

MX-5200 Dual Simultaneous

Soldering, Desoldering & Rework Systems

The MX-5200 Soldering, Desoldering and Rework Series has the same increased power and process control as the MX-5000 Series, now with dual-simultaneous ports.

For two users or single user with dual applications. The MX-5200 can be operated with two hand-pieces dynamically sharing the 80 watts output power based on demand adding even more application flexibility and speed.

Fast time-to-recovery. Delivers increased production rates and throughput no matter the application. The challenges of high mass components, multilayered boards and lead-free solders are seamlessly tackled by the MX-5200 super-charged power supply.

SmartHeat process control. The technology built-in every Metcal System means that soldering and rework are always performed at safe, controlled temperatures. Metcal users know that moderate fixed temperatures, where power is varied, provides the best assurance for a well controlled soldering and rework process.

TipSaver™ Workstand improves tip life as well as operator ergonomics. This “Auto-Sleep” Workstand reduces the power to the hand-piece when it is placed in the Metcal TipSaver™ Workstand.

Reduction in power will substantially decrease tip oxidation, a major cause of reduced tip life.

Ergonomic Hand-pieces. The aluminium hand-pieces for soldering and rework provides a cooler, lighter weight and more comfortable feel for the operator. And, the Metcal UltraFine™ Hand-piece features a new generation of extremely fine diameter cartridges in a slim profiled handle. Both of these hand-pieces uniquely offer users a choice of three interchangeable grips.

ESD safe and features incoming AC ground monitoring circuitry. The AC (mains) ground monitor detects power line ground failure, immediately alerting the operator and shutting down the system. Only after the power line ground has been restored can the MX-5200 be restarted and soldering operations can be resumed.

Built-in power indication meter with digital display and bar graph that visually provides the operator with feedback on the status of the soldering operation. Whether using a large mass rework tip for QFPs or a fine-point soldering tip, the power indication meter is a valuable resource for making consistent, acceptable solder joints.

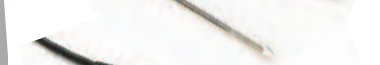
Four mode indicators:

Ready Mode: The hand-piece is removed from the workstand, ready for soldering or rework.

Power Mode: The hand-piece's tip is in contact with the load. The power indication meter provides graphical and numeric feedback on the system power output.

Sleep Mode : The hand-piece is at rest in the workstand; power is reduced to the hand-piece.

Powersave Mode: Power to the hand-piece is shut off. This programmable sleep feature allows an operator to set the desired time to cut off power to the hand-piece (from 10 to 120 min.).



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SYSTEMS CONFIGURATION

PART NUMBER	MX-PS5200 Power Supply	Hand-pieces				TipSaver™ Workstands		
		MX-H1-AV	MX-H2-UF	MX-PTZ	MX-DS1	MX-W1AV	MX-W4PT	MX-W5DS
MX-5210	✓	✓				✓		
MX-5211	✓	✓ ✓				✓ ✓		
MX-5220	✓		✓			✓		
MX-5241	✓	✓		✓		✓	✓	
MX-5250	✓				✓			✓
MX-5251	✓	✓			✓	✓		✓

SYSTEMS WITH ONE HAND-PIECE

SYSTEMS WITH TWO



MX-5210 Soldering and Rework System
Configured with the Advanced™ Hand-piece. Highly effective for soldering applications including: lead-free, high mass components or boards, thermally sensitive components requiring low operating temperature, high volume production soldering and touch-up soldering operations.

Soldering cartridges:
STTC Series and
SMTC Series



MX-5211 Soldering and Rework System
Same features as MX-5210 but configured with two Advanced™ Hand-pieces and two TipSaver™ Workstands.

Best Seller

Soldering cartridges:
STTC Series and
SMTC Series



MX-5220 UltraFine™ Soldering System
Configured with the UltraFine™ Soldering Hand-piece which is a speciality tool for soldering and touch-up of very small components, restricted access or high density component packaging on a PCB.

Soldering cartridges:
UFTC cartridges
featuring small tip
geometries and low
mass, suited for small
part soldering.



MX-5241 Precision Tweezers, Soldering and Rework System
Combines both the Advanced™ Hand-piece and the Precision Tweezers Hand-piece. Users get maximum application flexibility for soldering and reworking the widest range of surface mount components.

Tweezer cartridges:
PTTC Series.
Soldering Cartridges:
STTC and SMTC
Series



MX-5250 Plated-Through-Hole Component Desoldering System
Includes the MX-DS1 Desoldering hand-piece designed for through-hole desoldering.

Desoldering cartridges:
STDC Series provides
fast, high quality results

NOTE: Unit requires shop
air for desoldering.



MX-5251 Soldering, Desoldering and Rework System
For through-hole desoldering, general soldering, and SMD rework applications. Includes two hand-pieces: the Advanced™ Hand-piece and the MX-DS1 Desoldering hand-piece. Ideal for mixed technology boards. Provides versatility for addressing soldering & rework tasks.

Desoldering cartridges:
STDC Series
Soldering cartridges:
STTC and SMTC Series.

NOTE: Unit requires
shop air for desoldering.

MX-500 Dual Switchable Output

Soldering, Desoldering & Rework Systems

Metcal's MX-500 Soldering and Rework System has been reimagined, adding features and a new look to a bench top icon. The system utilizes SmartHeat® Technology, where each cartridge is equipped with a self-regulating heater which 'senses' its own temperature and closely maintains its pre-set idle temperature for the life of the heater-tip. The tip temperature is determined by the inherent metallurgical properties of the heater; no external adjustment or equipment is required. The MX-500 retains switchable dual port, 40W operation while introducing numerous new features in a new housing.



Key Features & Benefits

- ▶ A built in Net Power Meter which will display a graphical and numerical representation of the power applied to the cartridge.
- ▶ User Programmable PowerSave Mode: the time to enter PowerSave Mode is adjustable from 10 to 120 minutes.
- ▶ Ground Fault Interrupt: AC ground monitor detects power line ground failures and immediately alerts the operator and shuts down the system.
- ▶ Universal Power Supply: automatically senses the input line voltage and adjusts accordingly, which allows for worldwide operation without adaptors or a change in performance.
- ▶ Full compatibility with existing and previous MX upgrade kits, tip-cartridges, hand-pieces and accessories.

SYSTEM WITH ONE HAND-PIECE



MX-500S Soldering / Rework System
Power supply, MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand

Soldering cartridges:
STTC Series and SMTC Series



MX-500AV Soldering / Rework System
Power supply, MX-H1-AV Advanced™ hand-piece and MX-W1AV workstand

Soldering cartridges:
STTC Series and SMTC Series



MX-500UF Ultrafine™ Soldering System
Power supply, MX-H2-UF Ultrafine™ hand-piece and MX-W1AV workstand

Soldering cartridges:
UFTC Series

SYSTEMS WITH TWO HAND-PIECES



MX-500SPT Rework System
Power supply, MX-PTZ precision tweezer hand-piece with MX-W4PT TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand.

Tweezer cartridges:
PTTC Series.
Soldering Cartridges:
STTC and SMTC Series



MX-500DS Desoldering System
Power supply, MX-DS1 desoldering hand-piece with MX-W5DS TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand.

Desoldering cartridges:
STDC Series
Soldering cartridges:
STTC and SMTC Series.
NOTE: Unit requires shop air for desoldering.

POWER SUPPLY WITH NO HAND-PIECE



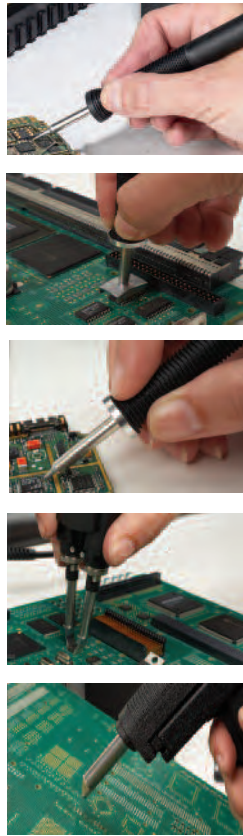
MX-500P
MX-500 dual port switchable power supply

NOTE: Additional Hand-pieces and Upgrade Kits are available, see pages 7 and 8

MX Series Hand-pieces

Soldering, Desoldering & Rework Systems

The MX-500 AND MX-5200 Series offers users a choice of hand-pieces to meet the customer's application needs. Each hand-piece has its own range of cartridges with many choices available for tip geometry and temperature. The hand-pieces below are compatible with existing MX-500 and MX-5200 Systems as well as backward compatible with previous MX-500 and MX-5000 Systems



Hand-pieces

Cartridges

<p>MX-RM3E Metcal Hand-piece</p>		<p>STTC Soldering Cartridges See pages 11-12.</p>
<p>MX-H1-AV Metcal Advanced™ Hand-piece</p>		<p>SMTC Rework Cartridges See pages 14-15.</p>
<p>MX-H2-UF Metcal UltraFine™ Hand-piece</p>		<p>UFTC Ultra Fine Soldering Cartridges. See page 13.</p>
<p>MX-PTZ Metcal Precision Tweezer Hand-piece</p>		<p>PTTC Tweezer Cartridges. See page 17. Also available are TATC Cartridges for the previous TALON hand-piece and the existing MX-TALON-01 upgrade kit. See page 15.</p>
<p>MX-DS1 Metcal Desoldering Hand-piece</p>		<p>STDC Desoldering Cartridges. See page 18.</p>



Hand-pieces and Grips

MX-H1-AV	1	Metcal Advanced™ Hand-piece with cord, soldering and rework, two grips included (see *)
MX-H1GR	2	Grip Metcal Advanced™ Hand-piece with black sleeve in ring pattern (*)
MX-H1GS	3	Grip Metcal Advanced™ Hand-piece with black scallop pattern
MX-H1GKG	4	Grip Metcal Advanced™ Hand-piece with green knob pattern (*)
MX-H1-BSR-5		Replacement Sleeve only, black ring pattern (pack of 5) - For MX-H1-AV and MX-H1GR
MX-H1-BSS-5		Replacement Sleeve only, black scallop pattern (pack of 5) - For MX-H1-AV and MX-H1GS
MX-H1-GSK-5		Replacement Sleeve only, green knob pattern (pack of 5) - For MX-H1-AV and MX-H1GKG
MX-H2-UF	5	Metcal UltraFine™ Hand-piece with cord, fine soldering, two grips included (see **)
MX-H2GR	6	Grip Metcal UltraFine™ Hand-piece with black sleeve in ring pattern (**)
MX-H2GRS	7	Short grip Metcal UltraFine™ Hand-piece with black sleeve in ring pattern
MX-H2GS		Grip Metcal UltraFine™ Hand-piece with black sleeve in scallop pattern
MX-H2GKG		Grip Metcal UltraFine™ Hand-piece with green sleeve in knob pattern (**)
MX-H2-BSR-5		Replacement Sleeve only, black ring pattern (pack of 5) - For MX-H2-UF and MX-H2GR
MX-H2-BSS-5		Replacement Sleeve only, black ring pattern (pack of 5) - For MX-H2-UF and MX-H2GS
MX-H2-GSK-5		Replacement Sleeve only, black ring pattern (pack of 5) - For MX-H2-UF and MX-H2GKG
MX-RM3E	8	Metcal Soldering / Rework Hand-piece
MX-PTZ	9	Metcal Precision Tweezer Hand-piece, SMD rework
MX-DS1	10	Metcal Desoldering Hand-piece
MX-RM8E		Metcal Desoldering Hand-piece Cord for MX-DS1
MX-RM5E		Standard Robotic cable (1.83m / 6ft) with connector for Soldering/Rework cartridges
MX-RM6E		Metcal Soldering / Rework Hand-piece for long reach cartridge access

NOTE: Cartridges are not included with hand-pieces. A cartridge removal pad (MX-CP1 see page 8) is included with every hand-piece.

MX Series Accessories

Workstands and Accessories

MX-W1AV	1	Metcal TipSaver™ Workstand, for Metcal Advanced™ and UltraFine™ Hand-pieces
MX-W1CR		Cradle for TipSaver™ Workstand, Advanced™ and UltraFine™ Hand-pieces, incl. knobs
MX-W4PT	2	Metcal TipSaver™ Workstand, for MX-PTZ Hand-piece
MX-W4CR		Cradle for Metcal TipSaver™ Workstand, MX-PTZ Hand-piece, includes knobs
MX-W5DS		Metcal TipSaver™ Workstand, for MX-DS1 Hand-piece
MX-W5CR		Cradle for Metcal TipSaver™ Workstand, MX-DS1 Hand-piece, includes knobs
WS1	3	Sleeper Soldering Workstand for MX-RM3E hand-piece
WST		Talon Workstand for MX-TALON hand-piece
AC-Y10	4	Yellow sponge, pack of 10
AC-YS3-P		Yellow sponge, pack of 50
AC-BP	5	Brass pad, pack of 10
AC-BRUSH		Soft Brass Brush
MX-CP1	7	Cartridge removal pad
AC-CK2		Green Lead Free identification ring for STTC cartridges (pack of 50)

Accessories for MX-DS1 Desoldering Hand-piece

MX-DCF1		Chamber Liners (pack of 15) and Filters (pack of 6)
MX-DCF1L		Chamber Liners (pack of 40)
MX-DCF1F		Filters (pack of 20)
AC-TC	8	Desolder Tip Cleaner
AC-CB1-P		Desolder Chamber Cleaning Brush (pack of 25)
AC-CB2-P		Tube Cleaning Brush (pack of 6)
MX-DSL2		Seal Cartridge
MX-DSB		Swivel Connector
MX-DLA		Desolder Gun Latch Adjustment (pack of 10)
MX-DMK1		Maintenance Kit
MX-DAH4		ESD air hose for MX-DS1 Desoldering Hand-piece
MX-DSL1		Seal Chamber
MX-DVC1		Venturi Cartridge
MX-DAR1		Air Regulator and Filter



All Metcal TipSaver Workstands can be configured as shown above.

UPGRADE KITS GUIDE: HAND-PIECE AND WORKSTAND

PART NUMBER	Hand-pieces					Workstands			
	MX-H1-AV Metcal Advanced™	MX-H2-UF Metcal UltraFine™	MX-PTZ Precision Tweezers	MX-DS1 Desoldering	MX-HPDC	MX-W1AV	MX-W4PT	MX-W5DS	MX-WHPDC
MX-UK1	✓					✓			
MX-UK2		✓				✓			
MX-UK3					✓				✓
MX-UK4			✓				✓		
MX-UK5				✓				✓	

All upgrade kits include a hand-piece and a workstand.



MX-TALON-01 Upgrade kit is also available for the MX-500 Series. It includes the previous MX-TALON hand-piece and WST workstand (as shown right). The TALON hand-piece is for use with TATC cartridges only.