



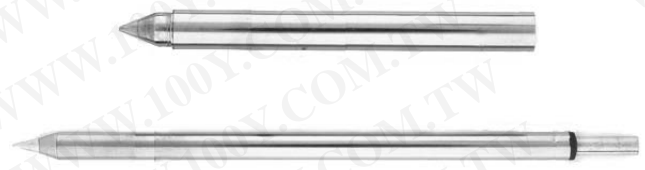
**METCAL**

**OKI**

勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-34970699  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

# Soldering / Desoldering / Rework Tips and Cartridges

## SELECTION GUIDE



# Content

|  |         |
|--|---------|
| Metcal STTC Soldering Cartridges .....           | 1 - 4   |
| Metcal UFTC UltraFine Soldering Cartridges ..... | 5 - 6   |
| Metcal SMTC Rework Cartridges .....              | 7 - 11  |
| Metcal PTTC Tweezer Cartridges .....             | 12      |
| Metcal TATC Talon Cartridges .....               | 13      |
| Metcal STDC Desoldering Cartridges .....         | 14      |
| Metcal and OKi SSC Soldering Cartridges .....    | 15 - 17 |
| OKi SxV Soldering Tips .....                     | 18 - 22 |
| OKi CxV Soldering Tips .....                     | 22      |
| OKi PHT Soldering Tips .....                     | 22 - 24 |
| OKi SxP Soldering & Rework Cartridges .....      | 25 - 27 |
| OKi RxP Rework Cartridges .....                  | 28 - 29 |
| OKi TxP Tweezer Cartridges .....                 | 30      |
| OKi DxP Desoldering Tips .....                   | 31      |
| Tip Temperature Chart .....                      | 32      |
| SmartHeat® Technology .....                      | 33      |



**ALL METCAL AND OKI TIPS AND CARTRIDGES  
ARE POWERED BY SMARTHEAT® TECHNOLOGY**

**SmartHeat® Technology = Variable Power / Fixed Temperature**

▶ See page 33 for full explanation



Compatible with: MX-500 and MX-5000 Systems / MX-RM3E and MX-H1-AV hand-pieces

CHISEL

| STTC SOLDERING CARTRIDGES |  |  |
|---------------------------|--|--|
|                           | <p>STTC-125P<br/>STTC-825P</p>                         | <p>Chisel 30°<br/>P = Optimised geometry for best thermal performance<br/>1.0mm x 6.5mm (.04" x .25")</p>  |
|                           | <p>STTC-525<br/>STTC-025<br/>STTC-125<br/>STTC-825</p> | <p>Chisel 30°<br/>1.0mm x 9.1mm (.04" x .33")</p>  |
|                           | <p>STTC-138P<br/>STTC-838P</p>                         | <p>Chisel 30°<br/>P = Optimised geometry for best thermal performance<br/>1.5mm x 6.0mm (.06" x .24")</p>  |
|                           | <p>STTC-538<br/>STTC-038<br/>STTC-138<br/>STTC-838</p> | <p>Chisel 30°<br/>1.5mm x 9.9mm (.06" x .39")</p>  |
|                           | <p>STTC-599<br/>STTC-099<br/>STTC-199<br/>STTC-899</p> | <p>Chisel Bent 30°<br/>1.5mm x 11.9mm (.06" x .47")</p>  |
|                           | <p>STTC-137P<br/>STTC-837P</p>                         | <p>Chisel 30°<br/>P = Optimised geometry for best thermal performance<br/>1.78mm x 6.0mm (.07" x .24")</p> |
|                           | <p>STTC-537<br/>STTC-037<br/>STTC-137<br/>STTC-837</p> | <p>Chisel Solder Cartridge 30°<br/>1.78mm x 9.9mm (.07" x .39")</p>  |
|                           | <p>STTC-598<br/>STTC-098<br/>STTC-198<br/>STTC-898</p> | <p>Chisel Bent 30°<br/>1.78mm x 9.9mm (.07" x .39")</p>  |
|                           | <p>STTC-542<br/>STTC-042<br/>STTC-142<br/>STTC-842</p> | <p>Long Reach Chisel 60°<br/>1.78mm x 16mm (.07" x .63")</p>   |
|                           | <p>STTC-514<br/>STTC-014<br/>STTC-114</p>              | <p>Chisel 45°<br/>2.0mm x 4.7mm (.08" x .19")</p>  |

5 = 500 Series and 0 = 600 Series for temperature sensitive applications - 1 = 700 Series for most standard applications.  
8 = 800 Series for Ceramic and high thermal demand applications.



CHISEL

## STTC SOLDERING CARTRIDGES

Compatible with: MX-500 and MX-5000 Systems / MX-RM3E and MX-H1-AV hand-pieces

|                |  |  |
|----------------|--|--|
|                | <p>STTC-136P<br/>STTC-836P</p>                         | <p>Chisel 30°<br/>P = Optimised geometry for best thermal performance<br/>2.5mm x 6.0mm (.10" x .24")</p>                                    |
|                | <p>STTC-536<br/>STTC-036<br/>STTC-136<br/>STTC-836</p> | <p>Chisel 30°<br/>2.5mm x 9.9mm (.10" x .39")</p>  |
|                | <p>STTC-513<br/>STTC-013<br/>STTC-113<br/>STTC-813</p> | <p>Chisel 90°<br/>3.0mm x 4.8mm (.12" x .19")</p>  |
|                | <p>STTC-520<br/>STTC-020<br/>STTC-120<br/>STTC-820</p> | <p>Long Reach Chisel 12°<br/>3.8mm x 21.6mm (.15" x .85")</p>  |
|                | <p>STTC-517<br/>STTC-017<br/>STTC-117<br/>STTC-817</p> | <p>Large Chisel<br/>5.0mm x 7.6mm (.20" x .30")</p>  |
|                | <p>STTC-565<br/>STTC-065<br/>STTC-165<br/>STTC-865</p> | <p>Large Chisel<br/>5.0mm x 11.4mm (.20" x .45")</p>   |
| <p>CONICAL</p> |  | <p>STTC-590<br/>STTC-090<br/>STTC-190<br/>STTC-890</p> <p>Fine and Long Reach Conical<br/>0.25mm x 13.2mm (.01" x .52")</p>                  |
|                |  | <p>STTC-526<br/>STTC-026<br/>STTC-126<br/>STTC-826</p> <p>Conical Sharp Bent 30°<br/>0.4mm x 7.9mm (.016" x .31")</p>                        |
|                |  | <p>STTC-522<br/>STTC-022<br/>STTC-122<br/>STTC-822</p> <p>Conical Sharp<br/>0.4mm x 8.4mm (.016" x .33")</p>                                 |
|                |  | <p>STTC-145P<br/>STTC-845P</p> <p>Conical Sharp<br/>P = Optimised geometry for best thermal performance<br/>0.4mm x 8.5mm (.016" x .34")</p> |

STTC Soldering Cartridges



CONICAL

| STTC SOLDERING CARTRIDGES |  | Compatible with: MX-500 and MX-5000 Systems / MX-RM3E and MX-H1-AV hand-pieces                |
|---------------------------|--|---|
|                           | STTC-506<br>STTC-006<br>STTC-106<br>STTC-806 | Conical Sharp<br>0.4mm x 13.7mm (.016" x .54")  |
|                           | STTC-545<br>STTC-045<br>STTC-145<br>STTC-845 | Conical Sharp<br>0.4mm x 14.7mm (.016" x .58")  |
|                           | STTC-540<br>STTC-040<br>STTC-140<br>STTC-840 | Conical Sharp Bent 30°<br>Long Reach<br>0.4mm x 16mm (.016" x .63")                           |
|                           | STTC-511<br>STTC-011<br>STTC-111             | Conical Sharp<br>0.5mm x 4.6mm (.02" x .18")  |
|                           | STTC-516<br>STTC-016<br>STTC-116<br>STTC-816 | Conical Sharp<br>0.5mm x 4.8mm (.02" x .19")  |
|                           | STTC-544<br>STTC-044<br>STTC-144<br>STTC-844 | Conical Sharp Bent 30°<br>Long Reach<br>0.5mm x 14.5mm (.02" x .57")                          |
|                           | STTC-543<br>STTC-043<br>STTC-143<br>STTC-843 | Conical Sharp<br>0.5mm x x 15.2mm (.02" x .6")  |
|                           | STTC-101P<br>STTC-801P                       | Conical<br>P = Optimised geometry for best thermal performance<br>1.0mm x 6.5mm (.04" x .25") |
|                           | STTC-531<br>STTC-031<br>STTC-131             | Conical<br>1.0mm x 9.9mm (.04" x .39")  |
|                           | STTC-501<br>STTC-001<br>STTC-101             | Conical<br>1.0mm x 13.5mm (.04" x .53")   |

5 = 500 Series and 0 = 600 Series for temperature sensitive applications - 1 = 700 Series for most standard applications.  
 8 = 800 Series for Ceramic and high thermal demand applications.



| STTC SOLDERING CARTRIDGES |  | Compatible with: MX-500 and MX-5000 Systems / MX-RM3E and MX-H1-AV hand-pieces |  |
|---------------------------|--|--|--|
| CONICAL                   |  | STTC-507<br>STTC-007<br>STTC-107   | Conical<br>1.0mm x 16.7mm (.04" x .66")  |
|                           |  | STTC-541<br>STTC-041<br>STTC-141<br>STTC-841                                   | Conical Bent 30°<br>Long Reach<br>1.3 mm x 21.8mm (.05" x .86")                                  |
| BEVEL                     |  | STTC-546<br>STTC-046<br>STTC-146<br>STTC-846                                   | Long Reach Bevel 60°<br>1.00mm x 14.2mm (.04" x .56")  |
|                           |  | STTC-147P<br>STTC-847P   | Bevel 60°<br>P = Optimised geometry for best thermal performance<br>1.78mm x 6.4mm (.07" x .25") |
|                           |  | STTC-535<br>STTC-035<br>STTC-135   | Bevel 30°<br>1.78mm x 9.9mm (.07" x .39")  |
|                           |  | STTC-505<br>STTC-005<br>STTC-105   | Bevel 30°<br>1.78mm x 11.7mm (.07" x .46")   |
|                           |  | STTC-547<br>STTC-047<br>STTC-147<br>STTC-847                                   | Long Reach Bevel 60°<br>1.78mm x 14.2mm (.07" x .56")  |

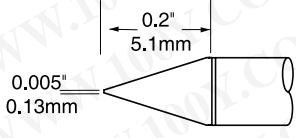
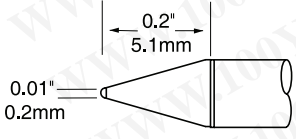
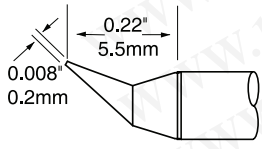
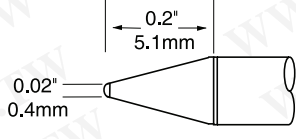
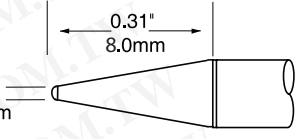
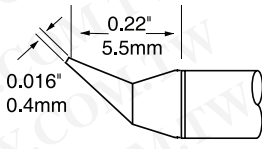
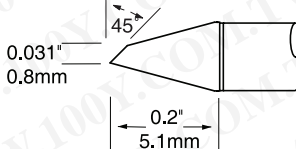
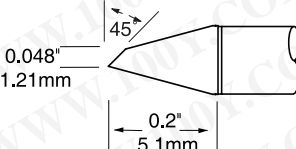
5 = 500 Series and 0 = 600 Series for temperature sensitive applications - 1 = 700 Series for most standard applications.  
 8 = 800 Series for Ceramic and high thermal demand applications.



CONICAL

**UFTC ULTRAFINE  
SOLDERING CARTRIDGES**

Compatible with: MX-5000 Systems and MX-H2-UF hand-piece

|   |   |  |  |
|---|---|--|--|
|    | <p>UFTC-7CN01</p>   | <p>Conical<br/>0.13mm x 5.1mm (.005" x .20")</p>     |  |
|    | <p>UFTC-7CN02</p>   | <p>Conical<br/>0.2mm x 5.1mm (.01" x .20")</p>       |  |
|    | <p>UFTC-7CNB02</p>  | <p>Conical Bent<br/>0.2mm x 5.5mm (0.01" x .22")</p> |  |
|    | <p>UFTC-7CN04</p>   | <p>Conical<br/>0.4mm x 5.1mm (.02" x 0.20")</p>      |  |
|   | <p>UFTC-7CNL04</p>  | <p>Conical Long<br/>0.4mm x 8mm (.02" x .31")</p>    |  |
|  | <p>UFTC-7CNB04</p>  | <p>Conical Bent<br/>0.4mm x 5.5mm (.02" x .22")</p>  |  |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">HOOF</p>           |  | <p>UFTC-7DRH408</p>                                  | <p>Hoof Micro<br/>0.8mm x 5.1mm (.03" x .20")</p>  |
|   |  | <p>UFTC-7DHR412</p>                                  | <p>Hoof Micro<br/>1.2mm x 5.1mm (.048" x .20")</p> |

7 = 700 Series for most standard applications

UFTC UltraFine Soldering Cartridges



**UFTC ULTRAFINE  
SOLDERING CARTRIDGES**

Compatible with: MX-5000 Systems and MX-H2-UF hand-piece

|               |  |             |   |
|---------------|--|-------------|---|
| <b>CHISEL</b> |  | UFTC-7CH06  | Chisel<br>0.6mm x 5.1mm (.024" x .20")    |
|               |  | UFTC-7CHL06 | Chisel Long<br>0.6mm x 9mm (.024" x .35") |
|               |  | UFTC-7CH08  | Chisel<br>0.8mm x 5.1mm (.03" x .2")      |
|               |  | UFTC-7CHL08 | Chisel Long<br>0.8mm x 9mm (.03" x .35")  |
|               |  | UFTC-7CH12  | Chisel<br>1.2mm x 5.1mm (.05" x .20")     |

7 = 700 Series for most standard applications

## SMTC REWORK CARTRIDGES

Compatible with: MX-500 and MX-5000 Systems, MX-RM3E and MX-H1-AV hand-pieces.  
All dimensions shown are in mm (inches)

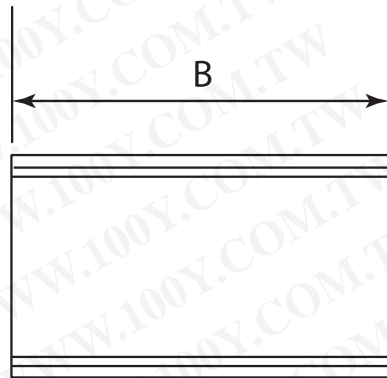
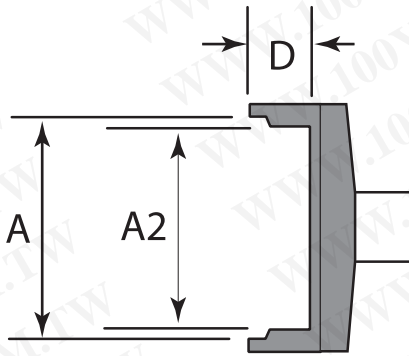
| SLOT |  |                                  | A                                | D              | B              | SMT TYPE                    |
|------|--|----------------------------------|----------------------------------|----------------|----------------|-----------------------------|
|      |  |                                  | SMTC-505<br>SMTC-005<br>SMTC-105 | 1.7<br>(.068)  | 1.27<br>(.05)  | 2.5<br>(.10)                |
|      |  | SMTC-596<br>SMTC-096<br>SMTC-196 | 1.78<br>(.070)                   | 1.02<br>(.040) | 1.02<br>(.040) | Chip 0402, 0603             |
|      |  | SMTC-588<br>SMTC-088<br>SMTC-188 | 2.03<br>(.080)                   | 1.52<br>(.60)  | 1.27<br>(.050) | Chip 0402, 0603,<br>0805    |
|      |  | SMTC-501<br>SMTC-001<br>SMTC-101 | 2.3<br>(.090)                    | 1.8<br>(.070)  | 1.3<br>(.050)  | Chip 0805                   |
|      |  | SMTC-502<br>SMTC-002<br>SMTC-102 | 3.6<br>(.14)                     | 1.8<br>(.07)   | 1.5<br>(.06)   | Chip 1206,1210              |
|      |  | SMTC-132                         | 3.81<br>(.150)                   | 2.54<br>(.10)  | 2.41<br>(.095) | Chip Box B EIA<br>SOPM-3528 |
|      |  | SMTC-536<br>SMTC-036<br>SMTC-136 | 4.8<br>(.190)                    | 4.06<br>(.16)  | 2.8<br>(.110)  | Chip Box B EIA<br>SOPM-4532 |
|      |  | SMTC-503<br>SMTC-003<br>SMTC-103 | 4.83<br>(.190)                   | 1.91<br>(.075) | 2.03<br>(.080) | Chip 1812                   |

5 = 500 Series & 0 = 600 Series for temperature sensitive applications. 1 = 700 Series for most standard applications.  
8 = 800 Series for Ceramic and high thermal demand applications.

**SMTC REWORK CARTRIDGES**

Compatible with: MX-500 and MX-5000 Systems, MX-RM3E and MX-H1-AV hand-pieces  
All dimensions shown are in mm (inches)

TUNNEL



SMTC Rework Cartridges

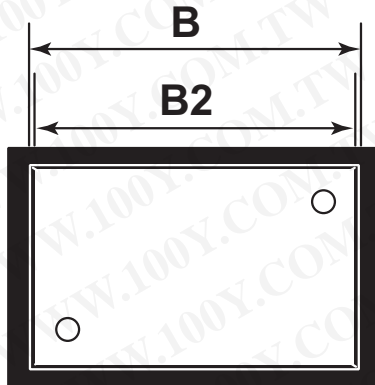
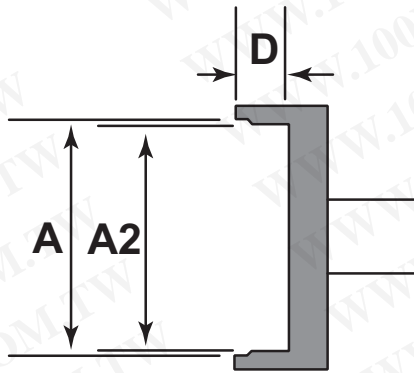
|                        | A               | A2              | D              | B               | SMT TYPE          |
|------------------------|-----------------|-----------------|----------------|-----------------|-------------------|
| SMTC-004<br>SMTC-104   | 5.08<br>(.20)   | 5.08<br>(.20)   | 2.3<br>(.90)   | 4.32<br>(.17)   | SOIC-8            |
| SMTC-006<br>SMTC-106   | 5.08<br>(.20)   | 5.08<br>(.20)   | 2.3<br>(.90)   | 10.16<br>(.40)  | SOIC-14,16        |
| SMTC-0142<br>SMTC-1142 | 5.18<br>(.204)  | 5.18<br>(.204)  | 2.54<br>(.100) | 8.89<br>(.350)  | SOIC-14           |
| SMTC-047<br>SMTC-147   | 8.51<br>(.335)  | 8.51<br>(.335)  | 5.08<br>(.200) | 6.35<br>(.250)  | DPAC              |
| SMTC-126               | 8.64<br>(.340)  | 8.0<br>(.315)   | 1.88<br>(.074) | 18.8<br>(.740)  | SOJ-28,<br>SOM-32 |
| SMTC-007<br>SMTC-107   | 9.53<br>(.375)  | 9.53<br>(.375)  | 3.20<br>(.125) | 18.3<br>(.720)  | SOIC-28           |
| SMTC-009<br>SMTC-109   | 9.53<br>(.375)  | 9.53<br>(.375)  | 3.18<br>(.125) | 15.75<br>(.620) | SOIC-24           |
| SMTC-010<br>SMTC-110   | 9.53<br>(.375)  | 9.53<br>(.375)  | 3.20<br>(.125) | 13.20<br>(.520) | SOIC-20           |
| SMTC-040<br>SMTC-140   | 11.43<br>(.450) | 10.40<br>(.410) | 1.90<br>(.075) | 25.9<br>(1.02)  | SOJ-40,<br>SOM-32 |

5 = 500 Series & 0 = 600 Series for temperature sensitive applications. 1 = 700 Series for most standard applications.  
8 = 800 Series for Ceramic and high thermal demand applications.

## SMTC REWORK CARTRIDGES

Compatible with: MX-500 and MX-5000 Systems, MX-RM3E and MX-H1-AV hand-pieces  
All dimensions shown are in mm (inches)

QUAD



|                        | A                | A2               | D              | B                | B2               | SMT TYPE               |
|------------------------|------------------|------------------|----------------|------------------|------------------|------------------------|
| SMTC-0121<br>SMTC-1121 | 8.38<br>(.330)   | 8.38<br>(.330)   | 2.54<br>(.100) | 8.38<br>(.330)   | 8.38<br>(.330)   | SQFP 48<br>(EIJA)      |
| SMTC-0112<br>SMTC-1112 | 10.16<br>(.400)  | 9.14<br>(.360)   | 3.80<br>(.150) | 10.16<br>(.400)  | 9.14<br>(.360)   | PLCC 20                |
| SMTC-0120<br>SMTC-1120 | 11.18<br>(.440)  | 11.18<br>(.440)  | 2.54<br>(.100) | 11.18<br>(.440)  | 11.18<br>(.440)  | SQFP 64<br>(EIJA)      |
| SMTC-1159              | 12.19<br>(.480)  | 11.18<br>(.440)  | 2.79<br>(.110) | 13.21<br>(.520)  | 12.19<br>(.480)  | TQFP 44                |
| SMTC-013<br>SMTC-113   | 12.70<br>(.500)  | 11.56<br>(.455)  | 3.80<br>(.150) | 12.70<br>(.500)  | 11.56<br>(.455)  | PLCC 28                |
| SMTC-116               | 12.70<br>(.500)  | 11.43<br>(.450)  | 3.80<br>(.150) | 15.24<br>(.600)  | 13.97<br>(.550)  | PLCC 32                |
| SMTC-1132              | 13.34<br>(.525)  | 12.32<br>(.485)  | 2.79<br>(.110) | 13.34<br>(.525)  | 12.32<br>(.485)  | TQFP 80                |
| SMTC-0118<br>SMTC-1118 | 15.49<br>(.610)  | 14.48<br>(.570)  | 2.79<br>(.110) | 15.49<br>(.610)  | 14.48<br>(.570)  | VQFP 100<br>(EIJA)     |
| SMTC-043<br>SMTC-143   | 16.51<br>(.650)  | 16.51<br>(.650)  | 3.30<br>(.130) | 22.48<br>(.885)  | 22.48<br>(.885)  | QFP 100<br>Rectangular |
| SMTC-014<br>SMTC-114   | 17.78<br>(.700)  | 16.76<br>(.660)  | 3.80<br>(.150) | 17.78<br>(.700)  | 16.76<br>(.660)  | PLCC 44                |
| SMTC-117               | 20.32<br>(.800)  | 19.30<br>(.760)  | 3.80<br>(.150) | 20.32<br>(.800)  | 19.30<br>(.760)  | PLCC 52                |
| SMTC-118               | 25.27<br>(.995)  | 19.30<br>(.760)  | 3.80<br>(.150) | 25.27<br>(.995)  | 19.30<br>(.760)  | PLCC 68                |
| SMTC-144               | 26.42<br>(1.040) | 26.42<br>(1.040) | 3.30<br>(.130) | 26.42<br>(1.040) | 26.42<br>(1.040) | QFP 100<br>Square      |

5 = 500 Series & 0 = 600 Series for temperature sensitive applications. 1 = 700 Series for most standard applications.  
8 = 800 Series for Ceramic and high thermal demand applications.

**SMTC REWORK CARTRIDGES**

Compatible with: MX-500 and MX-5000 Systems, MX-RM3E and MX-H1-AV hand-pieces

| BLADE          | <b>A</b> |  | <b>BLADE TYPE</b>  |  |
|----------------|----------|--|--|--|
|                |          | SMTC-064<br>SMTC-164                             | 5mm<br>(.20")  | Short  |
|                |          | SMTC-560<br>SMTC-060<br>SMTC-160<br>SMTC-860     | 10mm<br>(.40")   | Long   |
|                |          | SMTC-561<br>SMTC-061<br>SMTC-161<br>SMTC-861     | 15.75mm<br>(.62")  | Long   |
|                |          | SMTC-562<br>SMTC-062<br>SMTC-162<br>SMTC-862     | 22mm<br>(.86")   | Long   |
| HOOK & CONICAL |          |  | SMTC-5172<br>SMTC-0172<br>SMTC-1172<br>SMTC-8172                                       | Hook Long 30°<br>0.5mm x 15.24mm (.02"x.06") |
|                |          | SMTC-5171<br>SMTC-0171<br>SMTC-1171<br>SMTC-8171 | Conical Bent 30°<br>0.76mm x 16.51mm (.03"x .65")                                      |  |
| KNIFE          |          | SMTC-5161<br>SMTC-0161<br>SMTC-1161              | Knife 45° - Increased tinned Area Length 2.03mm (.08")<br>4.8mm x 16.51mm (.18"x .65") |  |
|                |          | SMTC-5173<br>SMTC-1173<br>SMTC-8173              | Knife 45° - Increased tinned Area Length 5.84mm (.23")<br>4.8mm x 16.51mm (.18"x .65") |  |
|                |          | STTC-1173P<br>STTC-8173P                         | Knife 45°<br>5.0mm x 13.2mm (.20" x .52")  |  |

SMTC Rework Cartridges

| SMTC REWORK CARTRIDGES |  | Compatible with: MX-500 and MX-5000 Systems, MX-RM3E and MX-H1-AV hand-pieces |  |
|------------------------|--|---|--|
| HOOF                   | <p>60°<br/>.035" .89mm<br/>.45" 11.43mm</p>  | SMTC-5175<br>SMTC-0175<br>SMTC-1175<br>SMTC-8175                              | Micro Hoof 60°<br>0.89mm x 11.43mm (.035"x.45")            |
|                        | <p>60°<br/>.045" 1.14mm<br/>.65" 16.51mm</p>                                       | SMTC-5174<br>SMTC-0174<br>SMTC-1174   | Micro Hoof 60° Long Reach<br>1.14mm x 16.51mm (.045"x.65") |
|                        | <p>30°<br/>.06" 1.52mm<br/>.65" 16.51mm</p>  | SMTC-5167<br>SMTC-0167<br>SMTC-1167   | Hoof 30° Long Reach<br>1.5mm x 16.51mm (.06"x.65")         |
|                        | <p>60°<br/>.08" 2.03mm<br/>.60" 15.24mm</p>  | SMTC-5169<br>SMTC-0169<br>SMTC-1169   | Hoof 60° Long Reach<br>2mm x 15.24mm (.08" x .60")         |
|                        | <p>0.64" 16.36mm<br/>30°<br/>0.10" ø2.50mm</p>                                     | SMTC-0183<br>SMTC-1183  | Hoof Concave 30° Bent<br>2.5mm x 16.36mm (.01" x.64")      |
|                        | <p>60°<br/>.12" 3.05mm<br/>.60" 15.24mm</p>  | SMTC-5170<br>SMTC-0170<br>SMTC-1170   | Hoof 60° Long Reach<br>3mm x 15.24mm (.12" x.60")          |
|                        | <p>.13" 3.3mm<br/>.70" 17.78mm<br/>60°</p>   | SMTC-5147<br>SMTC-0147<br>SMTC-1147<br>SMTC-8147                              | Hoof 60° Long Reach<br>3.3mm x 17.78mm (.13" x .70")       |
| SPECIALITY             | <p>.19" 4.83mm<br/>1.18" 29.97mm<br/>.08" 2.03mm<br/>.13" 3.3mm<br/>.03" .76mm</p> | SMTC-198  | 28 Pin SMT Connector                                       |

5 = 500 Series and 0 = 600 Series for temperature sensitive applications - 1 = 700 Series for most standard applications.  
 8 = 800 Series for Ceramic and high thermal demand applications.

# Metcal Cartridges



## PTTC TWEEZER CARTRIDGES

Compatible with: MX-5000 Systems and MX-PTZ Precision Tweezers hand-piece

|                |  |  |   |
|----------------|--|--|---|
| <b>CONICAL</b> |  | <p>PTTC-601<br/>PTTC-701<br/>PTTC-801</p>    | <p>Conical<br/>0.4mm x 19mm (.016" x .75")</p>                                      |
|                |  | <p>PTTC-701B<br/>PTTC-801B</p>               | <p>Conical Bent 30°<br/>0.4mm x 14.3mm (.016" x .56")</p>                           |
| <b>BLADE</b>   |  | <p>PTTC-602<br/>PTTC-702<br/>PTTC-802</p>    | <p>Blade, thickness 1mm (.04")<br/>1.3mm x 16.5mm (.05" x .65")</p>                 |
|                |  | <p>PTTC-603<br/>PTTC-703<br/>PTTC-803</p>    | <p>Blade, thickness 1mm (.04")<br/>2mm x 16.5mm (.08" x .65")</p>                   |
|                |  | <p>PTTC-608B<br/>PTTC-708B<br/>PTTC-808B</p> | <p>Blade Bent 30°<br/>3.5mm x 12.1mm (0.12" x .48")</p>                             |
|                |  | <p>PTTC-604<br/>PTTC-704<br/>PTTC-804</p>    | <p>Blade Bent 22°,<br/>thickness 0.7mm (.28")<br/>6.35mm x 12.7mm (.25" x .50")</p> |
|                |  | <p>PTTC-605<br/>PTTC-705<br/>PTTC-805</p>    | <p>Blade Bent 22°,<br/>thickness 0.7mm (.28")<br/>16mm x 12.7mm (.63" x .50")</p>   |
|                |  | <p>PTTC-606<br/>PTTC-706<br/>PTTC-806</p>    | <p>Blade Bent 22°,<br/>thickness 0.7mm (.28")<br/>20.5mm x 12.7mm (.80" x .50")</p> |
|                |  | <p>PTTC-607<br/>PTTC-707<br/>PTTC-807</p>    | <p>Blade Bent 22°,<br/>thickness 0.7mm (.28")<br/>28mm x 12.7mm (1.1" x .50")</p>   |

6 = 600 Series for temperature sensitive applications. 1 = 700 Series for most standard applications.  
8 = 800 Series for Ceramic and high thermal demand applications.

| TATC TALON CARTRIDGES |          | Compatible with: MX-500 Systems and MX-Talon hand-piece                  |
|-----------------------|----------|--|
|                       | TATC-609 | Fine Point,<br>thickness 0.35mm (.013")<br>0.5mm x 12.45mm (.02" x .49") |
|                       | TATC-601 | Fine Point,<br>thickness 1.2mm (.047")<br>0.5mm x 12.45mm (.02" x .49")  |
|                       | TATC-608 | Dual Side, angled Point<br>1.27mm (.05")                                 |
|                       | TATC-602 | Blade<br>6.35mm x 10.16mm<br>(.25" x .40")                               |
|                       | TATC-605 | Blade<br>10mm x 10.93mm<br>(.394" x .43")                                |
|                       | TATC-603 | Blade<br>15.75mm x 8.38mm<br>(.62" x .33")                               |
|                       | TATC-604 | Blade<br>20.57mm x 8.38mm<br>(.81" x .33")                               |
|                       | TATC-606 | Blade<br>27.94mm x 7.62mm<br>(1.1" x .30")                               |

6 = 600 Series for temperature sensitive applications.

Compatible with: MX-500 and MX-5000 Systems, MX-DS1 Desoldering hand-piece  
 All dimensions shown are in mm (inches)

| STDC DESOLDER CARTRIDGES |                        | A              | B              | C              | TYPE       |
|--------------------------|------------------------|----------------|----------------|----------------|------------|
|                          | STDC-102<br>STDC-802   | 0.64<br>(.025) | 1.40<br>(.055) | 11.43<br>(.45) | Standard   |
|                          | STDC-103<br>STDC-803   | 0.76<br>(.029) | 1.68<br>(.066) | 11.17<br>(.44) | Standard   |
| <p>Standard</p>          | STDC-104<br>STDC-804   | 1.02<br>(.04)  | 1.78<br>(.07)  | 10.92<br>(.43) | Standard   |
|                          | STDC-105<br>STDC-805   | 1.27<br>(.05)  | 2.03<br>(.08)  | 10.66<br>(.42) | Standard   |
| <p>Long Reach</p>        | STDC-106<br>STDC-806   | 1.52<br>(.06)  | 2.29<br>(.09)  | 10.41<br>(.41) | Standard   |
|                          | STDC-707<br>STDC-807   | 2.41<br>(.09)  | 3.18<br>(.12)  | 9.14<br>(.36)  | Standard   |
| <p>Long Reach</p>        | STDC-703L<br>STDC-803L | 0.76<br>(.03)  | 1.68<br>(.06)  | 21.33<br>(.84) | Long Reach |
|                          | STDC-704L<br>STDC-804L | 1.02<br>(.04)  | 1.79<br>(.07)  | 21.08<br>(.83) | Long Reach |
|                          | STDC-705L<br>STDC-805L | 1.27<br>(.05)  | 2.03<br>(.08)  | 20.82<br>(.82) | Long Reach |

1 = 700 Series (standard length) and 7 = 700 Series (long reach) for most standard applications.  
 8 = 800 Series for Ceramic and high thermal demand applications.



Compatible with: Metcal SP200, OKi MFR-1160 Systems,  
Metcal SP-HC12 and OKi MFR-H6-SSC hand-pieces

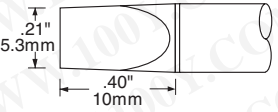
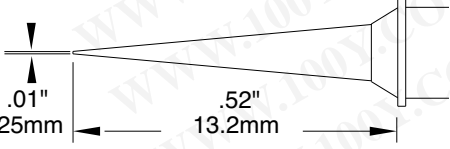
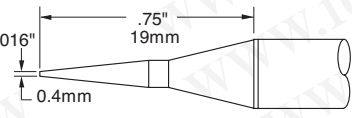
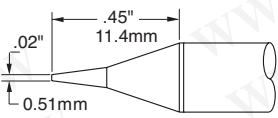
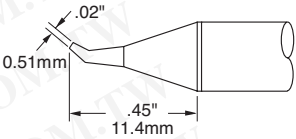
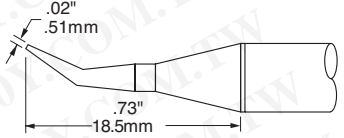
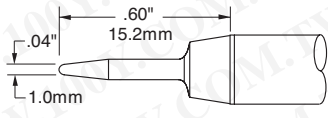
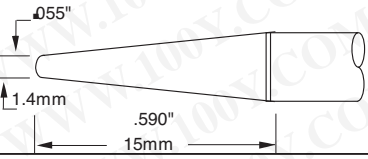
CHISEL

| SSC SOLDERING CARTRIDGES |                              |  |
|--------------------------|------------------------------|--|
|                          | <p>SSC-671A<br/>SSC-771A</p> | <p>Chisel<br/>1.0mm x 9.1mm (.04" x .36")</p>                |
|                          | <p>SSC-625A<br/>SSC-725A</p> | <p>Chisel 30°<br/>1.0mm x 11mm (.04" x .43")</p>             |
|                          | <p>SSC-638A<br/>SSC-738A</p> | <p>Chisel 30°<br/>1.5mm x 10mm (.06" x .40")</p>             |
|                          | <p>SSC-637A<br/>SSC-737A</p> | <p>Chisel 30°<br/>1.78mm x 9.9mm (.07" x .40")</p>           |
|                          | <p>SSC-672A<br/>SSC-772A</p> | <p>Chisel<br/>1.78mm x 9.9mm (.07" x .39")</p>               |
|                          | <p>SSC-642A<br/>SSC-742A</p> | <p>Long Reach Chisel 60°<br/>1.78mm x 16mm (.07" x .63")</p> |
|                          | <p>SSC-670A<br/>SSC-770A</p> | <p>Long Reach Chisel<br/>1.78mm x 16.5mm (.07" x .65")</p>   |
|                          | <p>SSC-636A<br/>SSC-736A</p> | <p>Chisel 30°<br/>2.5mm x 9.9mm (.10" x .39")</p>            |
|                          | <p>SSC-613A<br/>SSC-713A</p> | <p>Chisel 90°<br/>3.0mm x 7.6mm (.12" x .30")</p>            |
|                          | <p>SSC-646A<br/>SSC-746A</p> | <p>Long Reach Chisel<br/>3.0mm x 16.5mm (.12" x .65")</p>    |



Compatible with: Metcal SP200, OKi MFR-1160 Systems, Metcal SP-HC12 and OKi MFR-H6-SSC hand-pieces

CONICAL

| SSC SOLDERING CARTRIDGES  |                      |  |
|---|----------------------|--|
|    | SSC-617A<br>SSC-717A | Extra Large Chisel<br>5.3mm x 10mm (.21" x .40")                     |
|    | SSC-690A<br>SSC-790A | Long Reach<br>Micro Fine Conical<br>0.25mm x 13.2mm (.01" x .52")    |
|    | SSC-645A<br>SSC-745A | Conical Sharp Long Reach<br>0.4mm x 19mm (.016" x .75")              |
|    | SSC-622A<br>SSC-722A | Conical Sharp<br>0.51mm x 11.4mm (.02" x .45")                       |
|   | SSC-626A<br>SSC-726A | Conical Sharp Bent 30°<br>0.51mm x 11.4mm (.02" x .45")              |
|  | SSC-654A<br>SSC-754A | Conical Sharp Bent 30°<br>Long Reach<br>0.5mm x 18.5mm (.02" x .73") |
|  | SSC-601A<br>SSC-701A | Conical Sharp<br>1.0mm x 15.2mm (.04" x .60")                        |
|  | SSC-674A<br>SSC-774A | Conical<br>1.4mm x 15mm (.055" x .590")                              |

6 = 600 Series for temperature sensitive applications - 7 = 700 Series for most standard applications.



Compatible with: Metcal SP200, OKi MFR-1160 Systems,  
Metcal SP-HC12 and OKi MFR-H6-SSC hand-pieces

| SSC SOLDERING CARTRIDGES |  |   |
|--------------------------|--|---|
| HOOF                     |  | <p>SSC-667A<br/>SSC-767A</p> <p>Mini-Hoof<br/>1.27mm x 17.8mm (.05" x .70")</p>                           |
|                          |  | <p>SSC-639A<br/>SSC-739A</p> <p>Hoof<br/>2.3mm x 17.8mm (.016" x .70")</p>                                |
| KNIFE                    |  | <p>SSC-661A<br/>SSC-761A</p> <p>Knife 45°<br/>4.5mm x 16.25mm (.18" x .64")</p>                           |
|                          |  | <p>SSC-673A<br/>SSC-773A</p> <p>Knife 45°<br/>Increased tinned area<br/>5.1mm x 16.25mm (.24" x .64")</p> |
| BEVEL                    |  | <p>SSC-647A<br/>SSC-747A</p> <p>Bevel 60°<br/>1.78mm x 14.2mm (.07" x .56")</p>                           |

6 = 600 Series for temperature sensitive applications - 7 = 700 Series for most standard applications.



Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

| <b>SxV SOLDERING TIPS</b> |                  |   |  |  |
|---------------------------|------------------|---|--|--|
| <b>CHISEL</b>             | <b>NEW</b>       |   | <b>SFV-CH10A</b><br><b>STV-CH10A</b><br><b>SCV-CH10A</b>                               | <b>Chisel</b><br><i>Optimised for thermal performance</i><br>1.0mm x 18.3mm (.04" x .719")             |
|                           | <b>OLD STYLE</b> |   | <b>SFV-CH10AR</b><br><b>STV-CH10AR</b><br><b>SCV-CH10AR</b>                            | <b>Chisel</b><br><i>Original Easy Access Geometry</i><br>1.0mm x 13.7mm (.04" x .54")                  |
|                           |                  | <b>SFV-CH10</b><br><b>STV-CH10</b><br><b>SCV-CH10</b>       | <b>Chisel</b><br>1.0mm x 11mm (.04" x .43")  |  |
|                           | <b>NEW</b>       |   | <b>SFV-CH15A</b><br><b>STV-CH15A</b><br><b>SCV-CH15A</b>                               | <b>Chisel</b><br><i>Optimised for thermal performance</i><br>1.5mm x 11.3mm (.06" x .44")              |
|                           | <b>OLD STYLE</b> |   | <b>SFV-CH15AR</b><br><b>STV-CH15AR</b><br><b>SCV-CH15AR</b>                            | <b>Chisel</b><br><i>Original Easy Access Geometry</i><br>1.5mm x 13.4mm (.06" x .528")                 |
|                           |                  | <b>SFV-CHB15</b><br><b>STV-CHB15</b><br><b>SCV-CHB15</b>    | <b>Chisel Bent 30°</b><br>1.5mm x 12.2mm (.06" x .48")                                 |  |
|                           |                  | <b>SFV-CH18AR</b><br><b>STV-CH18AR</b><br><b>SCV-CH18AR</b> | <b>Chisel</b><br><i>Original Easy Access Geometry</i><br>1.8mm x 13.4mm (.07" x .528") |  |
|                           |                  | <b>SFV-CH20</b><br><b>STV-CH20</b><br><b>SCV-CH20</b>       | <b>Chisel</b><br>2.0mm x 11mm (.08" x .43")  |  |
|                           | <b>NEW</b>       |   | <b>SFV-CH24A</b><br><b>STV-CH24A</b><br><b>SCV-CH24A</b>                               | <b>Chisel Long Reach</b><br><i>Optimised for thermal performance</i><br>2.4mm x 18.3mm (.094" x .719") |
|                           |                  | <b>SFV-CH25AR</b><br><b>STV-CH25AR</b><br><b>SCV-CH25AR</b> | <b>Chisel</b><br><i>Original Easy Access Geometry</i><br>2.5mm x 13.4mm (.10" x .528") |  |



Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

| <b>SxV SOLDERING TIPS</b> |                  |  |  |
|---------------------------|------------------|--|--|
| <b>CHISEL</b>             |                  | <b>SFV-CH25</b><br><b>STV-CH25</b><br><b>SCV-CH25</b>          | Chisel<br>2.5mm x 11mm (.10" x .43")   |
|                           |                  | <b>SFV-CH30AR</b><br><b>STV-CH30AR</b><br><b>SCV-CH30AR</b>    | Chisel<br><i>Original Easy Access Geometry</i><br>3.0mm x 13.4mm (.12" x .528")                      |
|                           |                  | <b>SFV-CH50A</b><br><b>STV-CH50A</b><br><b>SCV-CH50A</b>       | Chisel<br><i>Optimised for thermal performance</i><br>5.0mm x 11.3mm (.20" x .44")                   |
|                           | <b>OLD STYLE</b> |  |  |
|                           |                  | <b>SFV-CH50AR</b><br><b>STV-CH50AR</b><br><b>SCV-CH50AR</b>    | Chisel<br><i>Original Easy Access Geometry</i><br>5.0mm x 11.7mm (.197" x .461")                     |
|                           |                  | <b>SFV-CH50</b><br><b>STV-CH50</b><br><b>SCV-CH50</b>          | Chisel<br>5.0mm x 10mm (.20" x .4")  |
| <b>CONICAL</b>            | <b>OLD STYLE</b> |  |  |
|                           |                  | <b>SFV-CNL03AR</b><br><b>STV-CNL03AR</b><br><b>SCV-CNL03AR</b> | Conical Long Reach<br><i>Original Easy Access Geometry</i><br>0.3mm x 18.4mm (.01" x .724")          |
|                           |                  | <b>SFV-CNB04A</b><br><b>STV-CNB04A</b><br><b>SCV-CNB04A</b>    | Conical Bent Long Reach<br><i>Optimised for thermal performance</i><br>0.4mm x 15.5mm (.016" x .61") |
|                           |                  | <b>SFV-CN05A</b><br><b>STV-CN05A</b><br><b>SCV-CN05A</b>       | Conical Long Reach<br><i>Optimised for thermal performance</i><br>0.4mm x 18.2mm (.016" x .72")      |
|                           | <b>OLD STYLE</b> |  |  |
|                           |                  | <b>SFV-CNB04AR</b><br><b>STV-CNB04AR</b><br><b>SCV-CNB04AR</b> | Conical Bent<br><i>Original Easy Access Geometry</i><br>0.4mm x 19.6mm (.016" x .77")                |
|                           |                  | <b>SFV-CNL04</b><br><b>STV-CNL04</b><br><b>SCV-CNL04</b>       | Conical<br>0.4mm x 13.6mm (.016" x .53")   |



Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

|                |                                     |   |  |
|----------------|-------------------------------------|---|--|
| <b>CONICAL</b> | <b>SxV SOLDERING TIPS</b>           |   |  |
|                | <b>OLD STYLE</b>                    |   |  |
|                |                                     | SFV-CN05AR<br>STV-CN05AR<br>SCV-CN05AR                | Conical<br><i>Original Easy Access Geometry</i><br>0.5mm x 13.7mm (.02" x .53")              |
|                |                                     | SFV-CN05<br>STV-CN05<br>SCV-CN05                      | Conical<br>0.5mm x 8.5mm (.02" x .34")   |
|                |                                     | SFV-CNB05<br>STV-CNB05<br>SCV-CNB05                   | Conical Bent<br>0.5mm x 13mm (.02" x .51")   |
|                | <b>NEW</b>                          |   |  |
|                |                                     | SFV-CNL10A<br>STV-CNL10A<br>SCV-CNL10A                | Conical Long Reach<br><i>Optimised for thermal performance</i><br>1.0mm x 18mm (.04" x .71") |
|                | <b>OLD STYLE</b>                    |   |  |
|                |                                     | SFV-CNL10AR<br>STV-CNL10AR<br>SCV-CNL10AR             | Conical Long Reach<br><i>Original Easy Access Geometry</i><br>1.0mm x 13.7mm (.04" x .54")   |
|                |                                     | SFV-CNL10<br>STV-CNL10<br>SCV-CNL10                   | Conical Long Reach<br>1.0mm x 13mm (.04" x .51")   |
|                | SFV-CNL14<br>STV-CNL14<br>SCV-CNL14 | Conical Long Reach<br>1.4mm x 15mm (.056" x .59")     |  |
|                | SFV-DRH20<br>STV-DRH20<br>SCV-DRH20 | Conical Bevel<br>2.0mm x 14mm (.08" x .55")           |  |
|                | SFV-CNL20<br>STV-CNL20<br>SCV-CNL20 | Conical Long Reach<br>2.0mm x 14mm (.08" x .59")      |  |
|                | SFV-WV20<br>STV-WV20<br>SCV-WV20    | Conical Wave Hoof 45°<br>2.0mm x 13.8mm (.08" x .54") |  |



Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

| SxV SOLDERING TIPS |                  |   |   |  |
|--------------------|------------------|---|---|--|
| <b>HOOF</b>        | <b>OLD STYLE</b> |   | <b>SFV-DRH420AR</b><br><b>STV-DRH420AR</b><br><b>SCV-DRH420AR</b>                                   | <b>Hoof 45° Long Reach</b><br><i>Original Easy Access Geometry</i><br>2.0mm x 20.7mm (.08" x .81") |
|                    |                  | <b>SFV-DRH20CP</b><br><b>STV-DRH20CP</b><br><b>SCV-DRH20CP</b>    | <b>Hoof 45°</b><br><i>CP = Chrome Plating, face only</i><br>2.5mm x 13mm (.10" x .51")              |  |
|                    |                  | <b>SFV-DRH430AR</b><br><b>STV-DRH430AR</b><br><b>SCV-DRH430AR</b> | <b>Hoof 45° Long Reach</b><br><i>Original Easy Access Geometry</i><br>3mm x 20.4mm (.12" x .8")     |  |
|                    | <b>NEW</b>       |   | <b>SFV-DRH420A</b><br><b>STV-DRH420A</b><br><b>SCV-DRH420A</b>                                      | <b>Hoof</b><br><i>Optimised for thermal performance</i><br>3.47mm x 12.2mm (.137" x .48")          |
|                    |                  | <b>SFV-DRH30CP</b><br><b>STV-DRH30CP</b><br><b>SCV-DRH30CP</b>    | <b>Hoof 45°</b><br><i>CP = Chrome Plating, face only</i><br>3.6mm x 13mm (.14" x .51")              |  |
|                    |                  | <b>SFV-DRH640AR</b><br><b>STV-DRH640AR</b><br><b>SCV-DRH640AR</b> | <b>Hoof 60° Long Reach</b><br><i>Original Easy Access Geometry</i><br>4mm x 17mm (.15" x .67")      |  |
|                    |                  | <b>SFV-DRH40CP</b><br><b>STV-DRH40CP</b><br><b>SCV-DRH40CP</b>    | <b>Hoof 45°</b><br><i>CP = Chrome Plating, face only</i><br>4.6mm x 13mm (.18" x .51")              |  |
| <b>NEW</b>         |                  | <b>SFV-DRH440A</b><br><b>STV-DRH440A</b><br><b>SCV-DRH440A</b>    | <b>Hoof</b><br><i>Optimised for thermal performance</i><br>4.75mm x 13.2mm (.187" x .52")           |  |
| <b>KNIFE</b>       | <b>OLD STYLE</b> |   | <b>SFV-DRK30AR</b><br><b>STV-DRK30AR</b><br><b>SCV-DRK30AR</b>                                      | <b>Knife 45° Long Reach</b><br><i>Original Easy Access Geometry</i><br>3mm x 18.7mm (.12" x .74")  |
|                    |                  | <b>SFV-DRK45AR</b><br><b>STV-DRK45AR</b><br><b>SCV-DRK45AR</b>    | <b>Knife 45° Long Reach</b><br><i>Original Easy Access Geometry</i><br>4.5mm x 18.7mm (.18" x .74") |  |



**SxV SOLDERING TIPS**

Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

|              |  |   |  |
|--------------|--|---|--|
| <b>KNIFE</b> |  | <p><b>NEW</b></p> <p>SFV-DRK45A<br/>STV-DRK45A<br/>SCV-DRK45A</p> | <p>Knife 45°<br/><i>Optimised for thermal performance</i><br/>5.0mm x 15.1mm (.20" x .60")</p> |
|              |  | <p>SFV-DRK50<br/>STV-DRK50<br/>SCV-DRK50</p>                      | <p>Knife 45°<br/>5.0mm x 14mm (.20" x .55")</p>  |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications.

**CxV BLADE TIPS**

Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3 and MFR-H2-ST hand-pieces, PS-CA3 and MFR-CA2 Coil Assemblies

|  |                                      |                                 |
|--|--------------------------------------|---------------------------------|
|  | <p>CFV-BL100 CTV-BL100 CCV-BL100</p> | <p><b>A</b><br/>10mm (.40")</p> |
|  | <p>CFV-BL250 CTV-BL250 CCV-BL250</p> | <p>25mm (1")</p>                |
|  | <p>CFV-BL350 CTV-BL350 CCV-BL350</p> | <p>35mm (1.4")</p>              |
|  | <p>CFV-BL400 CTV-BL400 CCV-BL400</p> | <p>40mm (1.6")</p>              |
|  | <p>CFV-BL500 CTV-BL500 CCV-BL500</p> | <p>50mm (2")</p>                |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications.

**PHT SOLDERING TIPS**

Compatible with: PS-800, PS-800E and PS-900 Systems and PS-CA1 Coil Assembly

|               |  |                                  |   |
|---------------|--|----------------------------------|---|
| <b>CHISEL</b> |  | <p>PHT-750315<br/>PHT-650315</p> | <p>Chisel Fine 30°<br/>1.0mm x 10mm (.04" x .394")</p>      |
|               |  | <p>PHT-750325<br/>PHT-650325</p> | <p>Chisel 60°<br/>1.5mm x 10mm (.06" x .394")</p>           |
|               |  | <p>PHT-750326<br/>PHT-650326</p> | <p>Chisel Fine Bent 30°<br/>1.5mm x 12mm (.06" x .472")</p> |
|               |  | <p>PHT-750335<br/>PHT-650335</p> | <p>Chisel 30°<br/>1.78mm x 10mm (.07" x .394")</p>          |

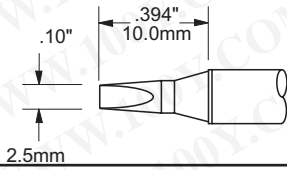
75 = 750 Series for most standard applications - 65 = 650 Series for temperature sensitive applications



Compatible with: PS-800, PS-800E and PS-900 Systems and PS-CA1 Coil Assembly

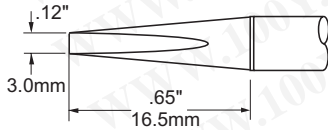
CHISEL

**PHT SOLDERING TIPS**



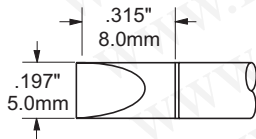
PHT-751355  
PHT-651355

Chisel 30°  
2.5mm x 10mm (.10" x .394")



PHT-751367  
PHT-651367

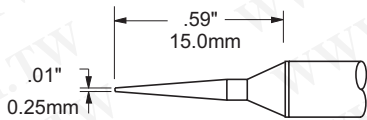
Chisel 30° Long Reach  
3.0mm x 16.5mm (.12" x .65")



PHT-751384  
PHT-651384

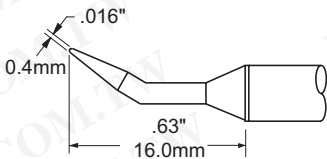
Chisel 30°  
3.0mm x 8mm (.12" x .315")

CONICAL



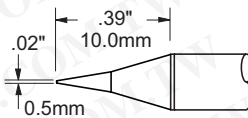
PHT-752017  
PHT-652017

Conical Fine Long Reach  
0.25mm x 15mm (.01" x .59")



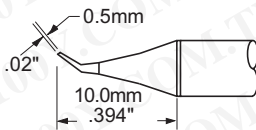
PHT-752327  
PHT-652327

Conical Fine Bent  
Long Reach  
0.4mm x 16mm (.016" x .63")



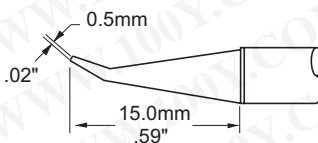
PHT-752035  
PHT-652035

Conical Fine  
0.5mm x 10mm (.02" x .39")



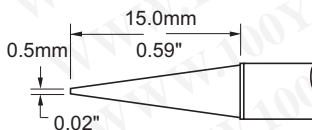
PHT-752335  
PHT-652335

Conical Fine 30°  
0.5mm x 10mm (.02" x .394")



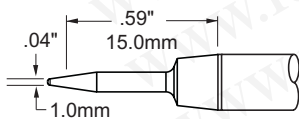
PHT-752337  
PHT-652337

Conical Fine Bent 30°  
Long Reach  
0.5mm x 15mm (.02" x .59")



PHT-753035  
PHT-653035

Conical 30°  
Long Reach  
0.5mm x 15mm (.02" x .59")



PHT-752057  
PHT-652057

Conical Fine  
Long Reach  
1.0mm x 15mm (.04" x .59")



Compatible with: PS-800, PS-800E and PS-900 Systems and PS-CA1 Coil Assembly

| <b>PHT SOLDERING TIPS</b> |  |                                    |   |
|---------------------------|--|------------------------------------|---|
| <b>CONICAL</b>            |  | <p>PHT-753067<br/>PHT-653067</p>   | <p>Conical Long Reach<br/>1.0mm x 15mm (.04" x .59")</p>                |
|                           |  | <p>PHT-753077<br/>PHT-653077</p>   | <p>Conical Long Reach<br/>1.0mm x 16.6mm (.04" x .656")</p>             |
| <b>HOOF</b>               |  | <p>PHT-754627<br/>PHT-654627</p>   | <p>Mini Hoof 60°<br/>1.0mm x 15mm (.04" x .59")</p>                     |
|                           |  | <p>PHT-754667<br/>PHT-654667</p>   | <p>Hoof 60°<br/>2.0mm x 17mm (.08" x .67")</p>                          |
|                           |  | <p>PHT-754687<br/>PHT-654687</p>   | <p>Hoof 60°<br/>3.0mm x 17mm (.12" x .67")</p>                          |
|                           |  | <p>PHT-754487F<br/>PHT-654487F</p> | <p>Hoof 45°<br/><i>F = Face Only</i><br/>3.0mm x 17mm (.12" x .67")</p> |
|                           |  | <p>PHT-654497</p>                  | <p>Hoof 45°<br/>4.00mm x 17mm (.16" x .67")</p>                         |
|                           |  | <p>PHT-654697</p>                  | <p>Hoof 60°<br/>4.00mm x 17mm (.16" x .67")</p>                         |
|                           |  | <p>PHT-755437<br/>PHT-655437</p>   | <p>Knife 45°<br/>4.5mm x 15mm (.18" x .59")</p>                         |
| <b>PHT Soldering Tips</b> |  | <p>PHT-755477<br/>PHT-655477</p>   | <p>Knife 45°<br/>5.0mm x 15mm (.20" x .59")</p>                         |



Compatible with: MFR-1110, MFR-1161, MFR-2211, MFR-2241 Systems and MFR-H1-SC hand-piece

CHISEL

| SxP SOLDERING & REWORK CARTRIDGES |  |   |  |
|-----------------------------------|--|---|--|
|                                   | <p>SFP-CH10<br/>STP-CH10<br/>SCP-CH10</p>    | <p>Chisel 30°<br/>1.0mm x 9.2mm (.04" x .36")</p>               |  |
|                                   | <p>SFP-CH15<br/>STP-CH15<br/>SCP-CH15</p>    | <p>Chisel 30°<br/>1.5mm x 10mm (.06" x .39")</p>                |  |
|                                   | <p>SFP-CHB15<br/>STP-CHB15<br/>SCP-CHB15</p> | <p>Chisel 30° Bent<br/>1.5mm x 12.04mm (.06" x .474")</p>       |  |
|                                   | <p>SFP-CH20<br/>STP-CH20<br/>SCP-CH20</p>    | <p>Chisel 30°<br/>2.0mm x 10mm (.08" x .4")</p>                 |  |
|                                   | <p>SFP-CHL20<br/>STP-CHL20<br/>SCP-CHL20</p> | <p>Chisel 60° Long Reach<br/>2.0mm x 16.04mm (.08" x .632")</p> |  |
|                                   | <p>SFP-CH25<br/>STP-CH25<br/>SCP-CH25</p>    | <p>Chisel 30°<br/>2.5mm x 10mm (.10" x .39")</p>                |  |
|                                   | <p>SFP-CH30<br/>STP-CH30<br/>SCP-CH30</p>    | <p>Chisel 30°<br/>3.0mm x 11mm (.12" x .43")</p>                |  |
|                                   | <p>SFP-CH35<br/>STP-CH35<br/>SCP-CH35</p>    | <p>Chisel 30°<br/>3.5mm x 11mm (.12" x .43")</p>                |  |
|                                   | <p>SFP-CH50<br/>STP-CH50<br/>SCP-CH50</p>    | <p>Chisel 30°<br/>5.0mm x 7.6mm (.20" x .3")</p>                |  |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications



Compatible with: MFR-1110, MFR-1161, MFR-2211, MFR-2241 Systems and MFR-H1-SC hand-piece

|                |  |  |
|----------------|--|--|
| <b>CONICAL</b> | <b>SxP SOLDERING &amp; REWORK<br/>CARTRIDGES</b> |  |
|                |  | <p>SFP-CN04<br/>STP-CN04<br/>SCP-CN04</p> <p>Conical<br/>0.4mm x 8.6mm (.016" x .34")</p>                    |
|                |  | <p>SFP-CNB04<br/>STP-CNB04<br/>SCP-CNB04</p> <p>Conical Bent<br/>0.4mm x 15.21mm (.016" x .6")</p>           |
|                |  | <p>SFP-CNL04<br/>STP-CNL04<br/>SCP-CNL04</p> <p>Conical Long Reach<br/>0.4mm x 14.9mm (.016" x .59")</p>     |
|                |  | <p>SFP-CN05<br/>STP-CN05<br/>SCP-CN05</p> <p>Conical<br/>0.5mm x 4.95mm (.02" x .20")</p>                    |
|                |  | <p>SFP-CNB05<br/>STP-CNB05<br/>SCP-CNB05</p> <p>Conical Bent Long Reach<br/>0.5mm x 14.7mm (.02" x .58")</p> |
| <b>BEVEL</b>   |  | <p>SFP-CNL06<br/>SCP-CNL06</p> <p>Conical Long Reach<br/>0.6mm x 14.9mm (.023" x .59")</p>                   |
|                |  | <p>SFP-BLV10<br/>STP-BLV10<br/>SCP-BLV10</p> <p>Bevel 60°<br/>1.0mm x 14.22mm (.04" x .56")</p>              |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications



Compatible with: MFR-1110, MFR-1161, MFR-2211, MFR-2241 Systems and MFR-H1-SC hand-piece

| SxP SOLDERING & REWORK CARTRIDGES |  |  |
|-----------------------------------|--|--|
| HOOF                              |  | <p>SFP-DRH05<br/>STP-DRH05<br/>SCP-DRH05</p> <p>Hoof<br/>0.5mm x 15.21mm (.02" x .6")</p>            |
|                                   |  | <p>SFP-DRH610<br/>STP-DRH610<br/>SCP-DRH610</p> <p>Hoof<br/>1.0mm x 11.6mm (.04" x .45")</p>         |
|                                   |  | <p>SFP-DRH15<br/>STP-DRH15<br/>SCP-DRH15</p> <p>Hoof 15°<br/>1.5mm x 16.5mm (.06" x .65")</p>        |
|                                   |  | <p>SFP-DRH615<br/>STP-DRH615<br/>SCP-DRH615</p> <p>Hoof 60°<br/>1.5mm x 11.6mm (.06" x .46")</p>     |
|                                   |  | <p>SFP-DRH35<br/>STP-DRH35<br/>SCP-DRH35</p> <p>Hoof Long Reach<br/>3.5mm x 17.78mm (.14" x .7")</p> |
| KNIFE                             |  | <p>SFP-DRK50<br/>STP-DRK50<br/>SCP-DRK50</p> <p>Knife<br/>5.0mm x 16mm (.20" x .63")</p>             |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications

## RxP REWORK CARTRIDGES

Compatible with: MFR-1110, MFR-1161, MFR-2211, MFR-2241 Systems and MFR-H1-SC hand-piece  
All dimensions shown are in mm (inches)

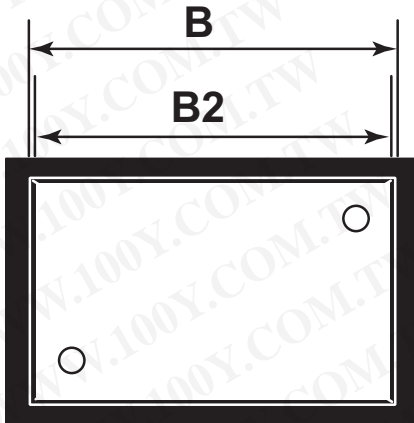
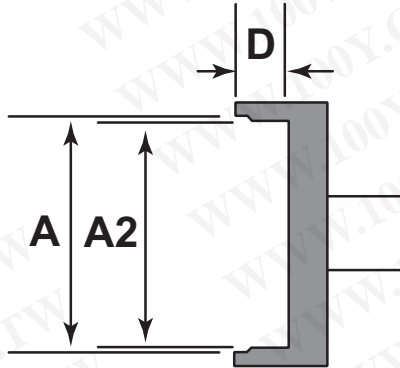
|        |  | A                  | B               | D               | SMT TYPE        |                      |
|--------|--|--------------------|-----------------|-----------------|-----------------|----------------------|
|        |  |                    |                 |                 |                 |                      |
| BLADE  |  | RFP-BL1<br>RCP-BL1 | 10<br>(0.41)    | -               | -               | -                    |
|        |  | RFP-BL2<br>RCP-BL2 | 15.6<br>(0.62)  | -               | -               | -                    |
|        |  | RFP-BL3<br>RCP-BL2 | 22.1<br>(0.87)  | -               | -               | -                    |
| TUNNEL |  | RFP-DL1<br>RCP-DL1 | 5.18<br>(0.204) | 4.32<br>(0.17)  | 3.22<br>(0.127) | Tunnel<br>SOIC-8     |
|        |  | RFP-DL2<br>RCP-DL2 | 5.18<br>(0.204) | 4.32<br>(0.17)  | 2.29<br>(.09)   | Tunnel<br>SOIC-14-16 |
|        |  | RFP-DL3<br>RCP-DL3 | 6.86<br>(.270)  | 11.15<br>(0.44) | 2.29<br>(.09)   | Tunnel<br>SOMC-16    |
| SLOT   |  | RFP-SL1<br>RCP-SL1 | 2.34<br>(.092)  | 1.37<br>(.054)  | 1.78<br>(.07)   | 0805 Chip<br>Package |
|        |  | RFP-SL2<br>RCP-SL2 | 3.48<br>(.137)  | 1.63<br>(.064)  | 1.78<br>(.07)   | 0805 Chip<br>Package |

F = FR4 / Fiber Glass, for most standard applications C = Ceramic for high thermal demand applications.

## RxP REWORK CARTRIDGES

Compatible with: MFR-1110, MFR-1161, MFR-2211, MFR-2241 Systems and MFR-H1-SC hand-piece  
All dimensions shown are in mm (inches)

QUAD



|                      | A               | A2              | D              | B               | B2              | SMT TYPE |
|----------------------|-----------------|-----------------|----------------|-----------------|-----------------|----------|
| RFP-QD4<br>RCP-QD4   | 12.70<br>(.500) | 11.43<br>(.450) | 3.81<br>(.150) | 15.24<br>(.600) | 13.97<br>(.550) | PLCC 32  |
| RFP-QD6<br>RCP-QD6   | 17.78<br>(.700) | 16.76<br>(.660) | 3.81<br>(.150) | 17.78<br>(.700) | 16.76<br>(.660) | PLCC 44  |
| RFP-QD7<br>RCP-QD7   | 25.27<br>(.995) | 24.38<br>(.960) | 5.59<br>(.220) | 25.27<br>(.995) | 24.38<br>(.960) | PLCC 68  |
| RFP-QD10<br>RCP-QD10 | 20.32<br>(.800) | 19.30<br>(.760) | 3.81<br>(.150) | 20.32<br>(.800) | 19.30<br>(.760) | PLCC 52  |
| RFP-QD15<br>RCP-QD15 | 13.34<br>(.525) | 12.32<br>(.485) | 2.79<br>(.110) | 13.34<br>(.525) | 12.32<br>(.485) | TQFP 80  |
| RFP-QD19<br>RCP-QD19 | 16.13<br>(.635) | 16.13<br>(.635) | 3.30<br>(.130) | 16.13<br>(.635) | 16.13<br>(.635) | QFP 44   |
| RFP-QD20<br>RCP-QD20 | 16.51<br>(.650) | 16.51<br>(.650) | 3.30<br>(.130) | 22.48<br>(.885) | 22.48<br>(.885) | QFP 100  |

F = FR4 / Fiber Glass, for most standard applications C = Ceramic for high thermal demand applications.

**TxP Tweezer Cartridges**

Compatible with: MFR-1140, MFR-2240, MFR2241 Systems and MFR-H4-TW hand-piece

|                   |  |  |  |
|-------------------|--|--|--|
| <b>BLADE</b>      |  | <p>TFP-BLP1<br/>TTP-BLP1<br/>TCP-BLP1</p>    | <p>1.0mm x 14mm (.04" x .55")</p>                |
|                   |  | <p>TFP-BLP2<br/>TTP-BLP2<br/>TCP-BLP2</p>    | <p>2.0mm x 14mm (.08" x .55")</p>                |
|                   |  | <p>TFP-CNP1<br/>TTP-CNP1<br/>TCP-CNP1</p>    | <p>Conical<br/>0.4mm x 19.1mm (.015" x .75")</p> |
| <b>HEAVY DUTY</b> |  |  | <b>A</b>   |
|                   |  | <p>TFP-BLH40<br/>TTP-BLH40<br/>TCP-BLH40</p> | <p>6.35mm<br/>(.25")</p>                         |
|                   |  | <p>TFP-BLH50<br/>TTP-BLH50<br/>TCP-BLH50</p> | <p>16mm<br/>(.62")</p>                           |
|                   |  | <p>TFP-BLH60<br/>TTP-BLH60<br/>TCP-BLH60</p> | <p>20.5mm<br/>(.81")</p>                         |
|                   |  | <p>TFP-BLH70<br/>TTP-BLH70<br/>TCP-BLH70</p> | <p>28mm<br/>(1.1")</p>                           |

F = FR4 / Fiber Glass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications.

| <b>DxP DESOLDERING TIPS</b> |                      | Compatible with: MFR-DSX, MFR-DSI, MFR-SDX, MFR-SDI Systems and MFR-HDS hand-piece<br>All dimensions shown are in mm (inches) |                |             |
|-----------------------------|----------------------|---|----------------|-------------|
|                             |                      | <b>A</b>  | <b>B</b>       | <b>TYPE</b> |
|                             | DFP-CN2<br>DCP-CN2   | 0.67<br>(.026)  | 1.80<br>(.070) | Standard    |
|                             | DFP-CN3<br>DCP-CN3   | 0.79<br>(.031)  | 2.05<br>(.080) | Standard    |
|                             | DFP-CN4<br>DCP-CN4   | 1.05<br>(.041)  | 2.30<br>(.090) | Standard    |
| <p><b>Standard</b></p>      | DFP-CN5<br>DCP-CN5   | 1.31<br>(.052)  | 2.65<br>(.104) | Standard    |
|                             | DFP-CN6<br>DCP-CN6   | 1.55<br>(.061)  | 2.85<br>(.112) | Standard    |
|                             | DFP-CN7<br>DCP-CN7   | 2.44<br>(.096)  | 3.65<br>(.143) | Standard    |
|                             | DFP-CNL3<br>DCP-CNL3 | 0.79<br>(.031)  | 2.05<br>(.080) | Long Reach  |
|                             | DFP-CNL4<br>DCP-CNL4 | 1.05<br>(.041)  | 2.30<br>(.090) | Long Reach  |
| <p><b>Long Reach</b></p>    | DFP-CNL5<br>DCP-CNL5 | 1.31<br>(.052)  | 2.65<br>(.104) | Long Reach  |

F = FR4 / Fiber Glass, for most standard applications C = Ceramic for high thermal demand applications

## What is SmartHeat® Technology?

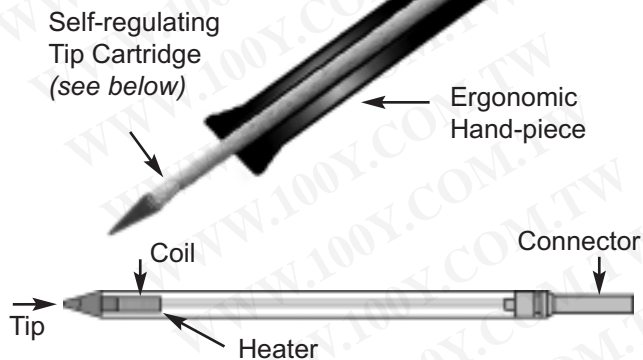
SmartHeat® Technology is unique in that it senses the specific thermal demand directly at the solder pad and delivers the precise quantity and flow of thermal energy during both flux activation and inter-metallic bonding phases without any adjustment and calibration. SmartHeat® is radically different and provides users the only fully safe and thermally effective soldering lead free solution.

Conventional technology senses and responds to the tip temperature and not the thermal energy demand of the solder joint and users are required to calibrate their systems regularly. In today's lead free environment, the conventional technology is thermally inefficient to produce good quality solder joints consistently and leaves process control in the hands of the individual operators.

Good quality joints are a result of precise quantity and flow of thermal energy and not tip temperature. Fixed temperature cartridges and tips offer users a fully safe and thermally effective solution to their lead free soldering needs as well as complete process control. Furthermore, fixed temperature cartridges and tips can offer better tip life because they can operate at a lower temperature than conventional technology. Please speak to our representatives on proper tip selection for your soldering applications.

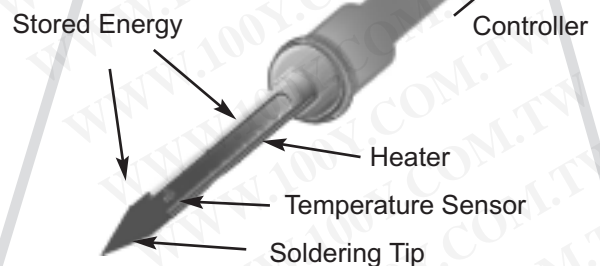
### SmartHeat® Soldering Technology = Variable Power / Fixed Temperature

- ▶ SmartHeat® tips and cartridges sense the load and instantly deliver the right amount of heat directly to the solder joint.
- ▶ The required solder joint temperature drives the heating process, as opposed to the idle tip temperature setting (as in a conventional iron).
- ▶ Operates at lower safer temperatures. Power is delivered in proportion to the load. SmartHeat® technology eliminates overshoot.
- ▶ No calibration required - saves money and eliminates system down-time.





### Conventional Soldering Technology = Fixed Power / Variable Temperature

- ▶ Conventional soldering irons are fixed power systems that store energy in the tip, they don't adjust power in response to thermal demand.
- ▶ The temperature needs to be manually set and adjusted to vary the amount of thermal energy applied, the operator can vary the process.
- ▶ The tip cools as it heats the joint and the heater reheats the tip, often overshooting the set temperature.
- ▶ Conventional soldering systems require calibration.
- ▶ The actual tip temperature can vary widely from set point, slowing the process and causing thermal damage and poor solder joint quality.



## Maximum Tip Temperature for Smartheat® Soldering Cartridges and Tips

| Serie   | Part Number   | Application           | Max tip temperature |
|---|---|-----------------------|---------------------|
|    |   |                       |                     |
| 500   | STTC-5xx, SMTC-5xxx, SSC-5xx  | Temperature Sensitive | 575°F/302°C         |
| 600   | STTC-0xx, PTTC-6xx, UFTC-6xxxx,<br>SMTC-0xxx, TATC-6xx, SSC-6xx           | Temperature Sensitive | 675°F/357°C         |
| 700   | STTC-1xx, PTTC-7xx, UFTC-7xxxx,<br>SMTC-1xxx, STDC-1xx, STDC-7xx, SSC-7xx | FR4/Glass Fiber       | 775°F/412°C         |
|  |   |                       |                     |
| 650   | PHT-65xxxx  | Temperature Sensitive | 680°F/360°C         |
| 750   | PHT-75xxxx  | FR4/Glass Fiber       | 780°F/416°C         |
| T   | STP-xxxx, STV-xxxx, TTP-xxx   | Temperature Sensitive | 690°F/365°C         |
| F   | SFP-xxxx, SFV-xxxx, RFP-xxx,<br>TFP-xxx, DFP-xxx                          | FR4/Glass Fiber       | 790°F/421°C         |
| C   | SCP-xxxx, SCV-xxxx, RCP-xxx,<br>TCP-xxx, DCP-xxx                          | Ceramic               | 860°F/460°C         |