E

Operating Instructions and Spare Parts List

XT 6 Horizontal Axis

ITW Gema

Issued 03/ 01

Table of Contents

Issued 03/ 01

XT 6 Horizontal Axis

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

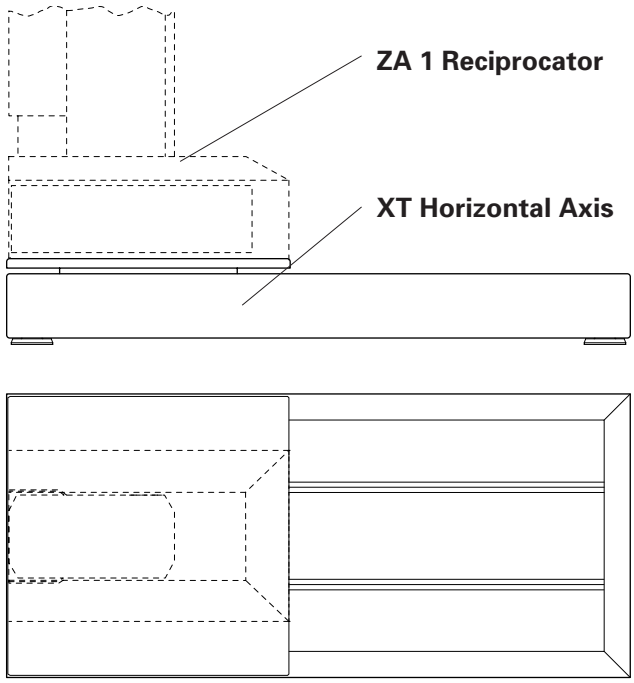


Figure 1. XT 6 Horizontal Axis with ZA 1 Reciprocator

2. Description

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

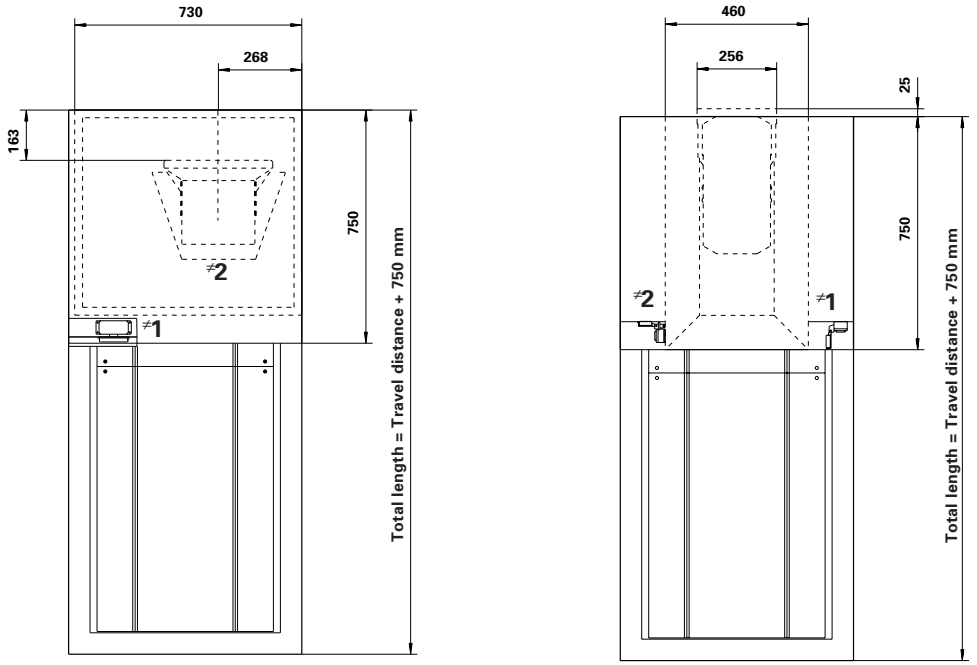
- uses the same control unit as the ACR Reciprocator
- Freely selectable positioning from the PRC Control unit
- Built-in levelling feet
- Minimum space requirements
- Requires no additional space for dismantling work and servicing
- Low height
- Fitting with ZA 1, and ACR Reciprocators possible
- Carriage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

Issued 03/ 01

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)



XT 6 Horizontal Axis with ACR Reciprocator

XT 6 Horizontal Axis with ZA 1 Reciprocator
View from above

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:

Parameter	Definition	Values to be set
SP1	Upper stroke limit (in metres)	Input the max. stroke (in metres)
SP2	Position Reference point (in metres)	0.050
SP3	Incremental pulse generator adaptation (Pulses / dm)	1975
SP4	max. Speed (m/s)	0.100
SP5	min. Speed (m/s)	0.100
SP6	Acceleration (m/s^2)	0.700
SP7	Circuit amplification (Factor)	400
SP8	Alarm - Input OFF ON	0 1
SP9	Incremental pulse generator adaptation for Chain conveyor	583
SP10	Chain conveyor pulses for PLC	10

Issued 03/ 01

Start-Up

⚠ CAUTION

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).

Issued 03/ 01

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1	Drive unit	369 845
2	Bolt	372 412
3	Foot plate	372 404
4	Incremental pulse generator fixture	372 498
5	Toothed belt wheel	369 748
6	Hollow shaft incremental pulse generator	248 851
6.1	Incremental pulse generator shaft	369 756
7	Guide roller	344 850
7.1	Deep groove ball race - ø 15 / 32 x 9 mm	241 709
8	Washer	345 407
9	Running wheel bearing - Front - complete	372 560
10	Running wheel bearing - Rear - complete	372 579
11	Guide wheel bearing - Front - complete	372 587
12	Guide wheel bearing - Rear - complete	372 595
14	Safety ring - A-15	233 617
15	Fixing plate	372 420
16	Clamp plate	345 067
17	Motor cable - XT 6 - complete	369 896
21	Cable guide	372 480
22	Clamping collar - ø 20 / 47 x 22 mm	257 583
23	Extension housing - 16 pin - without cover	258 407
23.1	Socket insert - 16 pin for Item **23**	221 864
28	Lead-through - PG11 - brass	204 390
30	Toothed belt	103 730**#***
31	Rubber buffer - ø 35 x 40 mm	211 664
37	Proximity switch	229 180
39	Bolt - M10 x 140 mm	258 474
40	Shaft screw	258 482
65	Nut - M12	215 597
66	Nut - M10	215 589
70	Washer - ø 13 / 24 x 2.5 mm	215 830
78	Grubscrew	214 841

⚠ IMPORTANT

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

Issued 03/ 01

XT 6 horizontal axis

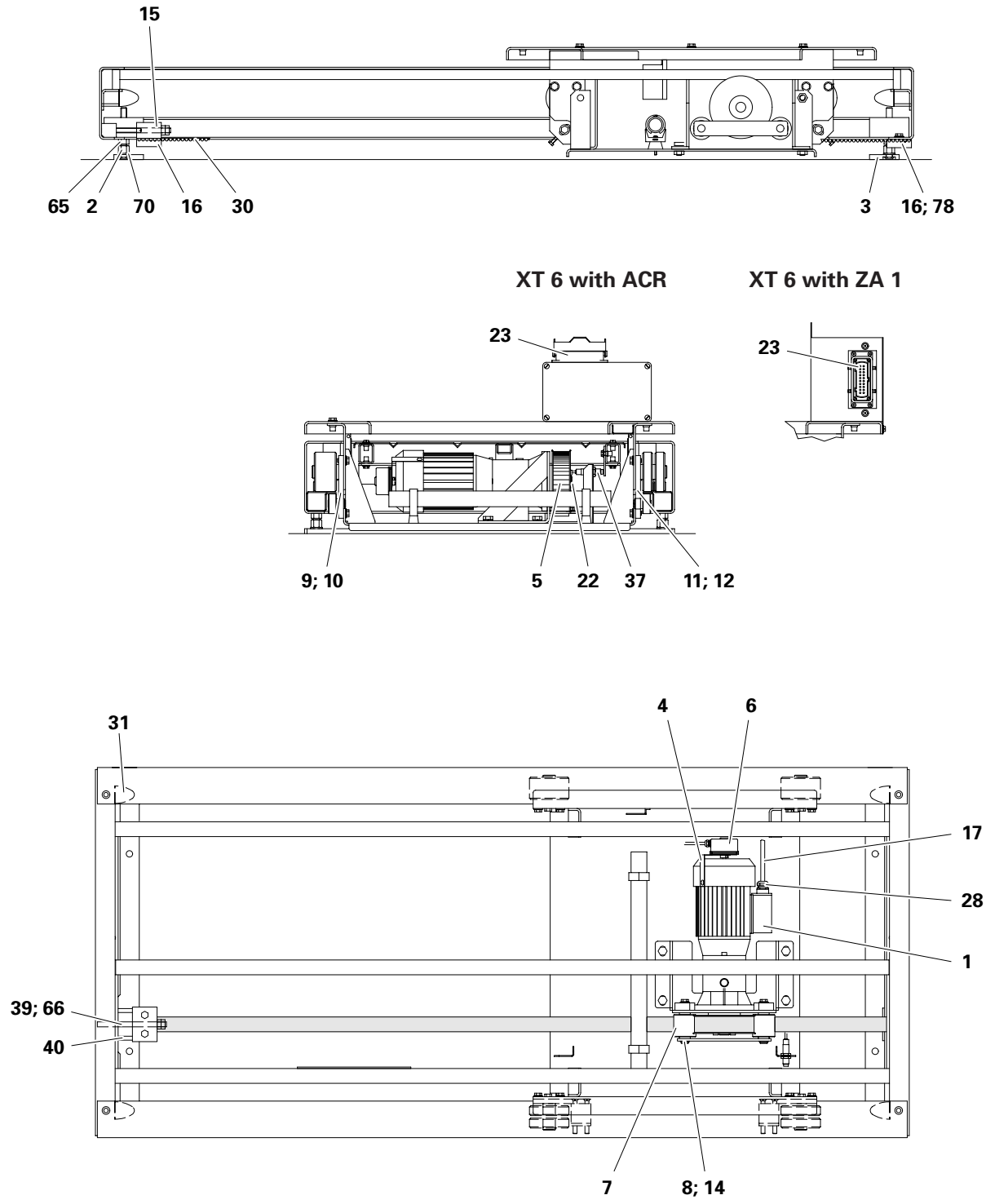


Figure 3.

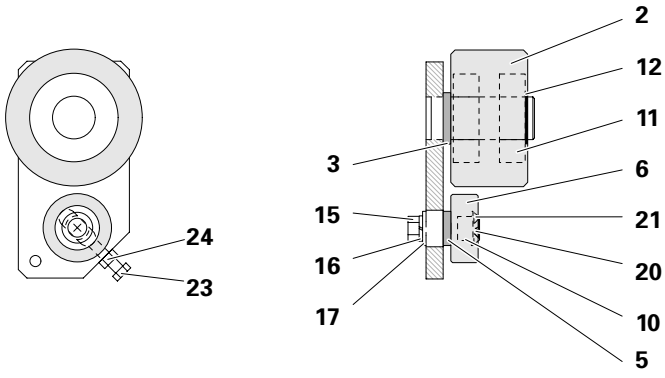
Running wheel bearing / Guide wheel bearing

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
10	Gleitlager D12/14x09 mm	258423
11	Deep groove ball race - ø 25 / 52 x 15 mm	258415
12	Safety ring - A-25	237094
15	Hex. Screw - M8 x 12 mm	213918
16	Spring washer - M 8	215953
17	Washer - ø 8.4 / 20 x 2 mm	215880
20	C/sk Screw - M 6 x 12 mm	214680
21	Washer - M6 (for C/sk Screw)	258431
23	Hex. Screw - M 6 x 30 mm	202312
24	Hex. Screw - M 6 mm	205095
26	C/sk Screw - M 8 x 70 mm	258440
27	Nut - M 8 mm	215570

Issued 03/ 01

Running wheel bearing / Guide wheel bearing

Running wheel bearing



Guide wheel bearing

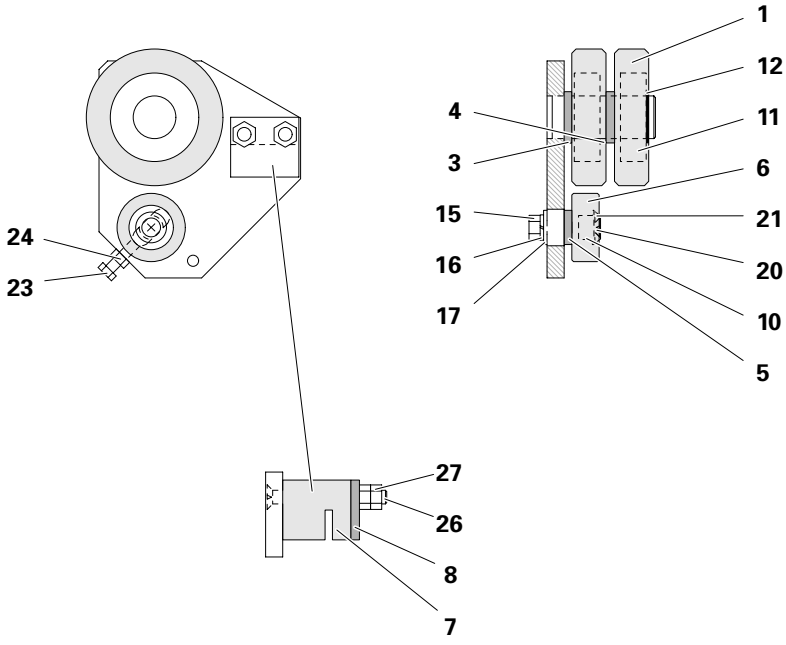


Figure 4

Documentation Horizontal Axis XT 6

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