

High-Speed Profile Cut-Off Machine with Synchronous Linear Motor



Application

The TK 123.20 LA is designed for a flying operation in rollforming and tube welding installations with high rollforming speed or high part output. It is especially suitable for cutting small and thin-walled profiles and tubes with particular cutting quality. It achieves for example a speed of 200 m/min cutting aluminium window spacer bar profiles. Cutting short profiles a part output up to 100 parts per minute and more can be reached. The machine is also suitable for punching of profiles in flying operation. Cutting and punching can be done in combined or single mode.

Advantages

flying speed max. 200 m/min

for short profiles high output up to 100 parts/minute

excellent cutting precision thanks to a system precision of ± 0,2 mm

no wear at power train because there are no toothed racks nor cogwheels nor other rotating parts

low noise



Technology

The TK 123.20 LA is driven by a synchronous motor without rotating parts. The primary section with three phase current winding is installed on the machine carriage. The secondary section consists of a permanent magnet which is mounted on the machine base. The symmetrical design of the drive system ensures that even at high accelerations no torsion is generated on the machine. The drive area is clearly separated from the working space and thus protected from pollution. Cutting tools and units can be quickly changed. Depending on the requirements cut-off punches, shears or saws can be installed on the machine.

Technical Data

Cut-off machine		
Flying speed	max. 200	m/min
Available running distance	2300	mm
Weight cut-off unit	max. 80	kg
Acceleration	max. 16	m/s²
Drive power	10	kW

Pneumatical cutting tool			
Typical Application	Window Spacer Bars in Aluminium		
Line speed at part length of 4000 mm	max. 200	m/min	
Profile cross section (W x H)	25 x 10	mm	
Punching force	1200	N	
Air consumption at 6 bar	100	I/min	

Hydraulic cut-off and punching tool			
Typical Application	Cutting and punching of short steel profiles		
Part output at 100 mm profile length	100	pieces/ min	
Profile cross section (W x H)	40 x 20	mm	
Punching force	30	kN	
Drive power hydraulic	3	kW	

Main Dimensions



