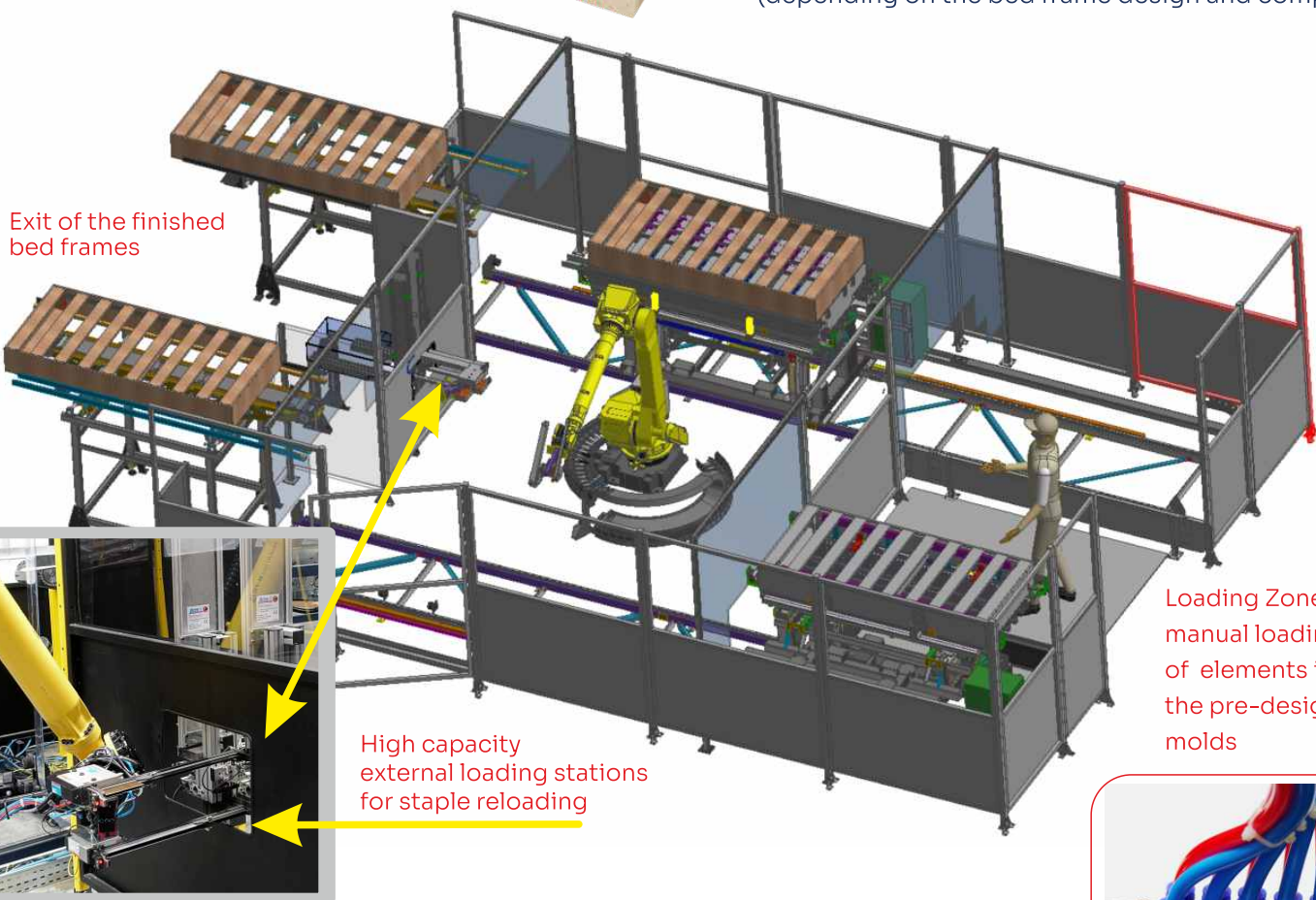


Fasteners and Fastening tools:

Two pneumatic staplers mounted on the robot arm, drive two types of staples 92 and 380 (medium-wire staple and upholstery staple) in 5 planes (from the top and four sides)

Productivity:

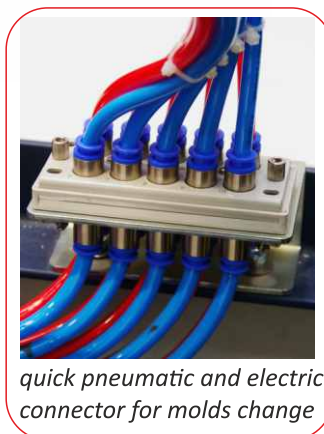
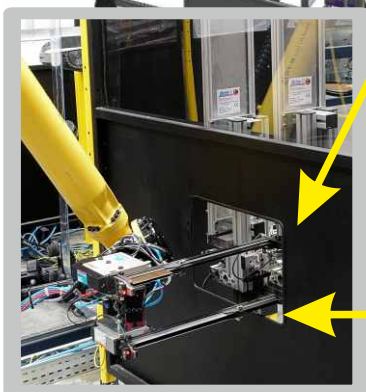
The robotic cell is operated by one operator only. Assembly of one bed frame takes 50 to 70 seconds (depending on the bed frame design and complexity).



Exit of the finished bed frames

Loading Zone: manual loading of elements into the pre-designed molds

High capacity external loading stations for staple reloading



The robotic cell is equipped with two loading stations (one for each staple type). The reloading process is fully automatic. Operator needs to refill the staples in the loading stations approx. once per hour without the need of interrupting machine operation as the loading stations are located outside the robot working area.

Versatility:

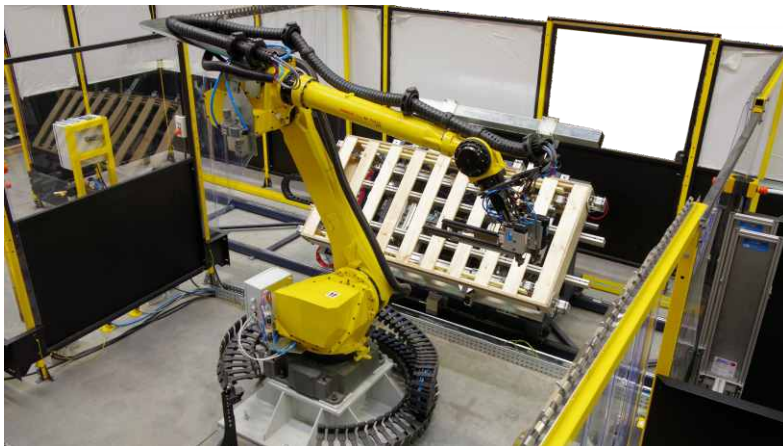
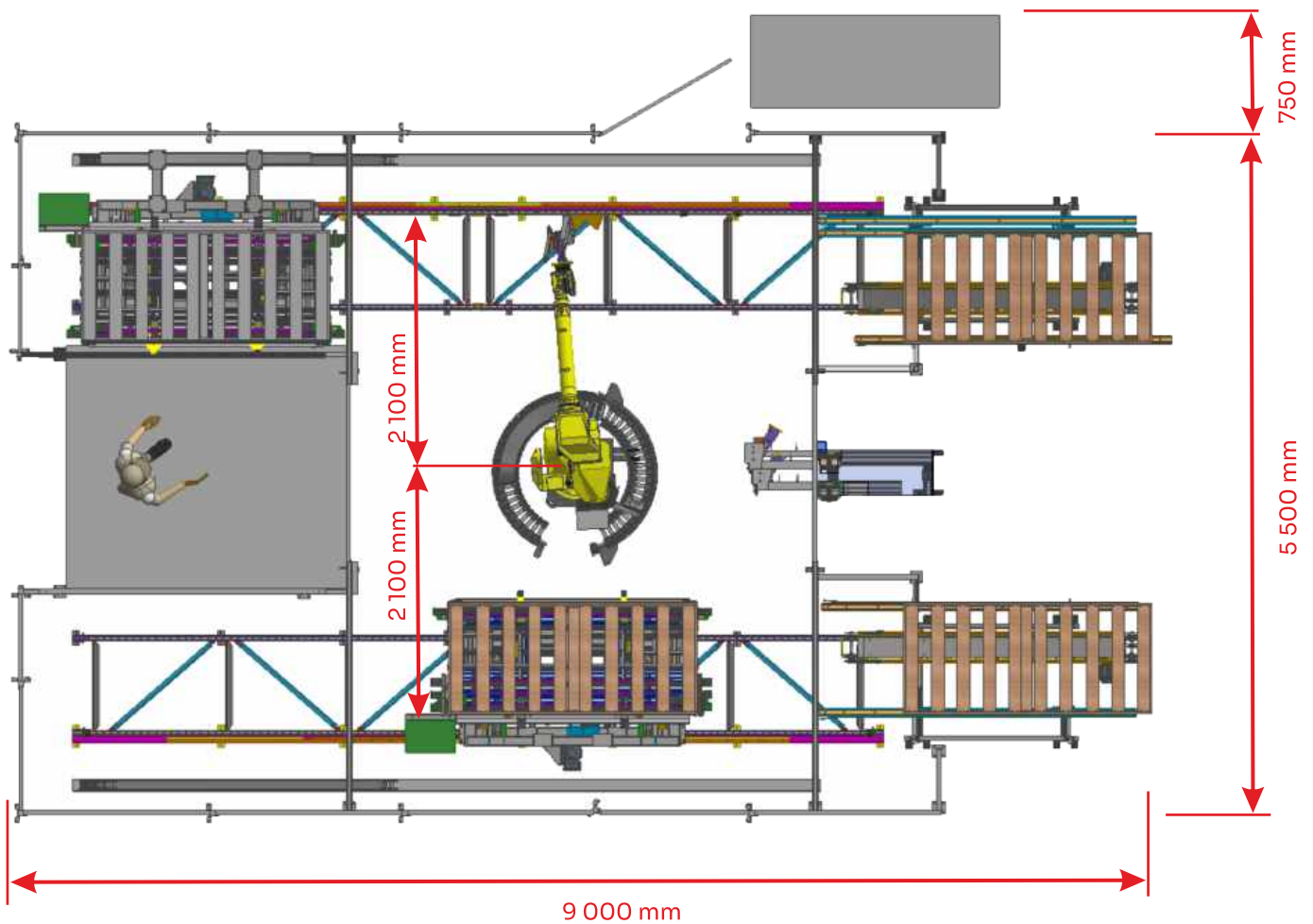
By changing mold format it is possible to produce many different models of bed frames. The change of the mold on one trolley takes ca. 10 minutes.

The change of product dimensions (without need to change the mold) - approx. 2 minutes.

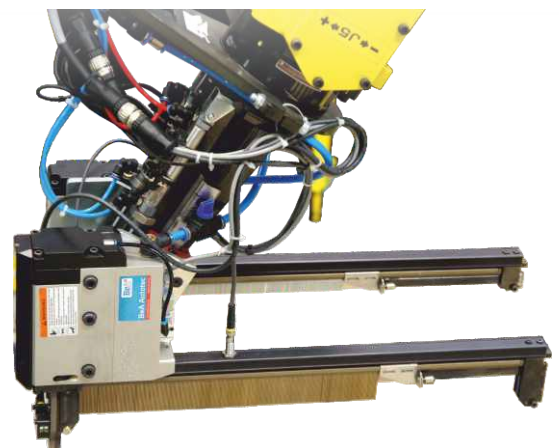
It is possible to run production of two different models at the same time (different mold on each of the two trolleys).

quick pneumatic and electric connector for molds change

Robotic cell for automated bed frame assembly



Six-axis robot Fanuc 710i45M
maximum reach: 2,5 m
maximum payload: 45 kg



Robot arm
with two BeA Autotec staplers