MX-500

고주파 납땜 및 SMD 수리장비

국제특허 납땜기술
SmartHeat

국제공인성
IL-STD-2000, -1686, 45743E, WS-6536D/E

본체보증
Warranty 4 years

LEAD FREE

Powered by Metcal SmartHeat®

■ 아이들 상태에서 30분후 전원 자동차단 기능
Cartridge 수명연장, 전력소모량 절감, 작업자 안전성증대

■ DC전류 감지후 전원 자동차단 기능
실수로 인한 고가부품의 손상방지

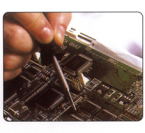
MX-500S

무연납땜 / SMD Rework / SMD Touch-up

■ 저온에서도 높은 열효율

■ 집게식 핸들이나 납흡입건을 추가하면
하나의 장비로 모든 부품의 납땜 및
SOIC, QFP, DIP IC 등 부품제거

무연납땜인두기, SMD Touch-up용으로 미국내 판매 1위 제품



밀집상태의 Multi Lead 납땜

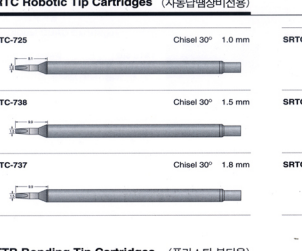
Chip 0603 / 1005 제거

MX-500 Specifications

MX Power Supply	
Tip-to-ground potential	< 2 mV, true RMS, 50-500 Hz
Tip-to-ground resistance	< 2 ohms, DC, unit on
Idle temperature stability	±1.1°C, still air
Ambient operating temp	10-40°C
Maximum enclosure temp	65°C
Thermal switch	Setpoint at 66±1.2°C Auto-reset once cooled to 43°C
Input line voltage	190-260 VAC
Input line frequency	50-60Hz
Nominal output	40Watts maximum@22°C ambient
Output frequency	13.56MHz
Auto-off feature	10 millisecond lag time
Time out feature	After 25-30 minutes idle time
Dimensions	
Length x width x height	135 x 241 x 119 mm
Weight(total unit)	3.4kg
Standards compliance	MIL-STO-2000, -1686, -45743E, WS-65360D and E
Agency approvals	ETL, CE Approved
ESD materials	10^5-10^{11} ohm / square per ASTM D257 (10^5-10^9 ohm / square where possible)
MX RM3E Soldering/ Rework Handpiece	
Weight	56.7g
Handle cord assembly	1830mm carbon loaded silicone, shielded
ESD materials	10^5-10^{10} ohm / square as per ASTM D257 (10^5-10^9 ohm / square where possible)
MX TALON handpiece	
Weight	56.7g
Handle cord assembly	1830mmcarbon loaded silicone, shielded
ESD materials	10^5-10^{10} ohm / square as per ASTM D257 (10^5-10^9 ohm / square where possible)
MX desoldering handpiece	
Input air pressure	60-100 psig required
Vacuum	457mm Hg minimum
Weight	298g
Handle cord assembly	1830mm carbon loaded silicone, shielded
ESD materials	10^5-10^{11} ohm / square as per ASTM D257 (10^5-10^9 ohm / square where possible)

MX-500TS

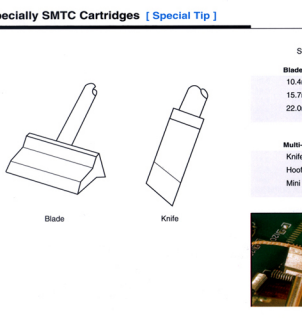
무연납땜 / SMD Rework / 소형 CHIP, SOIC전용 수리장비



■ MX-500S + 집게식 핸들
하나의 장비로 납땜 및 부품 제거를 동시에
할 수 있는 수리 전용장비

MX-500DS

무연납땜 / SMD Rework / 팸납 제거장비

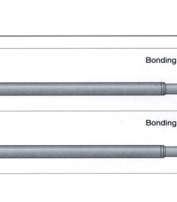


■ MX-500S + 납땜흡입건
하나의 장비로 납땜 및 부품 제거를 동시에
할 수 있는 수리 전용장비

MX-RM3E 납땜 + SMD Rework

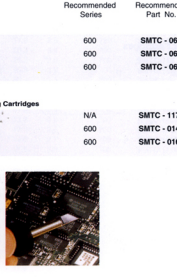
• 일반부품, 정밀부품 양산라인 납땜
• QFP, PLCC 등 SMD Rework
• Chip, SOIC 등 SMD 부품 제거

MX-TALON 집게식 핸들



• Chip, SOIC 등 SMD 부품 제거
• Tunnel type 부품 제거

MX-D001 Desoldering Gun



• Through-hole 부품 제거
• 다층기판 작업

MX-500 Cartridge

STTC Soldering Cartridges

STTC-022 : 600 Series
STTC-122 : 700 Series
Conical Sharp 0.4 mm

STTC-045 : 600 Series
STTC-145 : 700 Series
Bevel 60° 0.4 mm

STTC-026 : 600 Series
STTC-126 : 700 Series
Sharp(Bent30°) 0.4 mm

STTC-043 : 600 Series
STTC-143 : 700 Series
Conical Sharp 0.6 mm

STTC-044 : 600 Series
STTC-144 : 700 Series
Sharp (Bent 30°) 0.6 mm

STTC-025 : 600 Series
STTC-125 : 700 Series
Chisel 30° 0.8 mm

STTC-001 : 600 Series
STTC-101 : 700 Series
Conical Sharp 0.8 mm

STTC-038 : 600 Series
STTC-138 : 700 Series
Chisel 30° 1.2 mm

STTC-037 : 600 Series
STTC-137 : 700 Series
Chisel 30° 1.6 mm

STTC-042 : 600 Series
STTC-142 : 700 Series
Chisel 60° 1.6 mm

STTC-036 : 600 Series
STTC-136 : 700 Series
Chisel 30° 2.4 mm

STTC-013 : 600 Series
STTC-113 : 700 Series
Chisel 90° 3.2 mm

STTC-070 : 600 Series
Heat Staking 4 mm

STTC-017 : 600 Series
STTC-117 : 700 Series
Extra Large Chisel 5.2 mm

Micro Rework Tip Cartidges

SMTC-0171 : 600 Series
SMTC-1171 : 700 Series
0603, 1005 Chip 제거用

SMTC-0174 : 600 Series
SMTC-1174 : 700 Series
Hoof Type 밀집된 PCB 납땜用

SMTC-090 : 600 Series
SMTC-190 : 700 Series
0603, 1005 Chip 납땜用

SMTC-0172 : 600 Series
SMTC-1172 : 700 Series
솔더 브릿지 제거用

SMTC-0175 : 600 Series
SMTC-1175 : 700 Series
Hoof Type 밀집된 PCB 납땜用

SRTC Robotic Tip Cartridges (자동납땜장비전용)

SRTC-725 Chisel 30° 1.0 mm

SRTC-738 Chisel 30° 1.5 mm

SRTC-737 Chisel 30° 1.8 mm

SRTC-736 Chisel 30° 2.5 mm

SRTC-713 Chisel 90° 3.0 mm

SRTC-717 Extra Lage Chisel 5.0 mm

PTTB Bonding Tip Cartridges (플라스틱 본딩용)

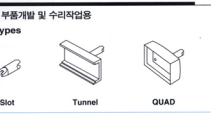
PTTB-501 Bonding Tip

PTTB-502 Bonding Tip

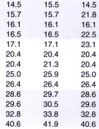
PTTB-503 Bonding Tip

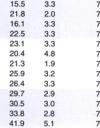
PTTB-504 Bonding Tip

Specially SMTC Cartridges [Special Tip]



Style	Recommended Series	Recommended Part No.
Blade Cartridges		
10.4mm Long	600	**SMTC - 060**
15.7mm Long	600	**SMTC - 061**
22.0mm Long	600	**SMTC - 062**
Multi-Lead Soldering Cartridges		
Knife	N/A	**SMTC - 1173**
Hoof	600	**SMTC - 0147**
Mini Hoof	600	**SMTC - 0167**





MX-500 Cartridge

Talon Cartridges

집게 type 작업용

TATC-601 Fine Point Tip : 0.4 mm
Span : 9.4 mm

TATC-605 TSOP 32 Tip

TATC-606 Blades Tip : 28 mm

TATC-608 Angled Viper Tip : 1.27 mm

TATC-609 Fine Point Tip : 0.4 mm

TATC-602 Blades Tip : 6.4 mm
Span : 9.1 mm

TATC-603 Blades Tip : 15.7 mm
Span : 10.6 mm

TATC-604 Blades Tip : 20.5 mm
Span : 12 mm

Desoldering System Tip Cartridges

DIP type 작업용

Standard Tip Cartridges

A(내경)	B(외경)	Part No.
0.6 mm	1.4 mm	**STDC-102**
0.8 mm	1.6 mm	**STDC-103**
1.0 mm	1.8 mm	**STDC-104**
1.2 mm	2.0 mm	**STDC-105**
1.5 mm	2.3 mm	**STDC-106**
2.4 mm	3.2 mm	**STDC-107**

SMT Rework Cartridges

SMD 부품개발 및 수리작업용

Tip Types

Slot Cartridges

SMD Component	Dimensions (mm) A: Width	B: Length	D: Depth	Recommended Series	Recommended Part No.
Chip 0402, 0603	1.8	1.0	0.9	500	**SMTC - 596**
Chip 0402, 0603, 0805 (angle)	2.0	1.3	1.5	500	**SMTC - 588**
Chip 0805	2.3	1.3	1.8	500	**SMTC - 501**
Chip 1206, 1210	3.6	1.5	1.8	500	**SMTC - 502**
Chip 1808, 1812	4.8	2.0	1.9	500	**SMTC - 503**
Chip, Case A (EIA SOPM-3224)	3.4	2.0	3.0	500	**SMTC - 535**
Chip, Case B (EIA SOPM-3528)	3.8	2.4	2.5	500	**SMTC - 532**
Inductor, Case B (EIA SOPM-4532)	4.8	2.8	4.1	500	**SMTC - 536**
Chip, Case C (EIA SOPM-6032)	6.4	2.4	3.3	600	**SMTC - 033**
Chip, Case D (EIA SOPM-7243)	7.6	2.5	3.6	600	**SMTC - 034**
Chip, Case E	8.4	4.6	5.7	600	**SMTC - 041**
SOT - 23	1.7	2.5	1.3	500	**SMTC - 505**
SOT - 89	2.8	6.4	2.0	500	**SMTC - 508**

PLCC 소켓제거용
QUAD/Dual QUAD Cartridges

SMD Component	Dimensions (mm) A: Width	B: Length	D: Depth	Recommended Series	Recommended Part No.
PLCC-20 Socket	9.1	9.1	2.9	700	**SMTC-1144**
PLCC-28 Socket	11.3	11.3	3.8	700	**SMTC-112**
PLCC-32 Socket	11.6	14.1	3.0	700	**SMTC-1109**
PLCC-44 Socket	16.8	16.8	2.5	700	**SMTC-1118**
PLCC-52 Socket	19.1	19.1	3.8	700	**SMTC-114**
PLCC-68 Socket	24.3	24.3	3.0	700	**SMTC-1108**
PLCC-84 Socket Dual*	29.5	29.5	2.9	700	**SMTC-1145**

Tunnel type 부품제거용
Tunnel Cartridges

SMD Component	Dimensions (mm) A2: Width	A: Width	B: Length	D: Depth	Recommended Series	Recommended Part No.
Chip MNR32	2.4	3.3	2.8	1.6	600	**SMTC-0149**
DPAK	8.5	8.5	6.4	5.1	600	**SMTC-047**
SO-8	8.1	9.7	19.1	6.1	600	**SMTC-0107**
SO-16	8.4	8.4	12.1	5.8	600	**SMTC-046**
SO-8	8.5	8.5	16.9	6.4	600	**SMTC-068**
SOIC-8	5.1	5.1	4.3	2.3	600	**SMTC-004**
SOIC-14, -16	5.1	5.1	10.2	2.3	600	**SMTC-006**
SOIC-14	5.2	5.2	8.9	2.5	600	**SMTC-0142**
SOIC-24	7.1	7.1	15.7	3.2	600	**SMTC-077**
SOIC-16	8.1	8.1	11.9	6.9	600	**SMTC-0124**
SOIC-20	9.5	9.5	13.2	3.2	600	**SMTC-010**
SOIC-24	9.5	9.5	15.7	3.2	600	**SMTC-009**
SOIC-28, SOL-34	9.5	9.5	18.3	3.2	600	**SMTC-007**
SOIC-32	13.2	13.2	20.4	4.3	600	**SMTC-042**
SOJ-28, SOM-36	8.0	8.6	18.8	1.9	600	**SMTC-026**
SOJ-32, 34	8.0	8.6	21.3	3.2	600	**SMTC-0140**
SOJ-40, SOM-32	10.4	11.4	25.9	1.9	600	**SMTC-040**
SOJ-42	10.4	11.4	27.2	3.2	600	**SMTC-0148**
SOMC-14, -16, DB-20	6.9	6.9	11.2	2.3	600	**SMTC-020**
SOP-20	6.9	6.9	7.2	2.5	600	**SMTC-0138**
SOP-28	10.7	10.7	18.3	3.2	700	**SMTC-139**
SOP-40	11.7	13.0	25.4	3.2	700	**SMTC-1134**
SOP-44	13.0	14.4	27.2	2.7	700	**SMTC-183**
TSOP-28	11.9	12.8	8.1	1.7	600	**SMTC-095**
TSOP-40	18.5	19.3	10.2	3.0	600	**SMTC-0154**
TSOP-56	18.5	19.3	14.1	3.0	600	**SMTC-0162**

QFP, PLCC type 부품제거용
QUAD/Dual QUAD Cartridges

SMD Component	Dimensions (mm) A2: Width	A: Width	B2: Length	B: Length	D: Depth	Recommended Series	Recommended Part No.
PLCC-18	7.6	8.4	12.7	13.5	2.5	700	**SMTC-111**
PLCC-20	9.1	10.2	9.1	10.2	2.5	700	**SMTC-112**
PLCC-28	9.4	10.4	14.5	15.5	2.5	700	**SMTC-1103**
PLCC-32	11.4	12.7	14.0	15.2	2.5	700	**SMTC-116**
PLCC-28	11.6	12.7	11.6	12.7	2.5	700	**SMTC-113**
PLCC-44	16.8	17.8	16.8	17.8	2.5	700	**SMTC-114**
PLCC-52	19.3	20.3	19.3	20.3	3.6	700	**SMTC-117**
PLCC-68	24.4	25.3	24.4	25.3	3.6	700	**SMTC-118**
PLCC-68 Dual*	24.4	25.3	24.4	25.3	3.6	700	**SMTC-128**
PLCC-84	29.5	30.4	29.5	30.4	3.6	700	**SMTC-119**
PLCC-84 Dual*	29.5	30.4	29.5	30.4	3.6	700	**SMTC-129**
SQFP-48 (EIAJ)	8.4	8.4	8.4	8.4	3.6	700	**SMTC-1121**
SQFP-64 (EIAJ)	11.2	11.2	11.2	11.2	2.5	700	**SMTC-1120**
TQFP-44	11.2	12.2	12.2	13.2	2.8	700	**SMTC-1159**
TQFP-80	12.3	13.3	12.3	13.3	2.8	700	**SMTC-1132**
QFP-48	14.0	14.0	14.0	14.0	2.7	700	**SMTC-1115**
VQFP-100 (EIAJ)	14.5	15.5	14.5	15.5	3.3	700	**SMTC-1118**
QFP-128(3.2mm fp)	15.7	15.7	21.8	21.8	2.0	700	**SMTC-1133**
QFP-44	16.1	16.1	16.1	16.1	3.3	700	**SMTC-121**
QFP-100	16.5	16.5	22.5	22.5	3.3	700	**SMTC-143**
QFP-64, -80	17.1	17.1	23.1	23.1	3.3	700	**SMTC-115**
QFP-100	20.4	20.4	20.4	20.4	4.8	700	**SMTC-145**
QFP-144	20.4	21.3	20.4	21.3	1.9	700	**SMTC-1122**
QFP-132	25.0	25.9	25.0	25.9	3.2	700	**SMTC-186**
QFP-100	26.4	26.4	26.4	26.4	3.3	700	**SMTC-144**
QFP-208 Dual*	28.6	29.7	28.6	29.7	2.9	700	**SMTC-181**
QFP-120, -160 Dual*	29.6	30.5	29.6	30.5	3.0	700	**SMTC-148**
PQFP-240 Dual*	32.8	33.8	32.8	33.8	2.8	700	**SMTC-1125**
PQFP-304 Dual*	40.6	41.9	40.6	41.9	5.1	700	**SMTC-1158**