

# **Teximp**Automation









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# **Universal Robot Cell**

| Cell Model  | Laser fence<br>Price in EUR |
|---|-----------------------------|
| Automation Cell URC-7   | 45′185.00                   |
| based on LR Mate 200iD (7kg)  | 43 103.00                   |
| Automation Cell URC-7L  | 46′865.00                   |
| based on LR Mate 200iD/7L (7kg)   | 40 005.00                   |
| Automation Cell URC-10  | 49′920.00                   |
| based on M10iA/10M (10kg)   | 15 526166                   |
| Automation Cell URC-20  | 54′620.00                   |
| based on M20iA/20M (20kg)   | 0.0000                      |
| Special EDU discount for School/Education institutions Incl. Installation and training free of charge | 15% (on URC Cell)           |
| met. Installation and training free of charge   | ,                           |

\* Recommended machines see "URC fit configurator"





Not included are the local VAT, Transport, Installation and Training The indicated prices are only valid if purchased with a new machine





#### **Fanuc Industrial Robots**



## Industrial robot type "LR Mate 200iD"

- 6-axis vertical robot
- Load capacity 7 kg / reach 717mm
- Compliance with EC Machinery Directives (CE mark)

## Industrial robot type "LR Mate 200iD/7L"

- 6-axis vertical robot (long arm)
- Load capacity 7 kg / reach 911mm
- Compliance with EC Machinery Directives (CE mark)





## Industrial robot type "M10iA/10M"

- 6-axis vertical robot
- Load capacity 10 kg / reach 1422mm
- Compliance with EC Machinery Directives (CE mark)

# Industrial robot type "M20iA/20M"

- 6-axis vertical anthropomorphic robot
- Load capacity 20 kg / reach 1813mm
- Compliance with EC Machinery Directives (CE mark)







#### **Fanuc Industrial Cabinets**



#### **Fanuc A- Cabinet**

**Fanuc M- Cabinet** 



**FANUC** iPendant touch



# Included Fanuc Options (loaded in A- / M- Cabinet)

| Option                                   | Туре     |
|--|----------|
| DCS Position/Speed check function (J567) | Software |
| Soft float (J612)                        | Software |
| Touch Skip (J921)                        | Software |
| Payload Identification (J669)            | Software |

## DCS Dual Check Safety Position / Speed Check

The Dual Check Safety (DCS) Position Speed Check software is a TÜV certified electronic safety control system for FANUC robots. It safely monitors robot speed and position in joint and cartesian coordinates.

It enables operator workstation to be positioned within the robot work envelope and allows to restrict the robot motion safety within a minimum of floor space.

It allows the creation of safe zones close to the robot center, where this would be difficult.

To realize using limit switches. It restricts the robot motion safely, within a minimum of floor space. Note: The safety ratings af the robots is in accordance to the ISO 13849-1 Category 3, PL=d (Performance Level)

#### Benefits:

- Improve operator safety
- Reduce system costs
- Minimizes floor space needs for the robot system





#### Soft Float

The Soft Float function supports soft load/unload operation. When using the soft Float motion instruction the robot servo control is softened to minimize reactive forces and avoid damages and scratches on the workpiece.

The function High Performance Soft Float is also included for extracting workpieces softly and fast out of injection moulding or die casting machines.

#### Benefits:

- Minimize reactive forces during load/unload operations
- Avoid damages of tooling and robot and scratches on the workpiece
- Speed up cycle times for workpiece extraction

### Touch Skip

Touch Skip is a function, which uses internal servo data to detect when and where the robot touches an object. This function can be used to avoid collisions or detect the work piece location without any external sensor.

Caution: excessive collision may affect robot lifetime and require additional maintenance measures. Benefits

- Cost efficient work piece location and checking (without any external sensor or limit switch)

## **Payload Identification**

The Payload Identification function measures and sets the robot payload using an adjustable test motion of the robot axes J5 and J6.

#### Benefits

- Speed up cycle times
- Minimize vibrations and stress on robot and tooling
- Improve system uptime

#### **Included Interface**

| Option             | Туре                            |  |
|--------------------|---------------------------------|--|
| TRI-Haas CHC / NGC | Teximp Robot Interface for Haas |  |
| TGI-A              | Teximp Gripper Interface - Air  |  |

## TRI-Haas CHC / NGC (Depending on the machine control)

Incl. all needed cables / connectors on machine side

Min. request 1 free M relays on mill / or min. 4 M relays for lathe. We recommend to add the Haas option 8M.





#### TGI-A

- Cable from FANUC, cable and connector bus
- 2x 24VDC air el. Mag. valve for double catcher, output fi 6mm
- 1x 24VDC air el. Mag. blowing valve
- Recovery button, manually unclamping the workpiece
- Air hoses and couplings
- Gripper opened/closed sensors
- Aluminum block, air cushion carrier 90° for 2 gripper and air jets in the middle

# **Included Gripper**

| For LR200iD                             | Туре                        |
|---|-----------------------------|
| 2x JGP 80-2                             | Schunk Parallel Gripper     |
| 2x Set ABR-PGZN-plus 80                 | Schunk Gripper<br>Aluminium |
| 4x prepared jaws and 1x calib. pin 20mm | Calibration Set             |

| For M10iA and M20iA                     | Туре                        |
|---|-----------------------------|
| 2x JGP 100-2                            | Schunk Parallel Gripper     |
| 2x Set ABR-PGZN-plus 100                | Schunk Gripper<br>Aluminium |
| 4x prepared jaws and 1x calib. pin 20mm | Calibration Set             |

## **JPG 80-2/100-2**

Universal 2-finger parallel gripper of the compact class with T-slot guidance and best cost-performance ratio



- max. piece weight 4,3kg / gripper
- stroke per jaw 4mm (total 8mm)

#### **JGP100-2**

# - max. piece weight 6,85kg / gripper - stroke per jaw 5mm (total 10mm)

## ABR/SBR-PGZN-plus 80/100

Blanks made of aluminum for rework by the customer









# **Included Auto Door**

| Option             | Туре                |  |
|--------------------|---------------------|--|
| PAD-HaasVFxx-side  | Pneumatic Auto Door |  |
| PAD-HaasVFxx-front | Pneumatic Auto Door |  |
| PAD-HaasMM-front   | Pneumatic Auto Door |  |
| PAD-HaasSTxx       | Pneumatic Auto Door |  |

Pneumatic Auto Door according to the machine model



Example: PAD-HaasVFxx-side

# Included Safety Options

| Safety Options | Туре                |  |
|----------------|---------------------|--|
| Laser          | Omron Laser         |  |
| Light Curtain  | Omron Light Curtain |  |



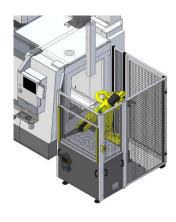
Omron Laser

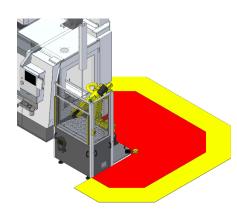
## Cage instead of Omron laser

All URC cells can also be delivered in the "Cage" version.

This variant is suitable for tight spaces or highly frequented areas.

Price of cells remains identical.







Omron Light Curtain





# **Included Pallet Table**

| Option | Туре                     |
|--------|--------------------------|
| TPT    | Pallet Table 980 x 700mm |



Included 3 sizes of matrix plates – quick setup

- 60 pockets (10 x 6),  $\,$  max. Ø 35mm

- 28 pockets (7 x 4), max. Ø 65mm
 - 15 pockets (5 x 3), max. Ø 95mm

Part height: 5mm - 150mm

Matrix programming using variables through Fanuc iPendant Omron safety laser/scanner, 2 zones

Omron safety light curtain, allow charging of pallet when robot is running





### Standard color

Option

RAL 1018 (+ 6 weeks)



## Standard color

Option

**RAL 7035** 



- \* Choose between RAL 1018 and 7035, no additional costs
  \*\* The delivery time increases by 6 weeks for the variant RAL 1018





# **Programing Option**

| Option                          | Туре                   |
|---------------------------------|------------------------|
| VPD - Visual Programming Dialog | Through Fanuc iPendant |

## **VPD - Visual Programming Dialog**

- Easy visual programing
- No additional hardware needed



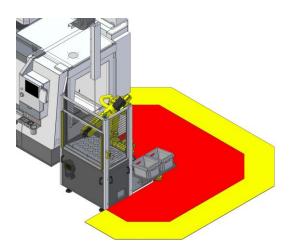


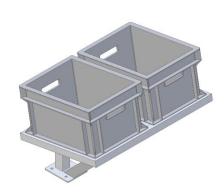




# **Storage Option**

| Option         | Туре     | Price in EUR |
|----------------|----------|--------------|
| Storage Option | Handling | 800.00       |

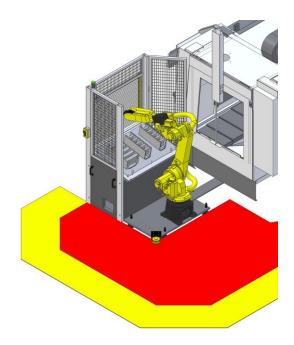


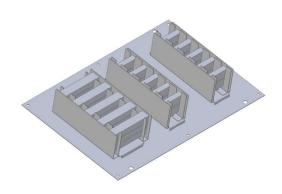


Dimensions of box: 400x300x220 mm

# **Pallet Option**

| Option        | Туре     | Price in EUR |
|---------------|----------|--------------|
| Pallet Option | Handling | 800.00       |



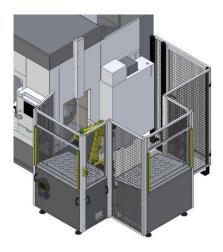






# URC Double pallet table 90°

| Option                  | Туре     | Price in EUR |
|-------------------------|----------|--------------|
| Double pallet table 90° | Handling | 5'995.00     |

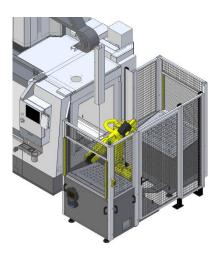


Compatible with: URC-10, URC-20

Note: Omron Laser is not compatible with this option

# URC Double pallet table 180°

| Option                   | Туре     | Price in EUR |  |
|--------------------------|----------|--------------|--|
| Double pallet table 180° | Handling | 5'995.00     |  |



Compatible with: URC-10, URC-20

Note: Omron Laser is not compatible with this option





# **Pneumatic Auto Door Option**

| Option               | Туре  | Price in EUR |  |
|----------------------|---|--------------|--|
| PAD-HaasMM-side      | Pneumatic Auto Door Option for side load    | 1′200.00     |  |
| PAD-HaasDM-side      | Pneumatic Auto Door Option for side load    | 1′200.00     |  |
| PAD-HaasUMC750-side  | Pneumatic Auto Door Option for side load    | 1′500.00     |  |
| PAD-HaasUMC1000-side | Pneumatic Auto Door Option<br>for side load | 1′500.00     |  |

# **Recommended machine options**

| Option (Haas) | Туре  |  |
|---------------|---|--|
| 8M            | 8 additional spare M-code relays Activated via M-codes Simplifies integration with aftermarket accessories        |  |
| JET           | Auto Jet Air Blast; keeps the workpiece and work holding clear of chips, without having to open the operator door |  |
| Haas Connect  | Don't guess, view live machine status   |  |
| WiFi Camera   | View your machining remotely  |  |





# **Clamping Vice**

| Option      | Туре                   | Price in EUR |
|-------------|------------------------|--------------|
| AMP-150G/HV | Kemmler Pneumatic Vice | 3'035.00     |
| AMP-200G/HV | Kemmler Pneumatic Vice | 3'880.00     |

## **AMP-150G/HV - 200G/HV**



- Suitable for mass production
- Clamping positions: horizontal and vertical
- The steel body is hardened and grinded all-round
- Integrated pull-down mechanism
- Vice modification: 1 Set of pneumatic valve for A+B line

| Option |                            | Туре                  | Price in EUR |  |
|--------|----------------------------|-----------------------|--------------|--|
|        | KSP-Z PLUS 100 + KTR-H 100 | Schunk Pneumatic Vice | 3'000.00     |  |



### **KSP-Z PLUS 100**

- Pneumatic clamping force block
- Suitable for 5 axis clamping
- Centric clamping
- Top jaw blanks
- Z-version
- Base



# **Clamping Rotary Air Chuck**

| Option  | Туре                        | Price in EUR |
|---------|-----------------------------|--------------|
| RTS-05  | 3 Jaw Pneumatic Chuck 182mm | 1'995.00     |
| RTS-06  | 3 Jaw Pneumatic Chuck 215mm | 2'095.00     |
| RTS-08  | 3 Jaw Pneumatic Chuck 255mm | 2'595.00     |
| RTS-10  | 3 Jaw Pneumatic Chuck 300mm | 3'295.00     |
| RTS-05T | 2 Jaw Pneumatic Chuck 182mm | 2'195.00     |
| RTS-06T | 2 Jaw Pneumatic Chuck 215mm | 2'350.00     |



#### RTS/T

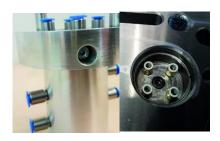
- 2 & 3 Jaw Pneumatic Chuck
- Dust and Liquid proof cover
- Built in Check Vale





# **Pneumatic Rotary Union**

| Option      | Туре                   | Price in EUR |  |
|-------------|------------------------|--------------|--|
| PRU-UMC750  | Pneumatic Rotary Union | 4'995.00     |  |
| PRU-UMC1000 | Pneumatic Rotary Union | 4'995.00     |  |



## **Pneumatic Rotary Union**

- Required option for Haas UMC-750 + UMC-750SS
- Required option for Haas UMC-1000 + UMC-1000SS
- 4- Way Coupling

# 0- point clamping system

| Option   | Туре                                      | Price in EUR |
|----------|---|--------------|
| SCHUNK 2 | 2x Quick-change pallet system (200x400mm) | 1′900.00     |
| SCHUNK 4 | 4x Quick-change pallet system (400x400mm) | 3′700.00     |
| RPV-A    | Automation (A+B line)                     | 395.00       |



## Schunk 0- point clamping system

- Clamping stations for general milling applications
- for extremely fast set-up processes of clamping devices

#### **RPV-A**

- 1 Set of pneumatic valve for A+B line





# Machine Size In Relation To The Robot Cell

# **URC** fit configurator

|            | Model                 | Load  | URC-7 | URC-7L | URC-10 | URC-20 |
|------------|-----------------------|-------|-------|--------|--------|--------|
|            |                       |       |       |        |        |        |
|            | VF-1 / VF-2 (SS)      | FRONT |       |        |        |        |
|            | VF-1 / VF-2 (SS)      | SIDE  |       |        |        | *      |
|            | VF-3 (SS) / VF-4 (SS) | FRONT | N/A   | N/A    |        |        |
|            | VF-3 (SS) / VF-4 (SS) | SIDE  | N/A   | N/A    | **     |        |
|            | VM-2                  | FRONT | N/A   | N/A    |        |        |
|            | VM-2                  | SIDE  | N/A   | N/A    |        | *      |
|            | VM-3                  | FRONT | N/A   | N/A    |        |        |
| =          | VM-3                  | SIDE  | N/A   | N/A    | **     |        |
| Haas Mill  | DM-1                  | SIDE  |       |        |        | N/A    |
| ıs         | Mini Mill             | FRONT |       |        |        |        |
| aa         | Mini Mill             | SIDE  |       |        |        | N/A    |
| I          | UMC-500 (SS)          | FRONT | N/A   | N/A    | **     |        |
|            | UMC-500 (SS)          | SIDE  | N/A   | N/A    | **     |        |
|            | UMC-750 (SS)          | FRONT | N/A   | N/A    | **     |        |
|            | UMC-750 (SS)          | SIDE  | N/A   | N/A    | **     |        |
|            | UMC-1000 (SS)         | FRONT | N/A   | N/A    | **     |        |
|            | UMC-1000 (SS)         | SIDE  | N/A   | N/A    | **     |        |
|            |                       |       |       |        |        |        |
|            |                       |       |       |        |        |        |
|            | T                     |       |       |        |        |        |
|            | ST-10                 |       | ***   |        | *      | N/A    |
| e          | ST-15                 |       | ***   |        |        | N/A    |
| Haas Lathe | ST-20                 |       |       |        |        | *      |
| La         | ST-25                 |       |       |        |        |        |
| as         | ST-30                 |       | N/A   |        |        |        |
| 493        | ST-35                 |       | N/A   | N/A    |        |        |
| _          |                       |       |       |        |        |        |
|            |                       |       |       |        |        |        |

#### Notes

\* URC may fit, but will require customization of robot code

\*\* URC may fit, but reach is limited

\*\*\* URC may fit, but will require specific position adjustment

N/A Not applicable

https://www.teximp-automation.com/layouts

