

Ultrasonic cutting system UCS.03

Ultrasonic oscillating system for cutting UCS.03 is intended for simple separation of strips from unvulcanized rubber. The principle cutting consists in substantial decrease of cutting force by superposing of small axial deviation (approx. 15 µm) with frequency of 30 kHz and movement of cutting tool. The result is a smooth cut without any residual material. Oscillation of cutting tool also ensures its self-cleaning.

Ultrasonic generator is transforming electric voltage from power network to electric voltage suitable to feed oscillating system in the area 30 kHz. Ultrasonic generator is with its internal connection compensating effects of load, temperature, variations in supply voltage, etc. so the piezoceramic oscillating system is constantly fed with optimal operating frequency.

Technical parameters of generator UZG10

Supply voltage	230 V ±10% / 50 Hz
Operating frequency	30 kHz ± 200 Hz
Cover	IP20
Max. input	1000 VA
Control voltage	24 V
Operating temperature of the generator	10 °C to 45 °C
Dimensions (L x W x H)	290 x 145 x 100 mm
Weight	3 kg

Technical parameters of transducer UT500.30.01

Pracovná frekvencia	30 kHz
Transducer power	max 500 W
Cover	IP20
Weight	2 kg

Ultrasonic device UCS.03 allows communication with the master system through the communication connector. Ultrasonic device is controlled by two-state signals : OFF (RESET) and START. In the same time system generating two-state signals READY (ALARM) and RUN the status of UCS.03.

Meaning of signals

START	OFF (RESET)	Function
X	H	US turned off
L	L	Stand-by
H	L	US turned on - generator is delivering the power



US generator UZG10



Set-up of transducer UT500.30.01 and ultrasonic tool UH30.03.T

Meaning of status signals

RUN	READY	START	OFF	
L	L	X	H	Turned off, generator is uninitialized
L	H	L	H	Turned off, generator is initialized
X	L	L	H -- L	Initialization (max 4 sec)
L	H	L	L	StandBy
L	H	H	L	Soft start
H	H	H	L	Turning the generator on
X	H -- L	X	L	Generator failure

Manufacturer



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