

# Vacuum-Systems Questionnaire



## Layer Gripper Type Palletizer SPZ

Fax +49 (0)7443 2403 299

Dear customer,  
this questionnaire is intended to provide us with the necessary information for producing a fast and technically correct proposed solution or quotation.

Please check the appropriate answers to the questions on pages 1 and 2 and/or provide the requested parameters. The information on pages 3 and 4 is needed for a detailed quotation (sketches or drawings on separate sheets are always helpful).

We will call you immediately if we have any further questions.

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Tel.: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Equipment manufacturer       End user

Approximate quotation: Quotation needed by \_\_\_\_\_ Commissioning planned for \_\_\_\_\_

Detailed quotation: Quotation needed by \_\_\_\_\_ Commissioning planned for \_\_\_\_\_

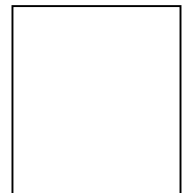
Number of gripper systems needed: \_\_\_\_\_

Main contact for project planning: \_\_\_\_\_

### 1. What do you want to handle?

Designation: \_\_\_\_\_

Shape:



(Sketch)

Other shape: \_\_\_\_\_

Material:

Wood     Metal     Cardboard/paper     Plastic     Glass     Other: \_\_\_\_\_

Surface finish:

Smooth     Flat     Rough     Dry     Moist     Oily     Dusty     Porous     Structured

Temperature: \_\_\_\_\_ °C      Working area:     Indoors     Outdoors

Are there any chemicals, acids, vapours, solvents, etc. in the vicinity? If so, which? \_\_\_\_\_

### 2. What are the dimensions and weights of the workpieces?

	Length	Width	Thickness (height)	Weight
<b>Min.</b>	mm	mm	mm	kg
<b>Max.</b>	mm	mm	mm	kg
<b>Any holes or apertures?</b>	mm	mm	mm	---

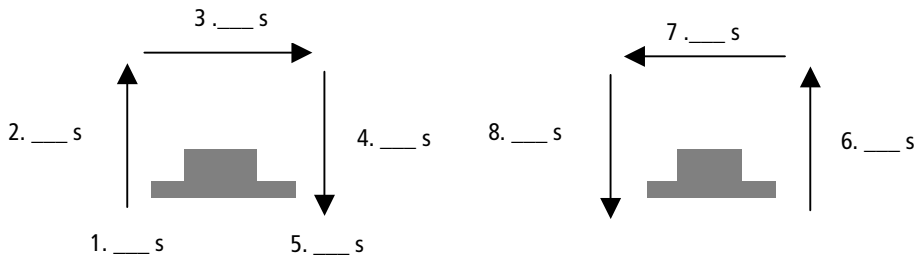
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### 3. Description of the working cycle:

→ If possible, specify the duration of each individual step in the cycle

With load:

Without load:



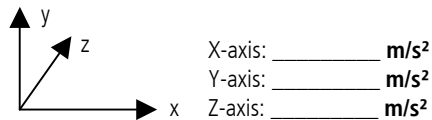
1: Gripping	5. Releasing
2: Lifting vertically	6. Idle travel, vertical
3: Transport, horizontal	7. Idle travel, horizontal
4: Blowing off, vertical	8. Idle travel, vertical

Total cycle duration: \_\_\_ s

Gripping time: \_\_\_ s

Release time: \_\_\_ s

### 3.1 What are the maximum acceleration values?



### 3.2 Do other parts need to be handled in addition to the workpiece?

Intermediate layers     Paletts     Other: \_\_\_\_\_

### 4. How large is the maximum difference in the workpiece heights?

Products within one layer \_\_\_\_\_ mm    Complete layers \_\_\_\_\_ mm

### 5. How large (maximum overall size) may the gripper system be?

X \_\_\_\_\_ mm    Y \_\_\_\_\_ mm    Z \_\_\_\_\_ mm

### 6. Which automation component is used?

Portal robot     Industrial robot

What maximum net load can be handled? \_\_\_\_\_ kg

### 7. Which pallet sizes/maximum layer dimensions need to be handled?

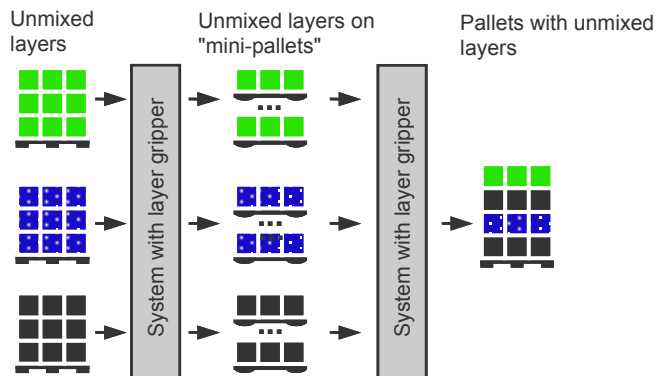
Type of pallet	Remarks	Pallet size	5% overhang	7% overhang
Euro-pallet	Pallets commonly used in Europe	1,200 x 800 mm	1,260 x 840 mm	1,284 x 856 mm
US pallet		1,210 x 1,010 mm	1,270.5 x 1,060.5 mm	1,294.7 x 1,080.7 mm
Special sizes				
Maximum permissible overall dimensions of the gripper?				

### 8. Are the layers unmixed (each contains objects of only one kind)?

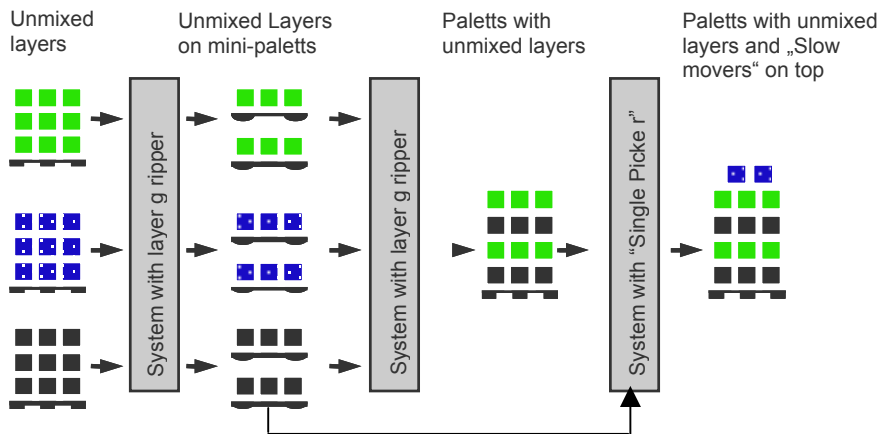
Yes     No



### 13.6. Depalettizing/palettizing of unmixed layers with buffer area



### 13.7. Other tasks



### 14. Is it necessary to avoid marking the workpieces?

- Absolutely     Only occasionally     No

### 15. How strongly may the gripper be pressed against the workpiece?

- No limit     Only own weight of workpiece     \_\_\_\_\_ N

### 16. Where may the workpiece be gripper (or does his result in a longer lever)?

- Anywhere     Only at certain positions

### 17. Which sensor functions would you like on the gripper?

- Layer detection     Detection of overhanging objects