

Plastic Core Cutter TWIN K-2000

The TWIN K-2000 is able to cut tubes of each kind of plastic materials in progressive, single index action

Available with outside and interior chamfering.

Closest tolerances and perfect cutting surfaces are guaranteed by it
The entire operational sequence is PLC-controlled and fully program

➤ Working method:

The tube is fed into the machine. The required cutting lengths are programmed and the machine started. Tube advance is actioned by servo-motor according to the programmed length. First a trim cut is made and discharged then the complete core is divided into the corresponding length. The first and last trim cuts are ejected to the rear of the machine separate from the cut sections.

The machine is equipped with:

- Siemens Operating Touch Panel
- PLC – control Siemens S7
- Self - diagnostic - system with fault indication at the terminal.
- Dual-cutting-system programmable via servo devices.
Station 1: Nose cutting tool for cutting the plastic core
Station 2: Narrow square for chamfering and smoothing
- Very easy tube set-up by programming the corresponding data for core- and toolset data
- Minimum - Jet-Lubrication of tooling for polished cutting surface and cooling.
- Upper and lower guiding rollers with automatic adaptation to the cores diameter.
- Upper guiding roll powered by separately engine
- 3-jaw-chuck, suitable also for heavy core cutting.
- Positionable servo-indexing
- Discharging device for the last trim cut with automatic adaptation to the cores diameter.
- Sorting device for first and last trim cuts.
- Toolset for one core-ID with expanding cutting head
- CEE - Safety devices



Wallthickness	appr	2 – 15 mm
Length of core		
parent length max	appr	2160 mm
parent length min	appr	850 mm
Cutting length		
min	appr	10 mm
max	appr	2.000 mm
Trim cuts		
first cut programmable	appr	0 - 150 mm
last cut min	appr	45 mm
Cutting accuracy *	appr	+/- 0,1 mm
Tube set-up time	appr	10 - 15 min
Electrical installation		400 Volt, 50 Hz 3-phase current with N and PE
Electrical Drives		
Tooling unit via 2 servo-drives		each 2,50 kVA
Cutting head		2,5 kVA
Indexing unit		8,50 kVA
Tube rotation		4,00 kW
Pneumatic installation		60 NL/min at 6 bar
PLC - Control		Siemens S7
Machine dimensions (LxWxH)	appr	6,4 x 3,0 x 3,0 m
incl. automatic feeding		
Net weight	appr	2.500 kg

Additional Features:

Chamfer and Finishing

Device for operating the following processing steps:

- Outside Chamfer
- Interior Chamfer
- Finishing of cutting surface

By using a square tool the outside chamfer is adapted during cutting process.

The separate rings are servo-positioned symmetrically apart of each other to open the gap for the square tool to get in for creating the interior chamfer.

Re-positioning allows the tool to finish the cutting surface.

The complete processing is servo-controlled.

Feeding Units:

Standard Feeding System HBK 2000

Automatic tube feeding
for appr. 20 cores (OD 100mm (4"))

consisting of:

- Storage table with noise reduced tube separation.
- Sorting device for first and final trim cut. (Final trim cuts longer than 350mm (14'') discharged with cut pieces)
- Electrical adjustment for fast and easy tube setup.
- Levelling elements for exact alignment of the machine.
- CE - Safety devices

Optional Equipment:

Tube Storage Table AT 2000 with Sensor

placed in front of the machine.

Storage capacity is the recut output of about six 3''- parent tubes.

The cut sections are ejected onto the Storage Table.

The machine stops automatically if the storage capacity is filled and the cut sections are not off-loaded.

Chips Suction System

consisting of:

- Industrial vacuum cleaner with preselection unit
- System bag size 200 liter

Separately Suction Arm

Vacuum cleaning also with opened protective door

- Additional Hose
- Inclusive valve

Multi-Lengths - Software

for cutting one tube up into 8 different lengths.

Length of the remaining part is indicated.

Tooling-Control

Minimum-Lubrication

Pre-Programming of Cutting Parameters

Up to 50 data records can be pre-programmed.

Tool Sets:

Additional Tool Set for plastic cores

Consisting of clamping disc and expanding guiding ring.

For each tube inside diameter a tool set is needed.

ID = 69 – 110 mm

ID = 111 – 170 mm

ID = 171 – 220 mm