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1. Field of Application

The XT 6 Horizontal Axis unit is used where workpieces of various widths are to be coated in a single job run or where job runs with workpieces of different widths are changed fairly frequently. The XT 6 Horizontal Axis unit can be used with ACR, and ZA 1 Reciprocators.

2. Description

The XT 6 Horizontal Axis is a mobile axis and has the following characteristics:

- uses the same control unit as the ACR Reciprocator
- Freely selectable positioning from the PRC Control unit
- Built-in levelling feet
- Minimum space requirements
- Requires no additional space for dismantling work and servicing
- Low height
- Fitting with ZA 1, and ACR Reciprocators possible
- Carriage can be moved manually when the control unit is switched off

(For further information about the control of the axis, please see the corresponding PRC Operating Instructions).
3. Technical Data of the XT 6 Horizontal Axis

- Electrical connection: Frequency converter (controlled from a PRC 2 or PRC 3)
- Travel speed: 0.1 m/sec.
- Position detection: Incremental pulse generator
- Reference point: Proximity switch
- Zero point: Selectable at both end switches
- Travel distance - Standard: 1000 mm / 1400 mm (other travel distances on request)

Figure 2.

1 - Cable connection - X Axis
2 - Cable connection - Z Axis
Preparation for Start-Up

Before the XT 6 Horizontal Axis is started up, the following points must be observed:
- Check if the frame is grounded.
  Grounding is to be done by the customer. The connection is under the cover plate of the XT Axis, near the toothed belt tensioning position.
- Adapt the system parameters in the PRC 3 Control unit.
  (see below)

Adapting the System Parameters to the PRC 3 Control unit

⚠️ NOTICE ⚠️

To operate the XT 6 Horizontal Axis with a PRC 3 Control unit the system parameters on the control unit must be adapted according to the following values:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Definition</th>
<th>Values to be set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>Upper stroke limit (in metres)</td>
<td>Input the max. stroke (in metres)</td>
</tr>
<tr>
<td>SP2</td>
<td>Position Reference point (in metres)</td>
<td>0.050</td>
</tr>
<tr>
<td>SP3</td>
<td>Incremental pulse generator adaptation (Pulses / dm)</td>
<td>1975</td>
</tr>
<tr>
<td>SP4</td>
<td>max. Speed (m/s)</td>
<td>0.100</td>
</tr>
<tr>
<td>SP5</td>
<td>min. Speed (m/s)</td>
<td>0.100</td>
</tr>
<tr>
<td>SP6</td>
<td>Acceleration (m/s²)</td>
<td>0.700</td>
</tr>
<tr>
<td>SP7</td>
<td>Circuit amplification (Factor)</td>
<td>400</td>
</tr>
</tbody>
</table>
| SP8       | Alarm - Input OFF
          | ON                                                                           | 0                        |
| SP9       | Incremental pulse generator adaptation for Chain conveyor                  | 583                      |
| SP10      | Chain conveyor pulses for PLC                                              | 10                       |
Start-Up

Do not stand in the Horizontal Axis and never stand under the carriage of the Vertical Axis! Danger of accidents !!!

1. Check if the toothed belt runs on the wheel rim.
   A possible cause could be from transport damage, a blow to the carriage or similar.

2. If the toothed belt runs only on the wheel rim on one side, loosen the motor and displace in the slots with a few light blows of a hammer on the opposite side where the toothed belt touches.
   The toothed belt must not touch the wheel rim along the whole length of travel or at the reversing points.

3. If the toothed belt still runs on the wheel rim:
   - loosen the motor
   - displace the motor axially.

4. Check if the reciprocator vibrates together with the carriage plate.
   - adjust the counter roller with the corresponding screws on the running wheel bearing / guide wheel bearing so that there is no play (see also the Spare Parts List).
   **Under no circumstances is the counter roller to be pressed hard onto the rail, as this will wear very quickly.**

5. Check the reference point and when necessary, reverse.
   If the Reference point is reversed, simultaneously:
   - Set the proximity switch to the other end and set it so that the distance to the switch plate is 1 mm,
   - Reverse 2 phases in the motor (direction of motor rotation),
   - Reverse the A, and B signals on the incremental pulse generator.
Spare Parts List

Ordering Spare Parts

When ordering spare parts for your powder coating booth, please indicate the following specifications:

1. Type, and serial number of your powder coating booth
2. Order number, quantity, and description of each spare part

Example:

1. Type XT 6 Horizontal Axis  Serial no: XXX XXX

2. Order no: 245 151, 2 piece, Levelling foot - ø 110/M12/L=196 mm

When ordering cable or hose material the length required must be given.
The spare part numbers of this yard/metre ware is always marked with an *.

The spare part number of yard/metre ware always begins with 1xx xxx.

All wear parts are marked with a #.

All dimensions of plastic hoses are given as external and internal diameters:
   e.g. ø 8 / 6 mm = 8 mm outside diameter (o/d) / 6 mm inside diameter (i/d).
When ordering a toothed belt:
Toothed belt length = Travel distance + 850 mm

When replacing the toothed belt, screw in the grubscrews so that they touch the steel cables in the toothed belt, thereby making a ground contact.

# Wear parts
* Please give length required
XT 6 horizontal axis

Figure 3.
### Running wheel bearing / Guide wheel bearing

1. Guide wheel 372315
2. Running wheel 372323
3. Spacing ring L = 5.9 372340
4. Spacing ring L = 12.1 372331
5. Lagerbolzen 372358
6. Counter roller 372366
7. Guide profile 372374
8. Gegenplatte 372382
9. Gleitlager D12/14x09 mm 258423
10. Deep groove ball race - Ø 25 / 52 x 15 mm 258415
12. Hex. Screw - M8 x 12 mm 213918
13. Spring washer - M 8 215953
14. Washer - Ø 8.4 / 20 x 2 mm 215880
15. C/sk Screw - M 6 x 12 mm 214680
16. Washer - M6 (for C/sk Screw) 258431
17. Hex. Screw - M 6 x 30 mm 202312
18. Hex. Screw - M 6 mm 205095
19. C/sk Screw - M 8 x 70 mm 258440
20. Nut - M 8 mm 215570
Running wheel bearing / Guide wheel bearing

Running wheel bearing

Guide wheel bearing

Figure 4
Documentation Horizontal Axis XT 6

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