

# LBS Studwelders

Capacitor Discharge Stud Welding Units



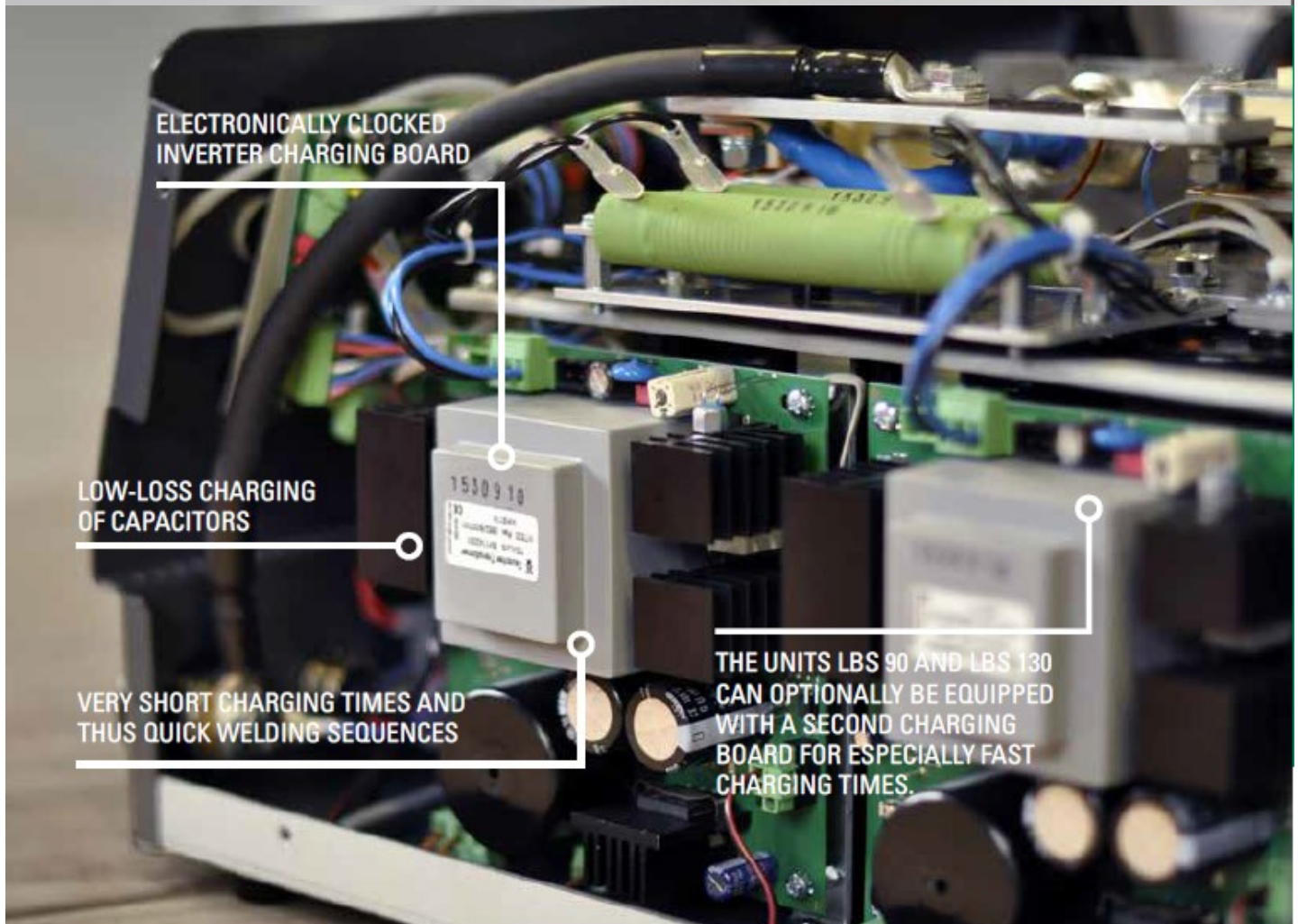


COMPACT  
AND ROBUST  
CONSTRUCTION

CHARGING VOLTAGE  
CONTINUOUSLY ADJUSTABLE

INDICATION OF ALL  
FUNCTIONS BY CLEARLY  
ARRANGED LED

VERY EASY  
OPERATION



ELECTRONICALLY Clocked  
INVERTER CHARGING BOARD

LOW-LOSS CHARGING  
OF CAPACITORS

VERY SHORT CHARGING TIMES AND  
THUS QUICK WELDING SEQUENCES

THE UNITS LBS 90 AND LBS 130  
CAN OPTIONALLY BE EQUIPPED  
WITH A SECOND CHARGING  
BOARD FOR ESPECIALLY FAST  
CHARGING TIMES.



## HIGHLIGHTS AND SPECIAL EQUIPMENT



### ELECTRONICALLY CLOCKED INVERTER CHARGING BOARDS

- » ensure very short charging times and thus quick welding sequences
- » ensure energy-efficient charging of capacitors
- » The units LBS 90 and LBS 130 can optionally be equipped with a second charging board for especially fast

charging times. Thus, extremely quick welding sequences (e.g. for automatic applications) can be achieved.



### AUTOMATIC STUD FEEDING

- » An automatic module enables the connection of the automatic stud feeder VBZ and an automatic welding gun.

**VERY SHORT CHARGING TIMES!  
QUICK WELDING SEQUENCES!**

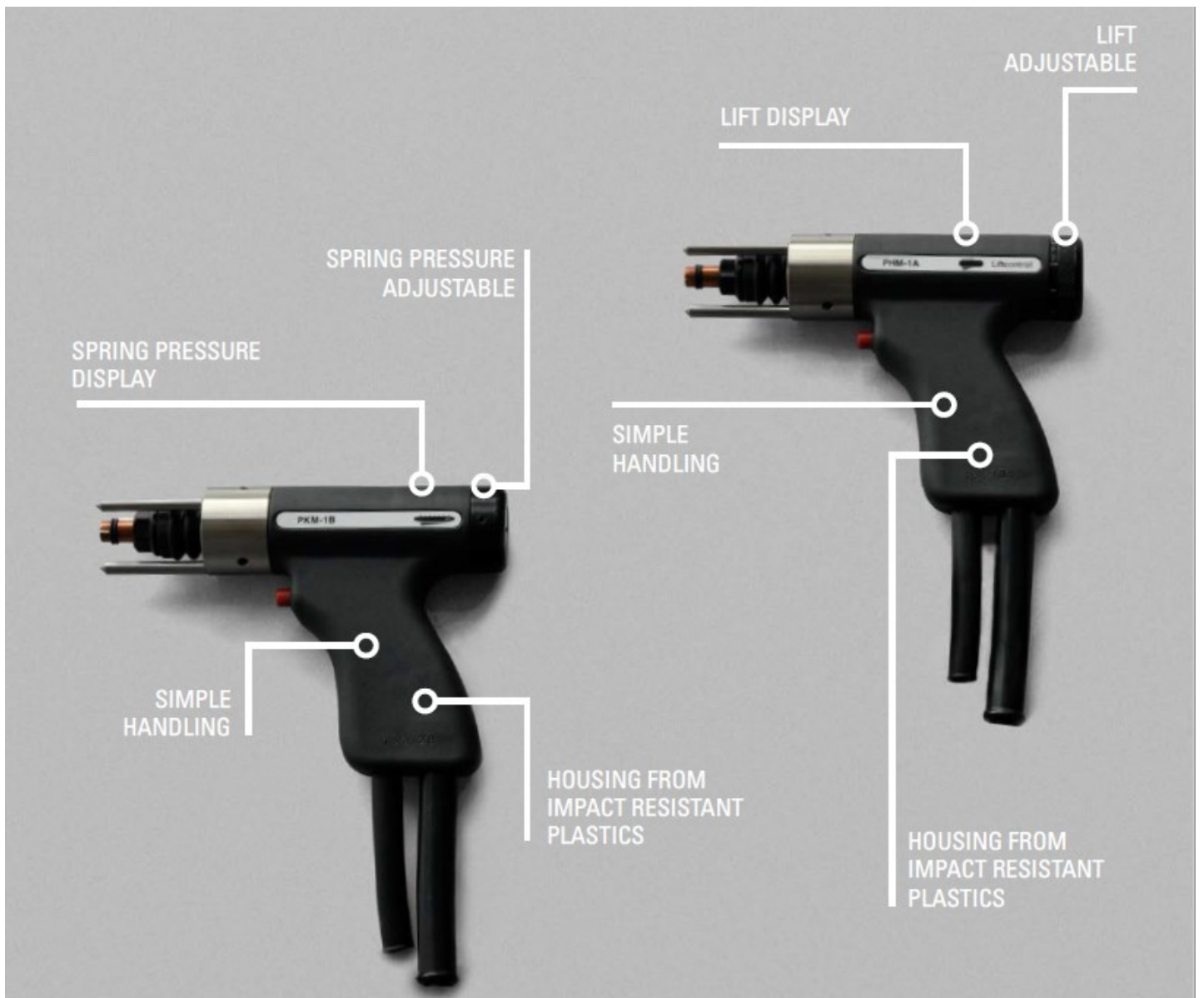
## Technical Data and Characteristics

	LBS 75	LBS 80
<b>Max. welding diameter (mm)</b>	8	10
<b>Capacitance (µF)</b>	66000	90000
<b>Charging voltage (V)</b>	60 - 200	60 - 200
<b>Welding time (mS)</b>	1 - 3	1 - 3
<b>Electronically clocked inverter charging boards</b>		
1 charging board	x	x
2 charging boards		
<b>Operation</b>		
Repeat cycle lock	x	x
Electronic function control	x	x
Self diagnosis system	x	x
Automatic function test	x	x
<b>Automatic stud feeding</b>		
<b>Error diagnosis systems</b>		
Excess temperature	x	x
Damage on welding/control cable	x	x
Damage on solenoid	x	x
<b>Thermic controlled ventilator</b>		x

	LBS 75	LBS 80
<b>Robust, powder-coated metal housing</b>	x	x
<b>Dimensions</b>		
Width (mm)	195	195
Height (mm)	260	260
Length (mm)	400	400
Weight (kg)	11	13,5
<b>Electric connection</b>		
Mains supply (V) at 50/60 Hz	230 (115)	230 (115)
Mains fuse external	≥ 10 AT	≥ 10 AT
Protection	IP 21	IP 21
<b>Control cable socket for welding guns</b>	7-pin	7-pin
<b>Suitable welding guns</b>		
PKM-1B	x	x
PHM-1A	x	x
PIM-1B	x	0
PKA-500		
PHA-500		



# CD Guns & Accessories



## TECHNICAL DATA AND CHARACTERISTICS

	PKM-1B	PHM-1A
<b>Welding method</b>		
Capacitor discharge (contact)	x	
Capacitor discharge (gap)		x
<b>Welding range (Ø mm)</b>	2-10	2-10
<b>Welding material</b>		
Steel	x	x
Stainless steel	x	x
Aluminium		x
Brass		x
<b>Spring pressure adjustable</b>	x	
<b>Spring pressure display</b>	x	
<b>Lift adjustable</b>		x
<b>Lift display</b>		x
<b>Piston guide</b>		
Slide-bearing	x	x
Linear ball track	o	o
<b>Welding cable</b>		
-cross-section (mm <sup>2</sup> )	25	25
-length (m)	6,5	3,5
<b>Control cable plug</b>	7-pin	7-pin
<b>Housing from impact resistant plastics</b>	x	x
<b>Protection of piston guidance from welding spatters</b>	x	x
<b>Dimensions</b>		
Width (mm)	40	40
Height (mm)	130	130
Length (mm)	183	183
Weight without cable (kg)	0,7	0,7

# Positioning Tube

For welding in jigs and on tubes



Ø	Length	Part Number
30	79	B-90-50-1012
30	100	B-90-501112

# Centring Device



- 1 Centring Tube
- 2 Flange
- 3 Distance Bolt
- 4 Foot Ring 38/32

- 5 Centring Disc
- 6 Cylinder Bolt
- 7 Chuck Extension  
12.5mm with length  
stop



## Intermediate Ring 16mm



## Offset Chuck

For welding close to edges



For welding of studs at a distance of up to 8.5mm

To angled sheets