



# NEW dimension in hot air riveting technology

## with the world's smallest heater from LEISTER

- Very high joint quality
- Problem-free plastic to metal bonding
- Bonding of same and different types of plastic
- No separation of embrittled particles
- No vibration

- Space saving
- High process control
- Economical assembly respectively bonding technique
- Integrated tool and heating element protection



LEISTER heater Mini used in an installation for riveting door side claddings.

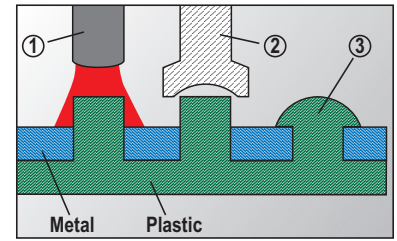


The automobile industry is focussed on hot air riveting

- Airbag-metal
- Internal cladding
- Containers
- ABS-control boxes
- Blinkers
- PCBs
- Mobile radio
- Sensors etc

# Industrial joint technology by means of hot air riveting

As opposed to ultrasonic riveting, thermal riveting can be used for problem-free metal/plastic bonding as no vibrating tools come into contact with the metal which may impairing the bonding. Thermal riveting achieves a very high joint quality, particularly for difficult plastics such as POM or PAGF which tend to embrittle during ultrasonic riveting. The process is of great use where contamination of parts due to separation of embrittled particles is to be avoided for safety reasons.



- ① Heating by means of hot air
- ② Riveting punch
- ③ Riveting head

## LEISTER heater Mini Sensor



Converter

## LEISTER heater Mini



Type		LE Mini Sensor, 400	LE Mini Sensor, 800	LE Mini, 400	LE Mini, 800
Voltage	V~	120 / 230	230	120 / 230	230
Frequency	Hz	50 / 60	50 / 60	50 / 60	50 / 60
Power consumption	W	400	800	400	800
Max. temperature	°C	600	750	600	750
Min. air flow	l/min	10	10	25	30
Max. pressure	MPa	0.2	0.2	0.2	0.2
Thermal switch for tool protection		+	+	+	+
Heating element protection		+	+	-	-
Integrated heating probe		+	+	-	-
Analogue interface (passive)	4 – 20 mA	+	+	-	-
Dimensions, LE Mini L×ø	mm	253×27	308×27	253×27	308×27
Dimensions, heating tube ø	mm	15	15	15	15
Dimensions, converter L×W×H	mm	135×105×53	135×105×53	-	-
Weight LE Mini	g	120	150	120	150
Weight converter	g	190	190	-	-

Technical data are subject to change without notice

## LEISTER heaters



LEISTER heater 3000

Voltage 120 V~ 230 V~  
Power consumption 2200 W 3300 W



LEISTER heater 3300

Voltage 120 V~ 230 V~  
Power consumption 2200 W 3600 W



LEISTER heater 5000

Voltage 230 V~ 1 × 380/400 V~  
Power consumption 4.0 kW 5.0/6.7 kW

There are more heaters and blowers available



LEISTER Process Technologies  
6060 Sarnen/Switzerland

ISO 9001:2000

Tel. + 41 41 662 74 74 Fax + 41 41 662 74 16

e-mail: leister@leister.com

www.leister.com

Flyer LE Mini 03.2003