

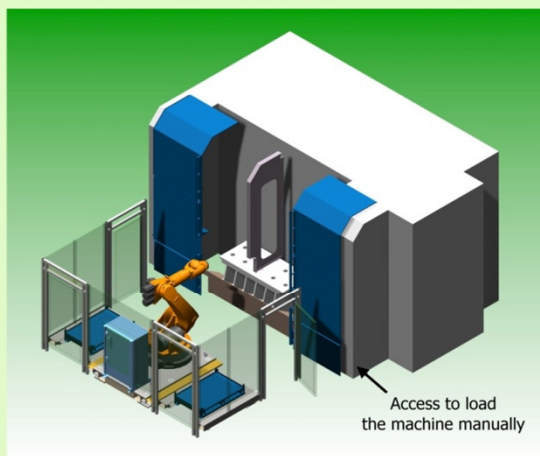
# Modular 'LOADING CELL' for processing machines

-> DIRECT WORK PIECE LOADING <-

## WORK PIECE LOADING

### 'Robot cell' main module with 6-axis robot

*Direct connection to the processing machine!*



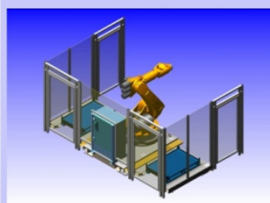
#### Compact robot cell including protective housing

- Standard cells in various sizes.
- Direct connection to the processing machine.
- It may be possible to continue to load the machine manually, if desired.
- Various robot types can be used.
- Cell can be transported using a fork-lift truck.

cell designation	4000-T15	4000-T30	4000-T50	4800-T75	4800-T150
cell measurements (width x depth)	4000 x 3200 - 3400 mm			4800 x 4100 - 4600 mm	
max. load robot	30 kg	60 kg	100 kg	150 kg	300 kg
handling weight (max. work piece weight)	ca. 15 kg	ca. 30 kg	ca. 50 kg	ca. 75 kg	ca. 150 kg
range robot	2000 mm	2000 mm	2400 mm	2700 mm	3150 mm

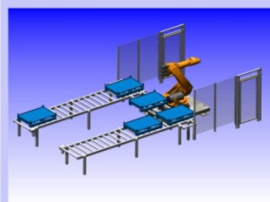
### 'Work piece supply' extension modules

*Flexible adjustment to your application profile!*



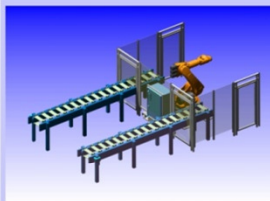
#### Pallet module

Supplies work pieces using transport pallets. (Euro pallets, single-purpose pallets made from steel, aluminium or plastic)



#### Conveyor belt module

Supplies work pieces using transport pallets. Feeds and removes pallets on the conveyor belt. (longer time allowances and direct connection to other processes are possible)



#### Chain conveyor module

Supplies work pieces onto circulating work piece carriers. (direct loading, particularly suitable for shaft machining)



#### Tiered pallet storage

Fully automatic storage for part supply. Unmanned manufacturing over many hours. Deposit and retrieval from storage independent of manufacturing.

### 'Work piece handling' additional modules

*Complete automation from one source!*

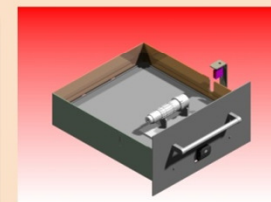
#### Grabber module

All types of grabbing technology. (pneumatic, hydraulic, vacuum, magnetic, servo technology)



#### Drawer module

Can be used as a testing drawer for specifically admitting or discharging parts that are deficient.



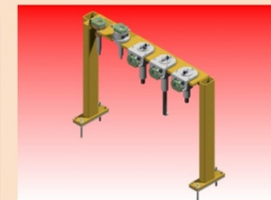
#### Alignment + turning module

Modules for position-oriented positioning and turning of work pieces

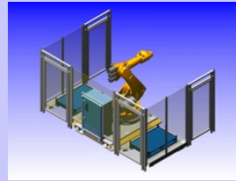


#### Processing module

Stations for any necessary additional processing. (burring, drilling, polishing, brushing, etc.)



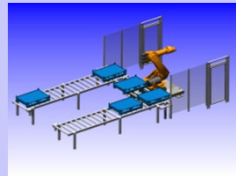
## Pallet module



*Supplies work pieces using transport pallets.  
(Euro pallets, single-purpose pallets made from steel, aluminium or plastic)*

- Industrial robot with max. load as detailed in the overview including control
- Robot base frame with flange-mounted pallet locking devices
- Simple work piece grabber, designed for the respective handling weight
- Protective housing
- Robot cell is commissioned at RILE insofar as possible

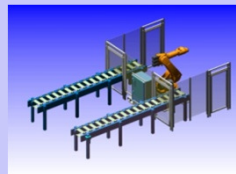
## Conveyor belt module



*Supplies work pieces using transport pallets. Feeds and removes pallets on the conveyor belt  
(longer time allowances and direct connection to other processes are possible).*

- Industrial robot with max. load as detailed in the overview including control
- Robot base frame
- U-shaped conveyor technology for admitting and discharging the pallets with work piece-specific receptacles (euro pallet size / max. pallet weight 500 kg) comprising:
  - 1x feeding station and 1x removal station configured as a conveyor belt, each including Battering ram (length 1,300 mm each)
  - 2x spare slot for max. 3 pallets designed as a conveyor belt (length approx. 4,000 mm each)
  - 1x lateral conveyor with excavation
- Simple work piece grabber, designed for the respective handling weight
- Protective housing
- Robot cell is commissioned at RILE insofar as possible

## Chain conveyor module



*Supplies work pieces onto circulating work piece carriers  
(direct loading, particularly suitable for shaft machining).*

- Industrial robot with max. load as detailed in the overview including control
- Robot base frame
- 2x chain timed conveyor for admitting and discharging work pieces, with a length of approx. 3 m and rotating approx. 30x simply designed work piece receptacle
- Simple work piece grabber, designed for the respective handling weight
- Protective housing
- Robot cell is commissioned at RILE insofar as possible

## Tiered pallet storage



*Fully automatic storage for part supply. Unmanned manufacturing over many hours.  
Deposit and retrieval from storage independent of manufacturing*

- Pallet storage with three tiers for 10 pallets in euro pallet size (the lowest tier is used only to handle the pallet between the individual stations).
- Own PLC control including sensors and basic program
- The pallet storage is commissioned at RILE insofar as possible

**Optionen: • Greifmodul • Schubladenmodul • Ausricht + Wendemodul • Bearbeitungsmodul**