

# New Products 2017

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# Solder Tip Cleaner AC-STC



#### Technical Specifications

Ambient Operating Temp.	10 to 40 °C
Input Line Voltage	24 VDC
Certifications/ Markings	cNRTLus, CE, RoHS + WEEE
Surface Resitivity	10 <sup>6</sup> -10 <sup>11</sup> Ω∕sq
Dimensions w x d x h	14 cm x 8.5 cm x 10cm
Weight	0.83 kg
Brush Speed	115 rpm
Brush Diameter	25 mm

Part Number	Description
AC-STC	Solder Tip Cleaner
AC-STC-BBRUSH	Solder Tip Cleaner, Replacement Brushes (pair)
AC-STC-GUARD	Solder Tip Cleaner, Rubber Splash Guard
AC-STC-TRAY	Solder Tip Cleaner, Replacement Tray

#### **Features & Benefits**

- Contactless Activation
- **Compact Footprint:** Surface area on the bench top is at a premium. This unit doesn't disappoint, taking only minimal footprint on your benchtop.
- **Replaceable Brush System:** Allows for easy replacement of the solder brush providing for a long useful life for the system.
- Universal Power Supply: Simple plug and play any where in the world.
- ESD Safe
- Quiet Operation

metcal.com/stc ©2017 Metcal, metcal.com

# Introducing the Solder Tip Cleaner AC-STC

# Solder tips represent a significant part of the cost of ownership for a solder station.

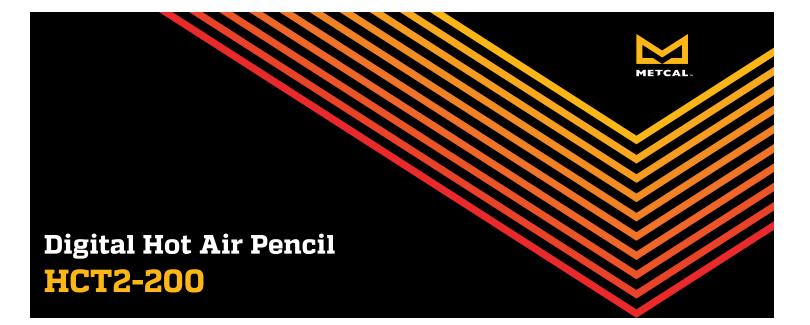
Oxidation on the tip degrades performance by creating a barrier that decreases the thermal transfer of the heat to the solder joint. This barrier slows performance and if not corrected will damage the tip. Proper tip care is essential to maximize the life of the tip.

Metcal's new Solder Tip Cleaner removes oxidation and **extends the life of the solder tip.** By placing the tip into the opening, the tip cleaner senses the tip and automatically activates saving the operator time. A replaceable brush system pulls excess solder away from the tip into a removable collection tray for disposal while removing oxidation from the tip. A splashguard prevents debris from escaping the collection area. The unit ships with a universal AC power adapter that ensures the unit is ready for use.





171702-0914-RL





#### Introducing the new Digital Hot Air Pencil

#### The HCT2-200 Hot Air Pencil is the latest addition to Metcal's convection rework tools.

This digital handheld convection tool is ideally suited for light rework applications, which use smaller components and integrated circuits.

As component miniaturization continues (e.g. 01005 components), the ergonomics of a pencil become more important to allow a user freedom to access and rework components on the board without affecting adjacent parts. Larger handheld convection systems commonly reflow and dislodge adjacent components due to a higher minimum airflow.

The HCT2 series of Digital Hot Air Pencils have always included an array of nozzle sizes for precision control. The HCT2-200's improved thermal performance allows the user to target a larger variety of components. Metcal has made working under a microscope easier with the optional bent nozzles. Add the HCT2-200 to your workbench and experience improved performance.

#### metcal.com/hct2

#### **HCT2-200 Digital Hot Air Pencil**



#### **Applications**

The HCT2-200 was developed for very small surface mount component and package sizes (1206's and smaller) and low board densities. For denser PCBA's or applications with heavy copper planes, boards > 4 layers, or components larger than 5mm<sup>2</sup>, use of a Metcal preheater (PCT-100 series) may be necessarv.

#### **Features and Benefits**

- 200 Watt Ceramic Heater and Dual Stage Air Pump: Provides the power and performance needed to deliver the right amount of thermal energy.
- **Digital Airflow & Temperature Controls:** • Two LED displays provide a graphical and numerical representation of the desired airflow and temperature.
- **Fast Response and Performance:** A • microprocessor controlled, closed loop feedback system provides fast heating. precise and stable temperature control.
- **Standby Mode:** When the hand-piece is placed into the workstand, the temperature will drop prolonging heater life.
- **Replaceable Hand-Piece:** The hand-piece • has been redesigned to allow removal from front of the machine.
- **Ergonomic and Light Weight Hand-Piece:** Slim and ergonomic design hand-piece that feels like a pencil, with a rubber grip.
- **Easily Change Heaters, Nozzles, and** • Hand-Pieces: All can be changed in moments
- Nozzles: Six nozzles (1.5 mm 4.0 mm) are included in the unit with a nozzle plate holder inside the workstand.



0201's

#### **Technical Specifications**

HCT2-200 Digital Hot Air Pencil		
Ambient Operating Temp.	10 to 40 °C	
Input Line Voltage	-11 110 VAC, grounded circuit	
Input Line Frequency	-21 220-240 VAC, grounded circuit 50/60 Hz	
Rated Power	200W	
Air Flow	1.5 - 7.0 LPM	
Noise Level	Typically under 52dBA at max airflow	
Output Temperature Range	100°-450°C	
Temperature Stability	10% of display value ( > 250°C)	
Certifications/Markings cNRTLus, CE, RoHS + WEEE		
Surface Resistivity	10 <sup>5</sup> -10 <sup>9</sup> Ω /sq	
Power Supply Dim. w x d x h	10.6 cm (4.2") x 21.3 cm (8.4") x 17.0cm (6.7")	
Workstand Dim. w x d x h	7.6 cm (3.0") x 16.8 cm (6.6") x 8.6 cm (3.4")	
Weight of the Power Supply	5.8 lbs. (2.63 kg)	
Weight of the Workstand	0.9 lbs. (.4 kg)	

#### **Models**

HCT2-200-11 Digital Hot Air Pencil, 110 VAC HCT2-200-21 Digital Hot Air Pencil, 220-240 VAC

System includes: Hot air pencil, pack of 6 straight nozzles, workstand with nozzle holder

#### **Optional Accessories**

Part #	Description	
HN-120KIT-6	Pack of 6 straight nozzles (1.5mm, 2.0mm, 2.5mm, 3.0mm, 3.5mm, 4.0mm)	
HN-HCT2-BENT-6	Pack of 6 bent nozzles (1.5mm, 2.0mm, 2.5mm, 3.0mm, 3.5mm, 4.0mm)	
НСТ2-200-НР	Replacement Hand-piece	
HCT-WS120	Replacement Workstand with nozzle holder	
HCT-HTR200	Replacement 200W Heater	
AC-CP2	Nozzle Removal Pad	
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#### metcal.com/hct2



# High Thermal Demand Solution (for MX-5000 and MX-5200 Series)



#### Introducing the New High Thermal Demand Solution

Metcal's High Thermal Demand hand-piece and tips transform an MX-5000 or MX-5200 series into a powerhouse for applications with high thermal loads such as dense boards, without damaging sensitive components.

It reduces the risk of prolonged soldering contact and improves time to manufacture while maintaining the comfort of the sleek and ergonomic hand-piece that you're used to.

Metcal's HTD solution provides a boost in performance by **more effectively delivering thermal energy** to the most demanding loads.

metcal.com/htd

#### **High Thermal Demand Solution**

#### (for MX-5000 and MX-5200 Series)

The system's ability to deliver more thermal energy, efficiently minimizes the risk of component or printed circuit board damage associated with leaving a soldering iron tip on the solder joint for extended periods of time.

#### **Configurations:**

#### MX-UK6 Upgrade Kit:

MX-W1AV (Workstand) MX-H6-HTD (Hand-piece)

#### **Cartridge Selection:**

Part #	Description
HTC-xCH0025S	Cartridge, Chisel, 2.5mm
HTC-xCH0053S	Cartridge, Chisel, 5.3mm
HTC-xCN0020S	Cartridge, Conical, 2.0mm
HTC-xVC0053S	Cartridge, V-Groove Chisel, 5.3mm

The x represents the heater series. 700 series=7, 800 series=8, 900 series=9



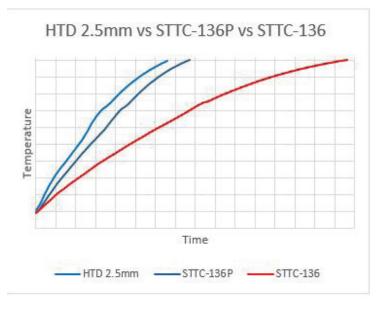
Comparing an HTD and an STTC tip of similar geometry.

#### **Key Features & Benefits**

- Improved temperature control Metcal's SmartHeat<sup>®</sup> inside means lower risk of overshooting delicate components
- Very fast heat-up speed means you can get to your next task even faster
- Ergonomic lightweight hand-piece keeps you comfortable even on large industrial jobs
- Available in 700 and 800 series temperatures, with 900 series coming soon

#### HTD Increases Throughput and Saves Money

HTD 2.5mm tip reaches 225 celsius 20% and 70% faster than, existing STTC-136P and STTC-136 tips.





# Volume Fume Extraction System VFX-1000



#### Introducing the New Volume Fume Extraction System VFX-1000

Solder smoke is more than just an irritant. It can reduce worker productivity through a loss of concentration and fatigue. These and other health concerns may be a result of exposure to solder fumes during the production process. As an employer, you are responsible for properly managing the health risks associated with solder fumes, and take appropriate precautionary measures. Solder fume extraction is a simple way to manage the risks to employees and your organization.

#### Features:

- 2 Inlet ports 75mm diameter
- Capable of running up to 7 arms, with 10m of ducting per port
- 2 Filter configurations Pre/HEPA/Gas ( 7.5KG of active carbon) Pre/GAS ( 12kg of active carbon)
- Remote variable speed control
- ESD System and Accessories

\*hose sold separately

#### **Systems**

VFX-1000-H

VFX-1000 with HEPA Filter

#### VFX-1000-G

VFX-1000 with Deep Bed Gas Filter

# **VFX-1000**

**Volume Fume Extraction System** 



#### **Features & Benefits**

- Digital Speed Control
- Deep Pleat Pre-Filter
- \* Blower with high airflow and pressure
- 3 stage filtration
- Built in silencing
- Long life filters with low replacement costs Remote speed control
- Remote Start/Stop Interface
- Filter change/System Fail Signal
- Universal Voltage

#### **Accessories**



#### AC-VFX-ARM-RF

50mm ARM; 650mm LONG, w/round funnel



#### AC-VFX-ARM-PF

50mm ARM; 650mm LONG, w/plenum funnel



#### AC-VFX-ARM-LF

50mm ARM; 650mm LONG, LED w/Funnel \* Supplied with 12V DC PSU



#### AC-VFX-HK75

75mm to 50mm Hose Kit for VFX-1000

Each AC-VFX-ARM-XX requires one hose kit.

Hose Kit contains 1 - Table Bracket, 1 -75mm End Cap, 4- 50mm Cobra Clips, 1 -50mm Pipe stub, 1 -50-40mm reducer, 1 -75mm to 50mm Branch, 1- 50mm flexi hose 1.0m, 1- 75mm flexi hose 2.5m, 1- 50mm jubliee clip, 2- 75mm cuffs, 1- 50mm cuff, 1- bench mount flush seal system white 50mm inlet.

#### **Replacement Filters**

#### AC-VFX-FIL-PRE

AC-VFX-FIL-HEPA

AC-VFX-FIL-GAS

Deep Pleat Pre-Filter for VFX-1000

Combined HEPA filterfor VFX-1000

#### Deep Bed Gas Filter for VFX-1000

Carbon

Zintec Mild Steel 99.997% @ 0.3 microns

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## Technical Specifications

Volume Fume Extraction System		
Ambient Operating Temperature	10 to 40°C	
Maximum Enclosure Temperature	55°C	
Input Line Voltage	100 - 240 VAC, grounded circuit	
Output Frequency	50/60 Hz	
Power	12.5 amps / 1.1 kw	
Noise	<54dBA	
Airflow/Pressure	350 m³/hr/96 mbar (206 cfm / 96 mbar)	
Certification/Marking	TUV, CE	
Dimensions w x d x h	590 x 375 x 415 mm (23.2 x 14.8 x 16.3")	
Weight	35 Kgs (77 lbs)	
Configuration		
Maximum number of 32mm Arms	7	
Maximum number of 50mm Arms, Cowls or Down Draft Trays	5	
Maximum number of 75mm Arms, Cowls or Down Draft Trays	2	
Deep Pleat Pre Filter Specifica	ation	
Surface Media Area	6m2 approx.	
Filter Media	Glass Fibre	
Filter Media Construction	Folded	
Filter EfficiencyF8 (95% @ 0.9 microns)		
Combined Filter Specifications		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Gas Filter	Treated Activated	

system white 50mm inlet.		

**Filter Housing** 

**Filter Efficiency** 



# Speed. Control. Convenience. **Solder Wire Feeder System**

METCAL

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#### Solder Wire Feeder System Includes:

- USF-1000 Solder Wire Feeder Unit
  MX-H7-SF Handpiece for solder feeder
  USF-FTA-12 Feeder tube assembly
- 0.25-0.74mm wire diameter USF-GTA-12 Guide tube assembly for USF-FTA-12 WS1-FTA-12
- WS1 Sleeper Workstand
  Foot Switch
  AC-DC Power Adapter

## **Solder Wire Feeder System** MX-UK7

#### Speed up your soldering process & increase your line efficiency.

Metcal's Solder Wire Feeder System adds control and convenience to your soldering process. The digital controls, high performance, and its ability to handle multiple solder wire diameters provide repeatability and functionality to your process. The Solder Wire Feeder pairs with Metcal's SmartHeat® MX-5200 or MX-500 Soldering and Rework Systems.

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# Solder Wire Feeder System



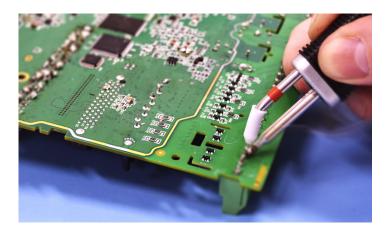
#### MIX-OIX/

#### **Features and Benefits**

- **Digital Controls with multiple Modes of Operation:** Forward Feed, Retraction, Delay, and Speed are programmable parameters in either the automatic, forward, or the backward mode of operation.
- Large LCD Display: Displays program parameters and a cycle counter with the selectable unit of measure, millimeters or inches.
- **Internal Program Storage:** Stores thirty (30) programs internally, allowing the operator to select the right program for the right application
- **Password Protection:** Prevents unintended changes to stored programs
- Multiple Solder Diameters: Compatible with solder diameters 0.3mm to 1.27mm
- **Solder Feed Blades:** Reduces the tendency for solder balls to form at point of use
- Solder Spool Lock: Secures the solder spool to the unit
- Universal Power Supply: Automatically senses the input line voltage and adjusts accordingly, which allows for worldwide operation without adaptors or a

#### **Accessories & Spares**

MX-H7-SF	Solder Wire Feeder Hand-Piece for MX System
USF-FTA-12	Feeder Tube Assembly, 025-0.74mm wire diameter
USF-FTA-17	Feeder Tube Assembly, 0.75-1.27mm wire diameter
USF-GTA-06	Guide Tube and Teflon Nozzle, 0.6mm
USF-GTA-12	Guide Tube and Teflon Nozzle, 1.2mm
USF-GTA-17	Guide Tube and Teflon Nozzle, 1.7mm
USF-TN06	Teflon Nozzle for USF-GTA-06 (10 Pack)
USF-TN12	Teflon Nozzle for USF-GTA-12 (10 Pack)
USF-TN17	Teflon Nozzle for USF-GTA-17 (10 Pack)
WS1	Work Stand



#### System Configurations & Upgrade Kit

#### MX-5270 Soldering / Rework System with USF-1000

MX-PS5200 Power Supply, USF-1000 Solder Feeder, MX-H7-SF Solder Feeder Hand-Piece, USF-FTA-12 Feeder Tube Assembly, USF-GTA-12 Teflon Nozzle, Footswitch and WS1 Sleeper Work Stand

#### MX-570 Soldering / Rework System with USF-1000

MX-500P Power Supply, USF-1000 Solder Feeder, MX-H7-SF Solder Feeder Hand-Piece, USF-FTA-12 Feeder Tube Assembly, USF-GTA-12 Teflon Nozzle, Footswitch and WS1 Sleeper Work Stand

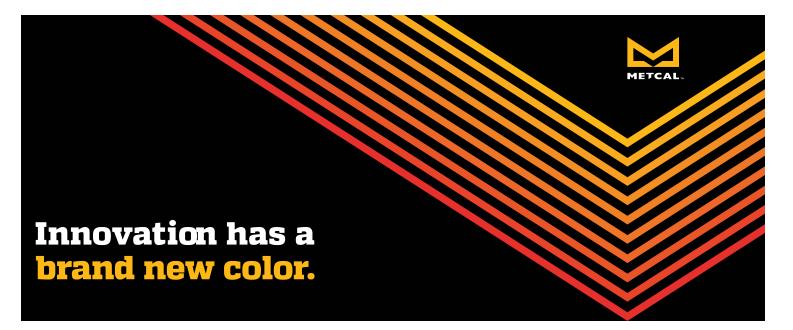
#### MX-UK7

USF-1000 Solder Feeder, MX-H7-SF Solder Feeder Hand-Piece, USF-FTA-12 Feeder Tube Assembly, USF-GTA-12 Teflon Nozzle, Footswitch and WS1 Sleeper Stand



#### **Specifications**

Input Voltage	110 - 230V
Power	18W max.
Dimensions - W x D x H	118 x 246.5 x 125.1mm (4.65" x 9.7" x 4.95")
Weight	1.9kg (4.15 lbs)
Operating Temperature	0 - 50°C (32 - 122°F)
Solder Diameter	0.3 - 1.27mm
Spool Capacity	Up to 1 kg. (2.2 lbs.)
Wire Length	0.2 - 200mm 30.5
Forward Speed	0.5 - 100mm/sec (0.5mm/sec increments)
Reverse Speed	0.5 - 100mm/sec (0.5mm/sec increments)
ESD Safe	10^5 - 10^9omega/square per ASTM D257
Program Memory	30 set-ups
Configuration	Standalone



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#### **Introducing the new**

CV-5200 Connection Validation<sup>™</sup> Soldering Station

# Metcal is raising the bar with a technology that will change hand soldering forever.

Metcal soldering stations have led the way with SmartHeat® technology for 35 years. SmartHeat senses the thermal load and instantly delivers Power on Demand directly to the joint. The embedded, self-regulating heater delivers the right amount of power based on the requirements of the solder joint. This provides a fast, safe and repeatable process with no calibration required.

Currently, the industry standard relies on a visual inspection of the solder joint. Metcal has developed a better way...

**Introducing Connection Validation.** 



# **CV-5200 Series**

**Connection Validation™ Soldering Station** 



The intermetallic compound thickness is critical in the formation of a solder joint. Connection Validation (CV) evaluates the quality of the solder joint by calculating the intermetallic compound formation and provides closed loop feedback to the operator.

CV provides feedback to the operator via the LED light ring integrated in the hand-piece. It takes the risk associated with the variables involved in the soldering activity and removes the success and failure determination of a good solder joint out of the hands of the operator.

CV complements the skill of the operator to judge the quality of a solder joint by introducing an objective method of evaluating solder joint quality. This systemic and objective approach provides repeatability and a measureable standard to the soldering process.

#### **Features and Benefits**

- SmartHeat Power on Demand Technology
- Patented Connection Validation IMC Formation
   Technology
- 2.8" color touchscreen with bold graphics
- Communications Port for process traceability data and firmware graphics
- Integrated Net Power Meter and power graph
   With optional precise tip temperature display
  - Patented Chip-in-Cartridge technology
    - ° Closed loop bi-directional communication
    - ° Stores and records cartridge attributes
    - ° Provides traceability information
    - Protects power supply from non-conforming cartridges
    - ° Backwards compatible with MX series power supplies
- Password protection



LED equipped hand piece signals to operator when a good solder joint is formed.



Tip temperature displayed on large color screen.

#### System Configuration

The CV-5210 soldering station includes:

- CV Power supply
- CV-H1-AV: Advanced hand-piece with integrated LED light\*
- MX-W1AV: TipSaver Workstand\*

Additional system configurations will be available soon. \*Can be ordered separately.

#### Technical Specifications

CV-5200 Connection Validation Power Supply		
Ambient Operating Temp.	10 to 40 °C	
Max. Enclosure Temp.	55°C	
Input Line Voltage	100 - 240 VAC, grounded circuit	
Input Line Frequency	50/60 Hz	
<b>Rated Power Consumption</b>	125W	
Output Power	80W max.	
Output Frequency	13.56 MHz	
Heating Method	Induction	
Display	2.8" Color TFT LCD Display	
Resolution	320*240 RGB	
Size	2.8" Diagonal	
Active Area	43.20 x 57.60 mm	
Connections	Single Port	
Communications	USB	
Power Supply Dim. w x d x h (mm)	121 x 130 x 235	
Power Supply Weight (kg)	3.35	
Certification / Marking	CE TUV	
<b>Tip-to- Ground Potential</b>	<2mV	
Tip-to-Ground Resistance	<2ohms	
Idle Temperature Stability	1.1°C in still air	
Tip Temperature Accuracy	Meets or exceeds IPC J-STD-001 Standard	
Hand-piece cable length	L=183cm (72"), burn proof, ESD safe	
Hand-piece connectors		
RF Connector	F type power connector	
LED Power Connector	6 pin DIN	
Operation	2 single port or dynamic dual simultaneous	
Firmware upgrade	Via USB port and appropriate software with compatible computer and cables.	

# New Connection Validation Monitoring Software



# **Introducing the All-New CV Monitoring Software**

Improve your solder process traceability and create a performance baseline using CV's intelligent cartridges plus CV-5000 Monitor software. Using our Connection Validation patented technology, CV Monitor software allows you to capture solder process information over time for each joint when attached to the communication port.

#### You'll get:

- Power demand
- Tip temperature
- Solder time
- Intermetallic Compound Formation (IMC Formation)\*

Now that you have a baseline, you can quickly analyze your soldering performance, identify changes in your solder conditions, and make changes to your process. Download the free CV-5000 Monitor software and start monitoring your process.

\*Metcal Exclusive

Download the free software to get started. www. Metcal.com

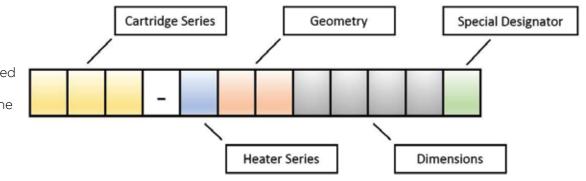


**Connection Validation** Soldering Station



# **New Cartridge Smart Numbering Scheme**

With the introduction of Connection Validation, Metcal is migrating to a new smart numbering convention that is designed to assist the operator or the process engineer in the selection of the correct cartridge for the application.



#### **Cartridge & Heater Series Legend**

Cartridge Series

- CVC Connection Validation Cartridges, Connection Validation enabled
- SMC Surface Mount Cartridges
- New cartridge series to be added soon

Heater Series – represented by the x in the part number.

- 5-500 series heaters
- 6-600 series heaters
- 7-700 series heaters
- 8-800 series heaters
- 9-900 series heaters

#### Geometry

BL	Blade	KN	Knife
BV	Bevel	мн	Mini-Hoof
СН	Chisel	QD	Quad
CN	Conical	sc	Slotted Cylindrical
СР	Hollow Cup	SH	Shield
ТN	Tunnel	SL	Slot
HF	Hoof	wv	Wave
НК	Hook	FB	Flat Blade
HP	Hot Plate	VC	V-Groove Chisel
HS	Heat Stake	PC	Pin Connector
LG	Long Groove	sк	Socket

Note: STTC/SMTC cartridges will not work on CV-5200 series systems.

#### Dimensions

Four digit numerical value, which represents the key dimension of the geometry.

#### **Special Designator**

Provides an additional level of identification to the cartridge to better identify any unique attributes

Α	Access	additional length in one axis, >10mm
D	Deep Taper	
н	High Mass	Similar in design to another tip geometry with increased thermal mass
J	Reach with Taper	additional length >10mm with a change in axis, Taper
L	Long Life	increased tip plating
Ν	Non-Wetting	1 or more surfaces that are non-wetting
Ρ	Power	reduced length in one-axis, <6.5mm
Q	Square	Square end feature for Flat Blade geometry
R	Reach	additional length >10mm with a change in axis
S	Standard	
Т	Taper	Taper with Step
U	Round	Round end feature for Flat Blade geometry
۷	Concave	
w	Enlarged Wetting Area	
х	Power & Long Life	reduced length in one-axis, <6.5mm, increased tip plating

Connection Validation\* Soldering Station



# **Cartridge Part Number Cross Reference Table**

Current Part Number	New Part Number	Description
STTC-x46	CVC-xBV6005A	CARTRIDGE, BEVEL, 0.5MM X 14MM LG, 60DEG
STTC-x47P	CVC-xBV6018P	CARTRIDGE, BEVEL, 1.8MM X 6MM LG, 60DEG
STTC-x47	CVC-xBV6018R	CARTRIDGE, BEVEL, 1.8MM X 14MM LG, 70DEG
STTC-x25P	CVC-xCH0010P	CARTRIDGE, CHISEL, 1MM X 6MM LG, 35DEG
STTC-x25	CVC-xCH0010S	CARTRIDGE, CHISEL, 1MM, 30DEG
STTC-x38P	CVC-xCH0014P	CARTRIDGE, CHISEL, 1.4MM X 6MM LG, 35DEG
STTC-x99	CVC-xCH0015R	CARTRIDGE, CHISEL, REACH, 1.4MM X 12MM LG, 30DEG
STTC-x38	CVC-xCH0014S	CARTRIDGE, CHISEL, 1.4MM X 9.9MM LG, 30DEG
STTC-x42	CVC-xCH0018A	CARTRIDGE, CHISEL, ACCESS, 1.8MM X 15MM LG, 60DEG
STTC-x37LL	CVC-xCH0018L	CARTRIDGE, CHISEL, 1.8MM X 10MM LG, 30DEG, LL
STTC-x37P	CVC-xCH0018P	CARTRIDGE, CHISEL, 1.8MM X 6MM LG, 35DEG
STTC-x98	CVC-xCH0018R	CARTRIDGE, CHISEL, REACH, 1.8MM X 10MM LG, 30DEG
STTC-x37	CVC-xCH0018S	CARTRIDGE, CHISEL, 1.8MM X 10MM LG, 30DEG
STTC-x36P	CVC-xCH0025P	CARTRIDGE, CHISEL, 2.5MM X 6MM LG, 30DEG
STTC-x36	CVC-xCH0025S	CARTRIDGE, CHISEL, 2.5MM X 10MM LG, 30DEG
STTC-x13	CVC-xCH0030S	CARTRIDGE, CHISEL, 3MM X 5MM LG, 90DEG
STTC-x03	CVC-xCH0034S	CARTRIDGE, CHISEL 3MM X 9MM LG
STTC-x65	CVC-xCH0050A	CARTRIDGE, CHISEL, 5MM X 12MM LG, 22DEG
STTC-x17	CVC-xCH0050S	CARTRIDGE, CHISEL, LARGE, 5MM X 8MM LG, 30DEG
STTC-x20	CVC-xCH2238A	CARTRIDGE, CHISEL, 3.8MM X 22MM LG, 12DEG
STTC-x90	CVC-xCN0003A	CARTRIDGE, CONICAL, 0.25MM X 13.5MM LG
STTC-x45P	CVC-xCN0004P	CARTRIDGE, CONICAL, 0.4MM X 9MM LG
STTC-x26	CVC-xCN0004R	CARTRIDGE, CONICAL, REACH, 0.6MM X 8MM LG, 35DEG
STTC-x22	CVC-xCN1404S	CARTRIDGE, CONICAL, 0.4MM X 9MM LG
STTC-x43	CVC-xCN0005A	CARTRIDGE, CONICAL, 0.5MM X 15MM LG
STTC-x44	CVC-xCN0005R	CARTRIDGE, CONICAL, REACH, 0.5MM X 15MM LG, 30DEG
STTC-x11	CVC-xCN0005S	CARTRIDGE, CONICAL, 0.5MM X 5MM LG
STTC-x01	CVC-xCN0010A	CARTRIDGE, CONICAL, 1MM X 13MM LG
STTC-x01P	CVC-xCN0010P	CARTRIDGE, CONICAL, 1MM X 6.5MM LG
STTC-x41	CVC-xCN0013R	CARTRIDGE, CONICAL, REACH, 1.3MM X 22MM LG,30DEG
STTC-x06	CVC-xCN1304A	CARTRIDGE, CONICAL, 0.4MM
STTC-x45	CVC-xCN1504A	CARTRIDGE, CONICAL, 0.4MM X 15MM LG
STTC-x40	CVC-xCN1604R	CARTRIDGE, CONICAL, REACH, 0.8MM X 16MM LG, 30DEG
STTC-x07	CVC-xCN1710A	CARTRIDGE, CONICAL, ACCESS, 1MM X 17MM LG
SMTC-x167	SMC-xHF6015S	CARTRIDGE, HOOF, 1.5MM X 16.5MM LG, 60 DEG
SMTC-x147	SMC-xHF6033S	CARTRIDGE, HOOF, 3.3MM X 17MM LG, 60 DEG
SMTC-x172	SMC-xHK0005S	CARTRIDGE, HOOK, LONG, 0.5MM

Note: STTC/SMTC cartridges will not work on CV-5200 series systems.



#### Connection Validation\* Soldering Station

# **Cartridge Part Number Cross Reference Table**

Old Part Number	New Part Number	Description
STTC-x05	CVC-xBV3018S	CARTRIDGE, BEVEL, 1.78MM, 30DEG
STTC-x15	CVC-xBV3018P	CARTRIDGE, BEVEL, 1.27MM, 30DEG
STTC-x24	CVC-xBV4001S	CARTRIDGE, BEVEL 1MM, 30DEG
STTC-x35	CVC-xBV6018S	CARTRIDGE, BEVEL, 1.78MM, 30DEG
STTC-x14	CVC-xCH0020S	CARTRIDGE, BEVEL, 2MM, 45DEG
STTC-x31	CVC-xCN0010S	CARTRIDGE, CONICAL, 1MM
STTC-x32	CVC-xCN1002S	CARTRIDGE, CONICAL, 1.78MM
STTC-x02	CVC-xCN1208S	CARTRIDGE, CONICAL, 1.78MM
STTC-x12	CVC-xCN4302S	CARTRIDGE, CONICAL, 2MM
STTC-x16	CVC-xCN4805S	CARTRIDGE, CONICAL, 0.5MM
STTC-x83	CVC-xLG1802A	CARTRIDGE, CONICAL, 2MM
SMTC-x60	SMC-xBL0010S	CARTRIDGE, BLADE, 10MM
SMTC-xBL150	SMC-xBL0015H	CARTRIDGE, HIGH MASS, BLADE 15MM
SMTC-x61	SMC-xBL0016S	CARTRIDGE, BLADE, 15.75MM
SMTC-x62	SMC-xBL0022S	CARTRIDGE, BLADE, 22MM
SMTC-xBL250	SMC-xBL0025H	CARTRIDGE, HIGH MASS, BLADE 25MM
SMTC-xBL350	SMC-xBL0035H	CARTRIDGE, HIGH MASS, BLADE 35MM
SMTC-x184	SMC-xHF0015V	CARTRIDGE, CONCAVE HOOF, 1.5MM
SMTC-x185	SMC-xHF0020V	CARTRIDGE, CONCAVE HOOF, 2MM
SMTC-x186	SMC-xHF0030V	CARTRIDGE, CONCAVE HOOF, 3MM
SMTC-x183	SMC-xHF3025S	CARTRIDGE, HOOF, CONCAVE, 2.5MM, BENT, 30 DEG
SMTC-x175	SMC-xHF6009S	CARTRIDGE, HOOF, 0.89MM, 60 DEG
SMTC-x174	SMC-xHF6011S	CARTRIDGE, HOOF, LONG, 1.1MM, 60 DEG
SMTC-x169	SMC-xHF6020S	CARTRIDGE, HOOF, LONG, 2MM, 60 DEG
SMTC-x170	SMC-xHF6030S	CARTRIDGE, HOOF, LONG, 3MM, 60 DEG
SMTC-x171	SMC-xHK0008S	CARTRIDGE, CONICAL, BENT, 0.76MM
SMTC-x165	SMC-xKN0025S	CARTRIDGE, KNIFE, 2.5MM
SMTC-x161	SMC-xKN0048S	CARTRIDGE, KNIFE, THIN TIN LENGTH, 4.8MM
SMTC-x173	SMC-xKN0048W	CARTRIDGE, KNIFE, WIDE TIN LENGTH, 4.8MM
STTC-x173P	SMC-xKN0050P	CARTRIDGE, KNIFE, POWER, 5MM
STTC-x173PLL	SMC-xKN0050X	CARTRIDGE, KNIFE, 5MM