

## SOLDER BALLS for BGA Reballing



High quality Solder Balls are available directly from MARTIN for reballing using MARTIN's MINIOVEN 04.

MARTIN Solder Balls are packaged under Argon inert gas atmospheres in quantities of up to 50.000 to prevent oxidation and promote a superior reballing process. Oxidation prevents solder alloys from wetting properly during the soldering process, enables voiding and jeopardizes the Rework process.

MARTIN's MINIOVEN 04 is a robust and easy to use dedicated reballing tool with an integrated soldering process controller. A prepared SMD component is loaded into the reballing fixture. The fixture pre-aligns the SMD with a stencil that enables poured Solder Balls to mate with the SMD's interconnecting pads and allows excess Solder Balls to be collected. The SMD and properly aligned Solder Balls housed within the reballing fixture are loaded into the MARTIN MINIOVEN 04 and reflowed under precise control.

### Features

- All Solder Ball boxes have quantity of 50.000pcs and are prefilled with dry, inert Argon gas.
- Storage life of closed boxes is 12 months, after opening 6 months

### Technical Data

#### Lead Free(SnAg3,5Cu0,5)

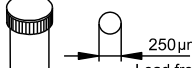
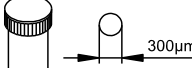
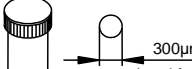
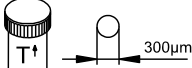
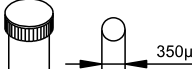
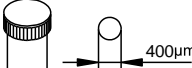
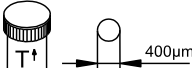
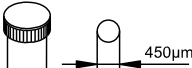
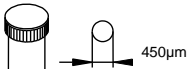
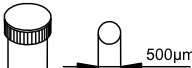
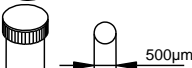

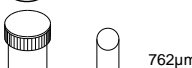
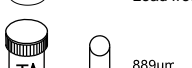
Size Range:	Ø 0,2–1,0 mm ±0,01 mm
Alloy:	Sn Balance, Ag 3,0–4,0% Cu 0,4–0,6%
Melting Point:	217-220 °C
Density:	7,37 g/cm <sup>3</sup>

#### Leaded (SnPb37)

Size Range:	Ø 0,2–1,0 mm ±0,01 mm
Alloy:	Pb Balance, Sn 62,5-63,5
Melting Point:	183 °C
Density:	8,4 g/cm <sup>3</sup>

## SOLDER BALLS for BGA Reballing

### Selection of Solder Ball Types form Stock

VD90.5004	Solder Balls, 50,000 pc, CSP Sn63Pb37, 250µm (= 3,5g)		1 piece
VD90.5104	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 250µm (=3g)		1 piece
VD90.5005	Solder Balls, 50,000 pc, CSP Sn63Pb37, 300µm (= 6g)		1 piece
VD90.5105	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 300µm (=5.2g)		1 piece
VD90.5011	Solder Balls, 50,000 pc, CCSP Sn10Pb90, 300µm (= 7.6g)		1 piece
VD90.5115	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 , 350µm (=7.5g)		1 piece
VD90.5008	Solder Balls, 50,000 pc, CSP Sn63Pb37, 400µm (= 14g)		1 piece
VD90.5108	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 , 400µm (=12.5g)		1 piece
VD90.5013	Solder Balls, 50,000 pc, CCSP Sn10Pb90, 400µm (= 18g)		1 piece
VD90.5010	Solder Balls, 50,000 pc, CSP Sn63Pb37, 450µm (= 20g)		1 piece
VD90.5110	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 , 450µm (=18g)		1 piece
VD90.5009	Solder Balls, 50,000 pc, CSP Sn63Pb37, 500µm (= 27g)		1 piece
VD90.5109	Solder Balls, 50,000 pc, lead free CSP Sn96.5Ag3Cu0.5 ,500µm (=24g)		1 piece
VD90.5006	Solder Balls, 50,000 pc, BGA Sn63Pb37, 600µm (= 47g)		1 piece
VD90.5106	Solder Balls, 50,000 pc, lead free BGA Sn96.5Ag3Cu0.5 , 600µm (=42g)		1 piece
VD90.5101	Solder Balls, 50,000 pc, lead free BGA Sn96.5Ag3Cu0.5, 762µm (=86g)		1 piece
VD90.5001	Solder Balls, 50,000 pc, BGA Sn63Pb37, 762µm (= 96g)		1 piece
VD90.5002	Solder Balls, 50,000 pc, CBGA Sn10Pb90, 889µm (= 197g)		1 piece