

P R E S T R E S S E D
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T E C H N O L O G Y



Anchor Manufacturing System for Button-Head Anchors

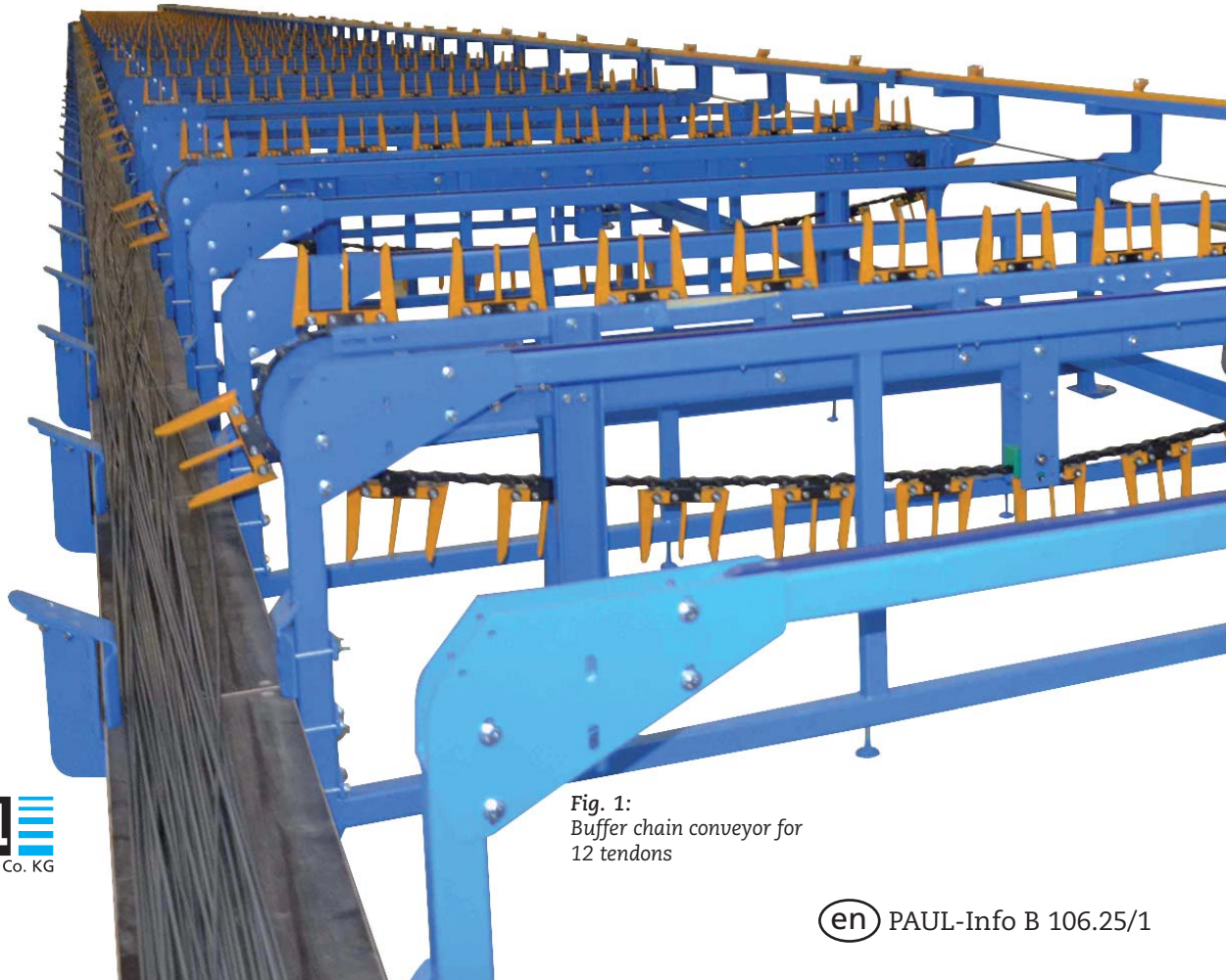


Fig. 1:
Buffer chain conveyor for
12 tendons

Description

The Anchor Manufacturing System greatly eases the prefabrication of tendons consisting of up to 100 round and smooth prestressing wires that are to be button-headed and provided with an anchor plate at either end and corrosion-protected, where necessary.

The system automatically cuts the prestressing wires to the exact length required and applies a button head of checked quality to one end of the wires. The automatic prefabrication offers the user a number of benefits:

- High quantities
- Consistent quality
- 100% automatic control of button-head quality
- Waste minimization thanks to immediate inspection of the first button head produced
- High cut length accuracy
- Low manpower required
- Fast changeover to different cut lengths
- Easy order management
- Easy change of wire coil

The tendons may comprise up to 100 smooth, solid round wires of 7mm in diameter that are anchored by means of button heads.

The system automatically positions the wire in the button heading machine and thereafter in the checking device where the quality of the button head, i.e. its height and diameter as well as the number and width of cracks is detected by several cameras. A button head that does not pass this check will be cut off and disposed of via an ejection flap before the wire is fed to the required length.

After the quality check the wire is fed at a max. speed of 5 m/sec into a channel of up to 100 meters in length, cut to length and laterally ejected onto a buffer chain conveyor. The buffered button-headed wires are transferred to a lateral channel from where they are pulled off for further processing (applying the second button head, anchor plates, etc). The repeat cut length accuracy of the individual wires is +/- 3 mm.



Fig. 2: Button-headed wires in buffer chain conveyor



Fig. 3: Button heading and checking unit (stationary), Wire feeding and cutting unit (moving)

Capacity

Product:	Prestressing wire, cut to length and button-headed at one end
Cycle time:	approx. 60 seconds / wire
Pushing speed:	5 meters / second *
Max. cut length:	100 meters (continuously adjustable)**
Repeat accuracy:	+/- 3 mm ***
Buffer:	for 12 to 15 tendons, as required

* with optimum wire supply at site, higher speeds on inquiry

** Different cut lengths on inquiry

*** at constant temperature of wire and environment