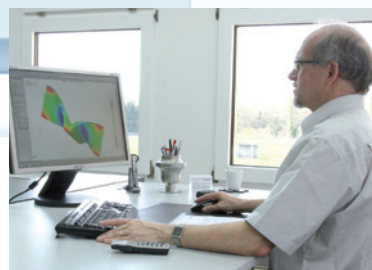




TOP BENEFITS FOR YOUR PACKAGING PROCESSES

**EFFICIENT AND ECONOMIC
PACKAGING PROCESSES WITH
MINIMUM USE OF RESOURCES**

TELSONIC
ULTRASONICS



TELSONIC has earned an excellent reputation over many years.

+ YOUR PLUS Perfect solutions from ultrasound specialists, made in Switzerland

Our dedication to quality and reliability, combined with innovative concepts and precise implementation play a key role here. We are committed to maintaining this reputation to the benefit of our customers and partners.

Unrivalled know-how with more than 45 years of experience.

TELSONIC was one of the pioneers of the highly specialized field of ultrasonic technology and it's industrial applications.

During this time the company has built a wealth of expertise and achieved international standing, which has resulted in the success of countless projects across a wide range of industries.



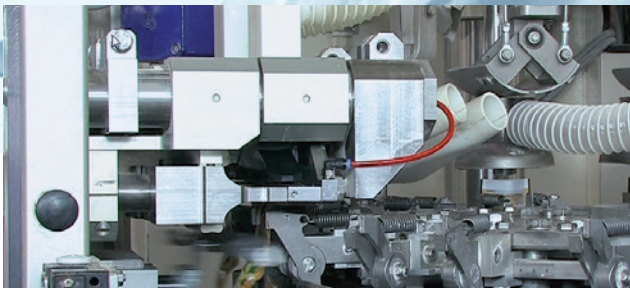
Over the course of our history, we have been developing techniques and building systems for our customers, in order to boost their product quality and manufacturing efficiency.



THE MANY ADVANTAGES OF ULTRASONICS IN PRODUCTION

More environmentally friendly – ultrasonic systems support a wide range of different process engineering applications in industry. The use of ultrasonics means that additives and chemicals for cleaning can often be reduced or left out altogether.

Energy savings – due to the very high efficiency of the resonant oscillating system, solutions based on ultrasonic technology are highly efficient. The energy required is applied for only a very short duration, and unlike thermal processes, the systems do not require a continuous supply of energy.



Attractive solutions based on creativity and literally perfect technology.

Proper utilization of ultrasonic technology can achieve much more than is commonly known. Discuss your ideas with our experts, and ask for examples of this state-of-the-art technology. Our philosophy and the TELSONIC technology will convince you.

Ultrasonics offers great advantages in terms of process technology in many areas.

Ultrasonics technology is an environmentally compatible, and a highly economic process that minimizes material use. This has firmly established the use of the process in the modern packaging industry, where these capabilities are particularly advantageous.





The packaging process with ultrasonics is fast, reliable and environmentally friendly.

Ultrasonics technology can be integrated to good effect in practically all packaging processes involving thermoplastic materials and packaging laminates. This results in improved productivity, better economic viability and higher quality. Added benefits are low energy consumption and reliable welding of surfaces that are in contact with the product.



		Longitudinal vibrating system			Longitudinal vibrating system booster
		20	30	35	
	Flexible packaging				
	Vertical Form Fill Seal	■	■	■	■
	Zipper	■	■	■	■
	Valves	■	■	■	
	Spouts	■	■	■	
Die cutting/Euro hole	■	■	■	■	
	Firm packaging				
	Welding	■	■	■	
	peelable sealing	■	■	■	
	Cut & seal	■	■	■	
	Initial opening protection	■	■	■	
	Valves	■	■	■	
	Spouts	■	■	■	
	Carton packaging				
	peelable] sealing	■	■	■	
Spouts	■	■	■		
Others					
Food cutting	■	■	■	■	

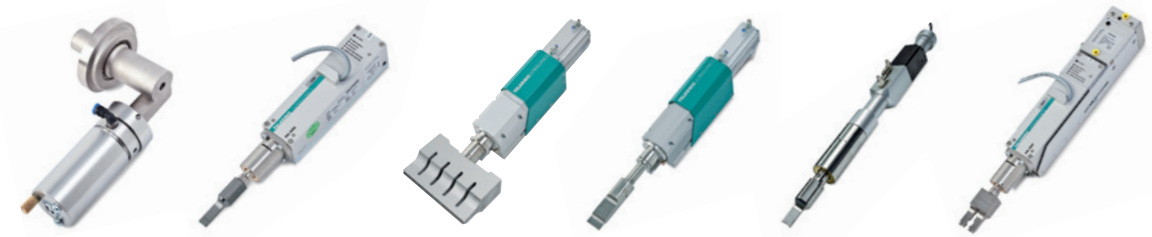
COMPONENTS

THE MANY ADVANTAGES OF ULTRASONICS IN PRODUCTION

More cost-effective – all manufacturing techniques and processes can be accelerated through the use of ultrasonics. This leads to the optimization of production costs and therefore to a correspondingly higher output.

Faster – with the use of ultrasonics it is possible to combine several different processes into a single production step. As a result of which, additional users or machine intervention can be avoided and production cycles are often significantly reduced.

More economical – faster and more streamlined processes result in excellent productivity. In addition, there is minimal wear to the sonically active components, keeping service and maintenance costs to a minimum.



Torsional vibrating system 20	Integrated oscillator/generator system IPM	AC1900	AC750	AC350	Integrated oscillator/generator system IPA
	■	■	■	■	■
	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
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■	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	MODULE	PNEUMATIC WELDING ACTUATOR UNITS			



SG3510



Example:
19" rack installation



Ultrasonic
welding generator
Type SGM3512



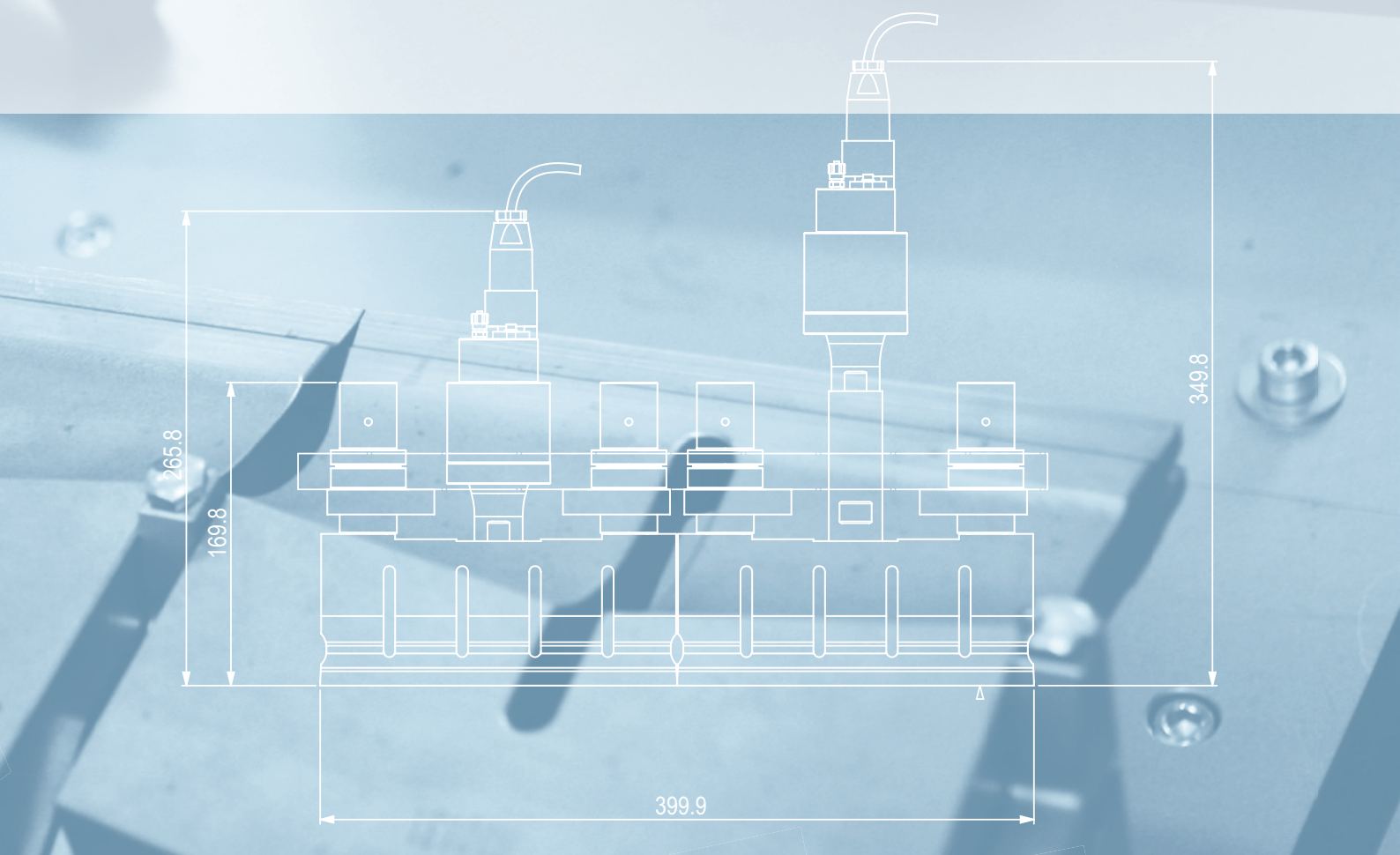
IPM

Optimum generator technology for packaging processes

The generator is the heart of an ultrasonics system. It goes without saying that the performance and technology of TELSONIC equipment represent state-of-the-art, and are exactly tailored to the respective packaging application. All process related data is clearly shown on the display and the operation of the units is user-friendly.

	SG3510	SGMXXYY			SGMXXYY PB			IPM
Frequency (X)	35 kHz	20 kHz	30 kHz	35 kHz	20 kHz	30 kHz	35 kHz	35 kHz
Output 500 W								■
Output (Y) 1000 W	■							
Output (Y) 1200 W		■			■			
Output (Y) 2000 W		■	■		■	■		
Dimensions < 2000 W approx. W x H x D mm	14 TE x 6 HE 93x300x365	21 TE x 3 HE 106 x 128 x 446			73.5 x 309 x 615			
Dimensions 2000 W approx. W x H x D mm		21 TE x 3 HE 142 x 128 x 446						
Operating data time			■			■		
Energy			■			■		
Distance absolute/relative			■			■		
Connectors D-sub 15 pole								■
D-sub 25 pole control plug	■		■			■		
D-sub 9 pole, RS-232			■			■		
D-sub 9 pole Profibus						■		
Amplitude setting	External	Front (RS-232, optional)			Front Profibus			Front
Output indicator	LED	LCD display RS-232, optional			LCD display Profibus			opt.
Frequency indicator			■			■		
Quality window*			■			■		
Actuation control (distance/force measuring)			■			■		
Data set management 8 data sets			■			■		
TelsoResult (process data storage)			opt.			opt.		opt.
TelsoPrint (welding curve storage)			opt.			opt.		
TelsoSave (settings storage)			opt.			opt.		






* time, energy, P_{max}, F_{max}, distance_{abs}



TELSONIC converters are robust and reliable for every application

Converters are the important links between the generators and the welding tools. The robust construction of the converter is always perfectly matched to the generator in order to meet the most demanding requirements in packing machines.



Typ	SE3512	SE3020	SE2012	SE2030	SE2040
Amplitude	6 µm	7,5 µm	10 µm	10 µm	7 µm
 SG3510	■				
 SGM3512	■				
 SGM2012			■		
 SGM2020				■	■
 SGM3020		■			
IP protection rating (optional)	50 (65)	65 (67)	40 (50)	30 (65)	30 (65)



Moulding presses and welding actuator units with an output of 10 kW and a force of 12 kN

From standard moulding presses to ultrasonic generators of all classes and matching welding actuator units through to non-standard high-tech machines: we supply Swiss precision to your exact briefing and production requirements.

TELSONIC – ULTRASONIC TECHNOLOGY FOR ALL APPLICATIONS

It takes a deep understanding of the entire spectrum of the ultrasonic technology to be able to design and manage all related processes. TELSONIC has been working in this field for over 45 years,

and will continue to set the industry standards for the future. Numerous patents in different applications including cleaning, welding and screening are proof that our

work has been successful. From these innovations, we produce application-specific products and solutions which will quickly optimize your processes.

TELSONIC
ULTRASONICS

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T H E P O W E R H O U S E O F U L T R A S O N I C S