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From:

Company: _____

Name: _____

Street: _____

City/Country/Zipcode: _____

Phone/Fax: _____

Email: _____

Industry: _____

Gripper assembly

Please complete the following questionnaire carefully so that we can select the optimal product for you.

Please help us to offer you the best service:

- > Please send us 3D-CAD Data of your part, tool and sprue (in STEP or IGES file format)
- > If you have no 3D-CAD Data available, please send us 2D-Drawings with measure details
- > If possible, please send us a photo or a sample
- > Please send us drawings of the robot adapter (2D, AutoCAD or PDF)

We will contact you if important information is missing. Please note, only if all information is completely available, we can ensure the optimal choice for you.

Handling

1. Robot Type

- ☐ Linear
- ☐ Swivel axes _____ No. of axes _____
- ☐ Model name _____

Robot Entry ☐ Top ☐ Side

Robot Wrist Flip ☐ Yes ☐ No

Robot Wrist Rotation ☐ Yes ☐ No

Robot Payload Capacity _____ kg

Existing Robot Side Quick Changer
☐ Yes ☐ No

Manufacturer / Type: _____

2. Media supply

Number of vacuum circuits _____

Number of compressed air circuits _____
_____ bar (_____ psi)

Hose diameter _____ mm

☐ OD ☐ ID

Hose length _____ mm

3. Vacuum generation

- ☐ By FIPA
- ☐ By the customer
- ☐ Number of ejectors _____ Type _____
- ☐ Pump
- ☐ Side channel blower
- ☐ Other: _____

4. Field bus connection:

- ☐ ASI
- ☐ Profibus
- ☐ Other: _____

5. Electric gripper system interface – continued on page 2

Sensor type ☐ PNP ☐ NPN

Electrical connector type (Robot side):

- ☐ M8 connector (3 pins) (Female connector at robot)
- ☐ M12 connector (4 pins) (Female connector at robot)
- ☐ SUB-D connector (25 pins) (Female connector at robot, please attach specification incl. pin-out!)

5. Electric gripper system interface – continued from page 1

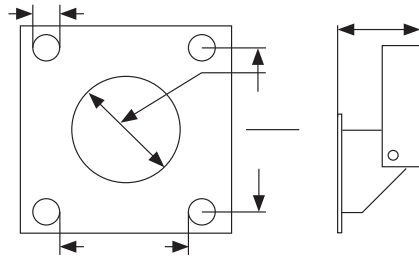
☐ Electrical contacts at quick change system (please attach specification incl. pin-out!)

☐ Other (please specify) _____

In order to keep the wiring simple and to save digital inputs at the controller unit, sensors can be AND-combined to supply a common output signal. This common output signal will be positive as long as all sensors supply a positive output signal. Please specify which sensors shall be and-combined (e.g. "all part detection sensors"): _____

Gripper Mounting

1. Sketch - robot adapter plate



2. Robot adapter plate

Size _____ mm

Spring loaded ☐ Lift _____ mm

Type: _____

Name: _____

3. Gripper base plate

Size _____ mm

Spring loaded ☐ Lift _____ mm

Type: _____

Name: _____

4. Comments: _____

Tool

1. Tool opening size _____ mm

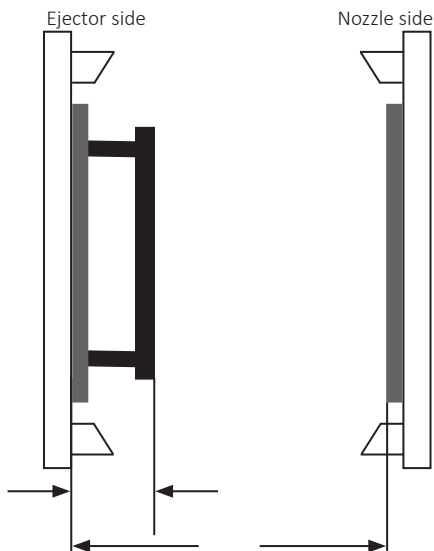
2. Robot space requirement in x-direction _____ mm

Robot space requirement in y-direction _____ mm

Robot space requirement in z-direction _____ mm

Die-Casting Machine

1. Sketch



Tie-bar thickness: _____ mm

Tie-bar spacing - horizontal: _____ mm

Tie-bar spacing - vertical: _____ mm

Typ of Mould: ☐ Hot Runner ☐ 3-Plate Mould

☐ Vertical Corepull ☐ Subgated

☐ Other Explain Below

Ejection: ☐ Moving Half ☐ Fixed Half

Do parts fall or sag during or after ejection? ☐ Yes ☐ No

Is any force, twisting, bending, lifting required to remove parts?

☐ Yes ☐ No

Double stroke? ☐ Yes ☐ No

Description _____

Component

1. Material

- ☐ Fabric
☐ Film
☐ Metal
☐ Magnetic material
☐ Silicon
☐ Plastic _____ Type _____
☐ Other: _____

2. Surface

- ☐ Non-marking
- ☐ Matt
- ☐ Shiny
- ☐ Textured
- ☐ Grained
- ☐ Other: _____

3. Subsequent process stages

- ☐ Cutting station
☐ Other: _____

4. Feeding of injection-mould

- ☐ Roll
- ☐ Magazine
- ☐ Provisioning
- ☐ Vibrating conveyor

5. Further Information

Part Name / I.D. _____

Part temperature during ejection: _____ °C (_____ °F)

Total shot weight: _____

Number of Cavities: _____

Application

1. Item Insert

- ☐ Ejector side
☐ Nozzle side
 Technical specifications available
☐ Yes ☐ No

2. Item placed on:

- ☐ Conveyor belt
 - ☐ Pallet
 - ☐ Container
 - ☐ Tray
 - ☐ Fixture
 - ☐ Other

3. Cycle time:

Withdrawal time_____ seconds

Feeding time _____ seconds

total cycle time _____ seconds

4. Description of process

[illegible]

Gripper Design

1. Gripper elements

- | | | | | | |
|--|------------------|--------------------------------|--|---|--|
| <input type="checkbox"/> Suction cups | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | |
| <input type="checkbox"/> Gripper fingers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | With monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Parallel grippers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | With monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Sprue grippers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | With monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Magnetic grippers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | |
| <input type="checkbox"/> Air nippers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | |
| <input type="checkbox"/> Needle grippers | _____ (quantity) | <input type="checkbox"/> Fixed | <input type="checkbox"/> Spring loaded | <input type="checkbox"/> Lifting cylinder | |

2. Parts inspection

- ☐ Vacuum _____ (quantity)
- ☐ Optical _____ (quantity)

3. Degating Required

- ☐ N/A
- ☐ On EOAT
- ☐ Separate Degate-Station

4. Further information

Gripper dimensions (LxWxH in mm) _____

Abmasse der Einlegeteile (am besten Zeichnung und / oder Muster beilegen) _____

- ☐ Functional/requirement specification ☐ Yes ☐ No of _____ to be used
- ☐ Relevant factory standards ☐ Yes ☐ No of _____ to be used

5. Comments: _____