

ELETEX[®] and ELEMET[®] ELEVATOR BELTS

INSTRUCTION FOR INSTALLATION

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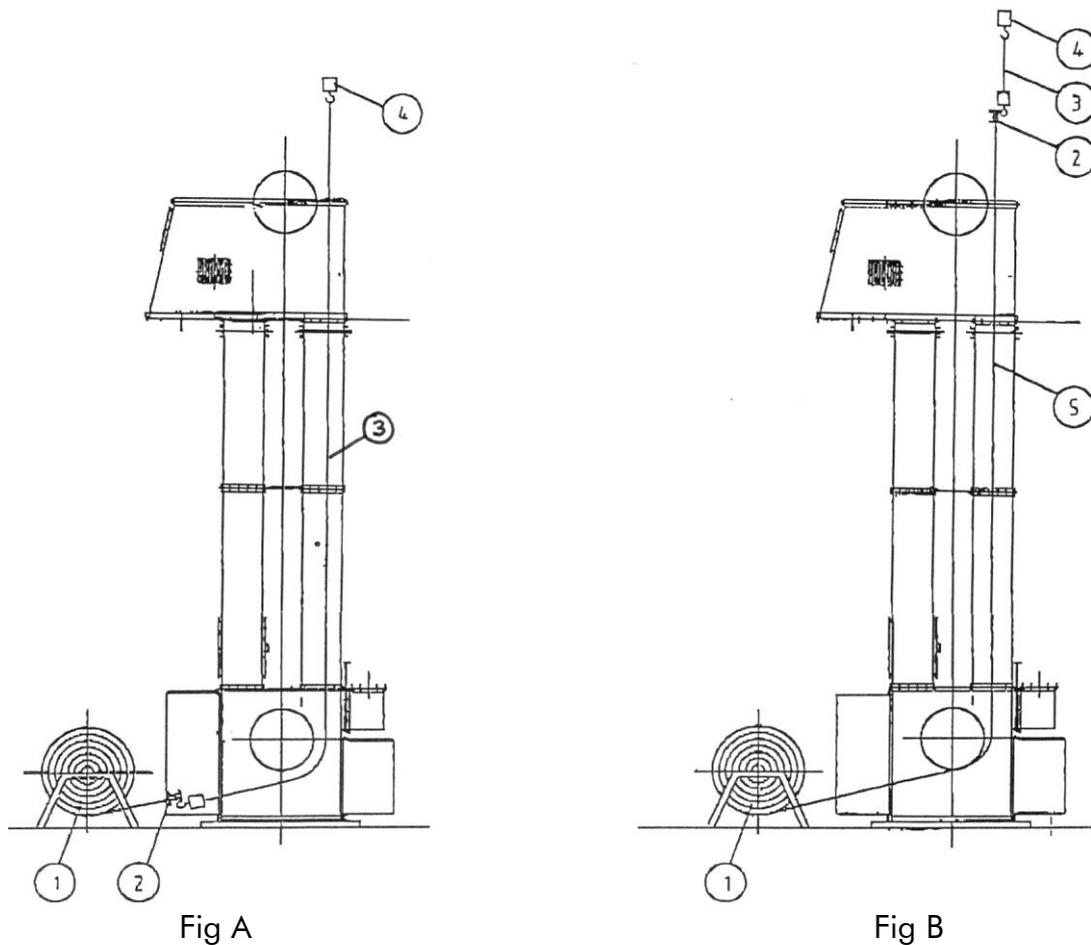
Revision	Date	Prepared by	Verified by	Approved by
1	15/05/2014	UT	CO	DG

FIG. A

1. Remove the head cover and the inspection door at the elevator boot.
2. Keep the bottom pulley at the highest position.
3. Place the belt roll in front of the opened inspection door.
4. Apply a winch (4) over the top of the elevator and drop the wire (3) along the upright.
5. Bolt an iron steel bar A of the same width of the belt (2) at the head of the belt exploiting the first row of holes realized for the bucket application. This steel bar must have a steel ring soldered on it to allow the hooking of winch wire.
6. Attach the steel bar to the winch hook.

FIG. B

7. Lift the belt till it arrives over the top pulley.


LEGEND

- | | |
|-------------------------------|-------------------------------|
| 1. Belt reel | 5. Elevator belt |
| 2. Bar A attached to the belt | 6. Hatch |
| 3. Winch wire | 7. Bar B attached to the belt |
| 4. Winch | |

FIG. C

8. Apply to the belt a steel bar B wider than the structure of the elevator (7) in order to fix the belt at the level of the top pulley.
9. Remove the steel bar A (2) and bolt it again at the lower point, near the bottom pulley.
10. Fix this steel bar to the winch hook.
11. Tension the wire and remove the bar B.

FIG. D

12. Lift the bar A till the top of the elevator, taking care that the belt head passes over the top pulley and begin to descend along the opposite upright.
13. When the bar A arrives to the higher point of the elevator, it means that the head of the belt is arrived near the lower hatch of the elevator.

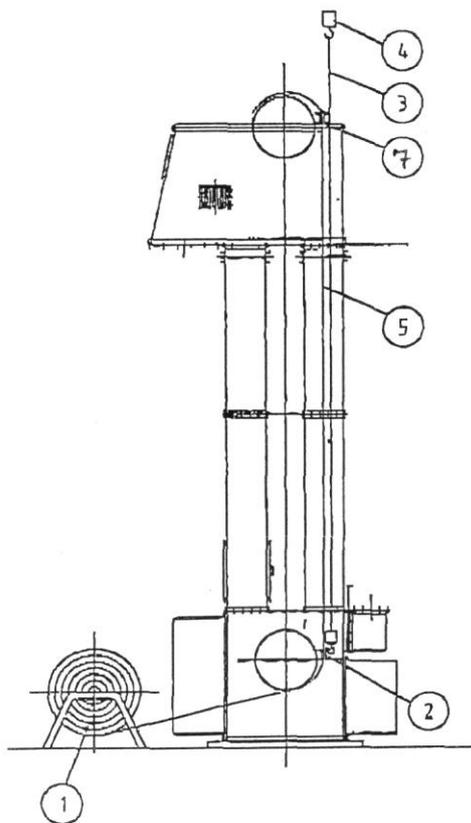


Fig C

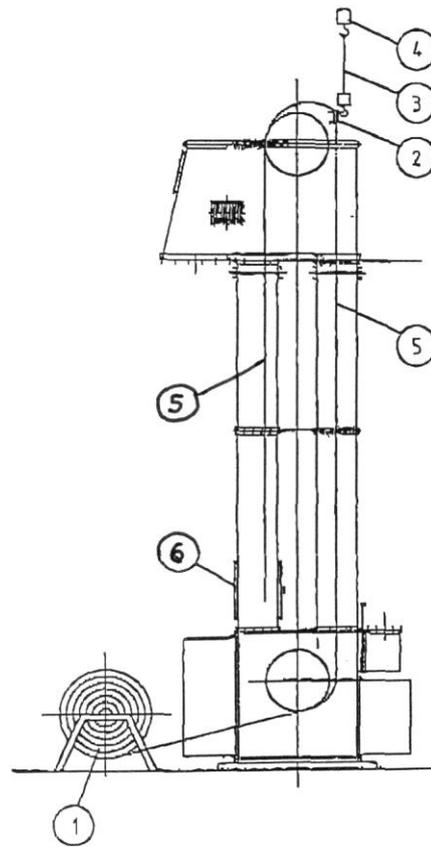


Fig D

LEGEND

- | | | | |
|----|----------------------------|----|----------------------------|
| 1. | Belt reel | 5. | Elevator belt |
| 2. | Bar A attached to the belt | 6. | Hatch |
| 3. | Winch wire | 7. | Bar B attached to the belt |
| 4. | Winch | | |

FIG. E

14. Fix the bar B as described at point 5.
15. Remove the bar A from the belt.
16. Apply the bar A to the other head of the belt.

FIG. F

17. Drop the wire along the opposite upright and fix the hook to the bar A.
18. Lift the belt until it is in the right position for the joint, in front of the inspection door. Be sure not to overstress the belt.

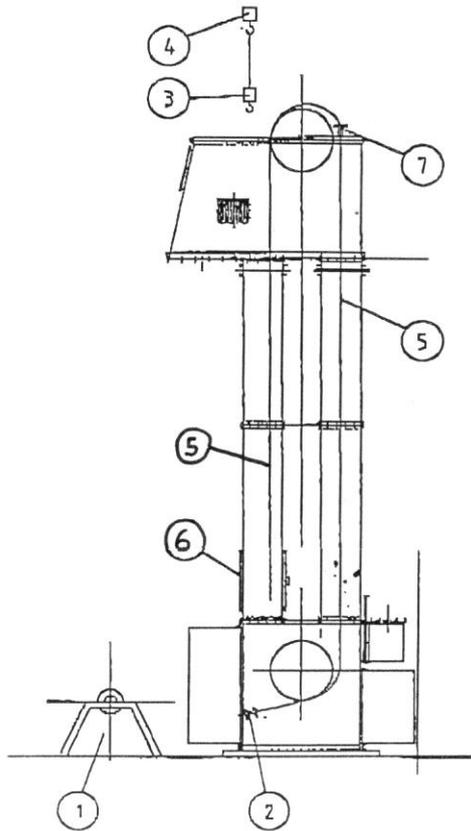


Fig E

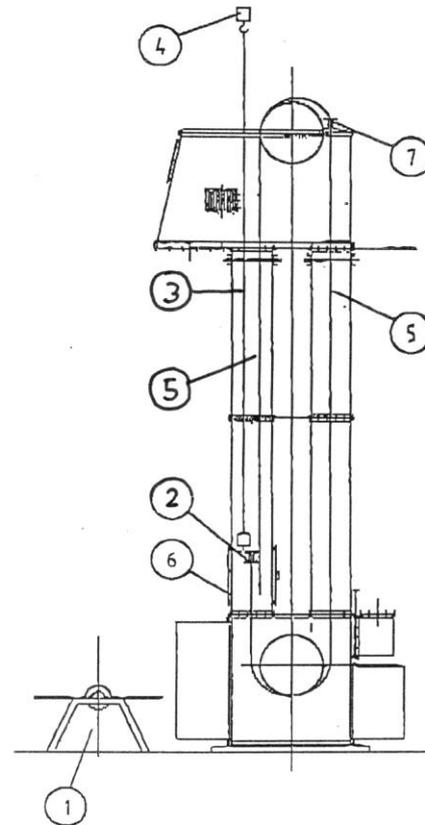


Fig F

LEGEND

- | | | | |
|----|----------------------------|----|----------------------------|
| 1. | Belt reel | 5. | Elevator belt |
| 2. | Bar A attached to the belt | 6. | Hatch |
| 3. | Winch wire | 7. | Bar B attached to the belt |
| 4. | Winch | | |

FIG. G

19. Fix the two ends of the belt together with tie-rods or similar systems placed on the bottom cover side, at approx 1 m far from the point of the joint installation. Be careful to assure same tension all over the belt width.
20. Remove the bar A, the bar B and the winch rope.
21. Apply the mechanical joint (see Appendix 2).
22. Eliminate the extra length of belt approximately 50 mm from the mechanical joint.
23. Check the right tensioning of the belt acting on the tensioning device of the bottom pulley.
24. Apply the buckets moving the belt around the pulleys in the normal direction of motion.
25. Track the belt, if possible at low speed.
26. Run the belt for approx 30 min and stop it with the joint at the inspection door.
27. Recheck bolts' tension with a torque wrench starting from the centre of the belt and moving alternatively left and wright toward the belt edges.

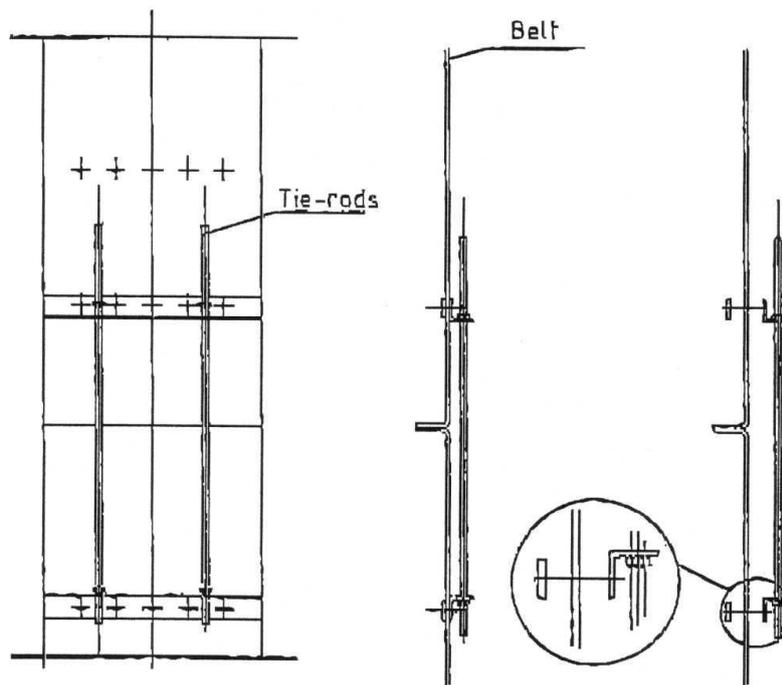
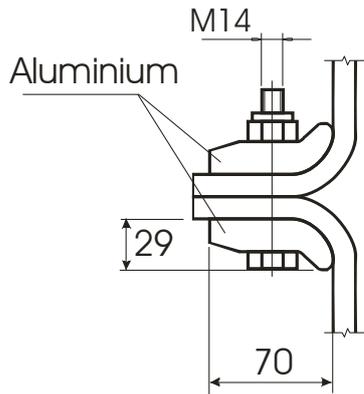


Fig G

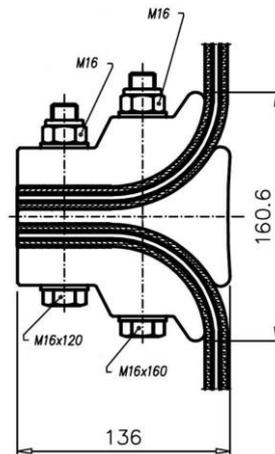
APPENDIX 1 – AVAILABLE MECHANICAL JOINT

Mechanical joints for ELETEX

400 – 800 N/mm

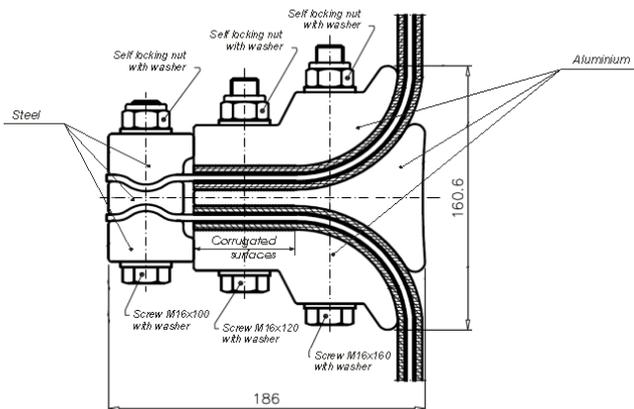


1000 – 1600 N/mm

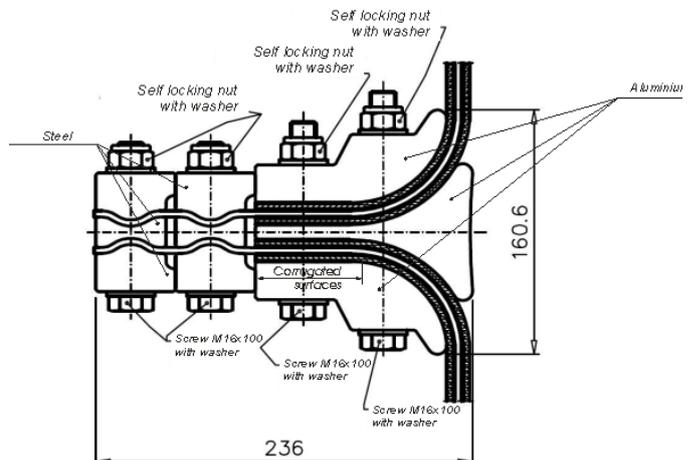


Mechanical joints for ELEMET

800 – 1250 N/mm



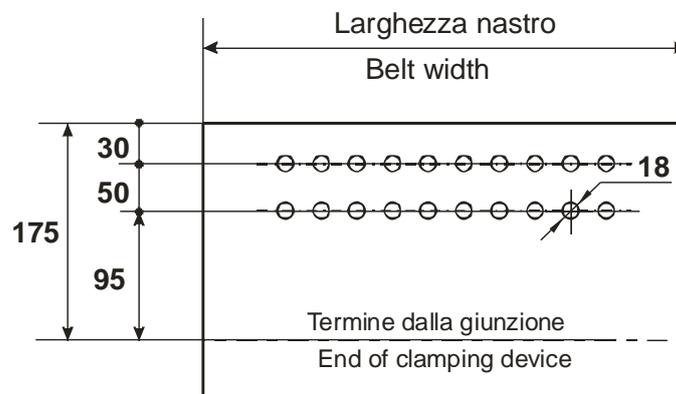
1600 – 2000 N/mm



For Elemenet belts, especially of high class, alternative mechanical joint with “casting box” is available. For the installation, please ask for the specific document.

APPENDIX 2 – INSTALLATION OF MECHANICAL JOINT

- A. Prepare a pre-drilled steel template 2-3 mm thick following the available sketch supplied with the mechanical joint.
- B. If possible, place the belt end to be drilled out of the inspection door in an horizontal position.
- C. Fix the steel template to one belt end perfectly orthogonal to the belt axis. The a.m. sketch (just for example, see the picture here below) gives indication of the distance between belt end and holes.



- D. Drill the holes with a standard drilling machine equipped with an hard steel bit having a diameter indicatively 2 mm bigger than the hole to be realized. Holes must be finished with a grinding wheel in order to eliminate all the broken cables.
- E. Carefully check the length of the ring in order to define the position of the holes at the second belt end. If necessary, modify the length of the tie-rods to correct the endless length.
- F. Repeat points B, C, D on the second belt end.
- G. Place the belt ends to the final mutual position by reducing the length of the tie-rods, assuring equal tension to the belt edges.
- H. Position fasteners in line with the holes, insert all bolts and tighten up to the complete joint fixation.
- I. Verify laterally if the joint is well positioned and squared.
- J. Recheck bolts' tension with a torque wrench starting from the centre of the belt and moving alternatively left and wright toward the belt edges. Torque depends on the type of bolt, according to the following table:

Bolt type mm	Torque Nm
M14	160
M16	250