

| Applications | | Systems | Handpieces | Tips & Cartridges |
|--|--|---------|--|--|
| S O L D E R I N G | | | | |
| LEAD FREE Repetitive production soldering, touch ups and through-hole PS-CA1 Light/medium load PS-CA2 & MFR-CA1 Heavy load | PS-800 PS-800E Soldering System | | Coil Assembly + Handpiece = PS-HC1 Coil Assembly = PS-CA1 (PS-800) or Coil Assembly = PS-CA2 (PS-800E) | TIPS PHT 37 geometries |
| | * MFR-PST Production Soldering Tip System | | Coil Assembly + Handpiece = MFR-HPS Coil Assembly = MFR-CA1 | TIPS SFV 12 geometries |
| S O L D E R I N G & R E W O R K | | | | |
| LEAD FREE Production soldering rework & SMT removal | * MFR-SRC Soldering & Rework Cartridge System | | Handpiece = MFR-HSR | CARTRIDGES SFP 17 geometries RFP 7 geometries |
| LEAD FREE 0201 Packages & small discrete components | * MFR-PTZ Precision Tweezer, Soldering & Rework System | | Handpiece = MFR-HPT + MFR-HSR | CARTRIDGES TFP 3 geometries TFP-BLP1, TFP-BLP2 TFP-CNP1 |
| | * MFR-PTW Precision Tweezer System | | Handpiece = MFR-HPT | <i>TFP tips are not interchangeable between MFR-HPT & MFR-HST</i> CARTRIDGES TFP 5 geometries TFP-BLH3, TFP-BLH4, TFP-BLH5, TFP-BLH6, TFP-BLH7 |
| LEAD FREE Discrete & SOIC components | * MFR-STZ Standard Tweezer Soldering & Rework System | | Handpiece = MFR-HST | |
| LEAD FREE Desoldering through-hole from 0.67mm (.26") O/D to 2.44mm (.096") O/D | * MFR-SDI / -SDX Solder/Desolder Internal Pump Solder/Desolder External Air | | Handpiece = MFR-HDS + MFR-HSR <i>MFR-HDS are only compatible with MFR-DSI, /-DSX, /-SDI, /-SDX</i> | CARTRIDGES DFP 9 geometries |
| | * MFR-DSI / -DSX Desolder Internal Pump System Desolder External Air System | | Handpiece = MFR-HDS | |

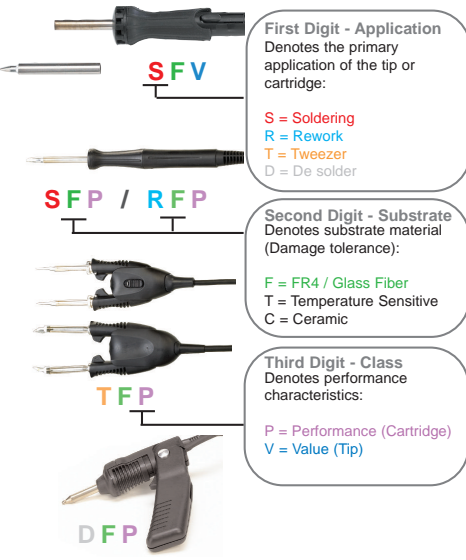
Handpieces MFR-HPS / MFR-HSR / MFR-HPT / MFR-HST are compatible and interchangeable with systems marked *

www.okinternational.com

Tip Cross Reference

| MX-500 | MFR-SFP | MFR-SFV/ PS-800E | PS-800 | SP200 |
|-----------|-----------|---------------------|------------|----------|
| STTC-X25 | SFP-CH10 | SFV-CH10 | PHT-XY0315 | SSC-X25A |
| STTC-X38 | SFP-CH15 | | | SSC-X38A |
| STTC-X37 | SFP-CH20 | SFV-CH20 | PHT-XY0335 | |
| STTC-X36 | SFP-CH25 | SFV-CH25 | PHT-XY1335 | SSC-X36A |
| STTC-X17 | SFP-CH50 | SFV-CH50 | PHT-XY1384 | SSC-X17A |
| STTC-X22 | SFP-CN04 | | | |
| STTC-X16 | SFP-CN05 | SFV-CN05 | PHT-XY3035 | SSC-X22A |
| STTC-X45 | SFP-CN04 | SFV-CN04 | PHT-XY2017 | |
| STTC-X42 | SFP-CHL20 | | | |
| STTC-X40 | SFP-CN04 | | | |
| STTC-X44 | SFP-CN05 | SFV-CN05 | PHT-XY2335 | SSC-X54A |
| STTC-X99 | SFP-CHB15 | SFV-CHB15 | PHT-XY0326 | |
| STTC-X46 | SFP-BVL10 | | | |
| SMTC-X172 | SFP-DRH05 | | | |
| SMTC-X167 | SFP-DRH15 | | | SSC-X67A |
| SMTC-X147 | SFP-DRH35 | | | SSC-X39A |
| SMTC-X161 | SFP-DRK50 | SFV-DRK50 | PHT-XY5477 | SSC-X73A |
| SMTC-X62 | RFP-BL3 | | | |
| SMTC-X61 | RFP-BL2 | | | |
| SMTC-X60 | RFP-BL1 | | | |
| SMTC-X01 | RFP-SL1 | | | |
| SMTC-X02 | RFP-SL2 | | | |
| SMTC-X04 | RFP-DL2 | | | |
| SMTC-X06 | RFP-DL1 | | | |
| TATC-X01 | TFF-CN1 | | | |

MFR Tip Part Numbering



Upgrade Kits

Add versatility to your MFR System.
Hand-piece Upgrade Kits can be ordered to compliment any of the MFR Systems. Kits include both the hand-piece and workstand.

MFR-PST-AD

Production / Solder Tip Upgrade Kit

MFR-SRC-AD

Solder / Rework Cartridge Upgrade Kit

MFR-PTZ-AD

Precision Tweezer Upgrade Kit

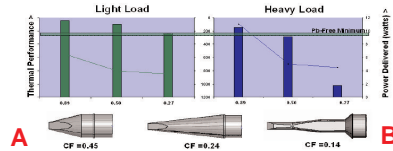
MFR-STZ-AD

Standard Tweezer Upgrade Kit



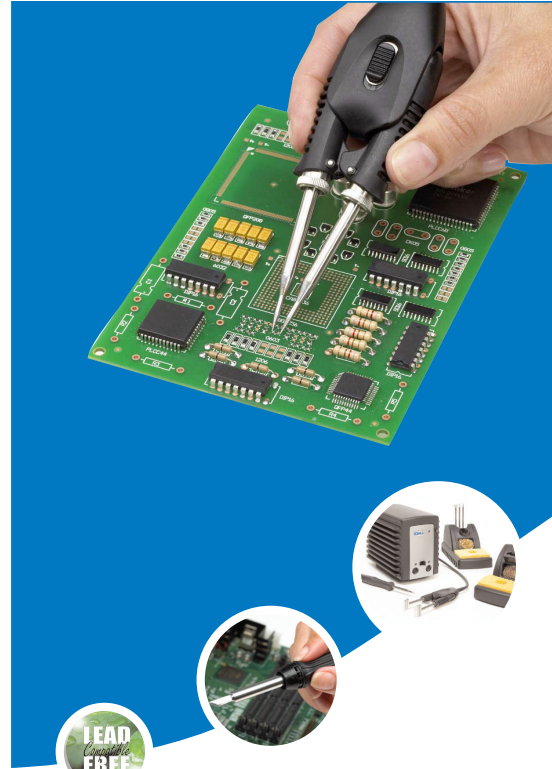
Conductivity Factor

Our new SmartHeat® PowerTips™ have been specifically developed for Lead free applications. They offer high performance at low tip idle temperatures, by optimizing the conduction of the thermal energy through the design of the tip geometries .



The tip **B** is formed with multiple steps. This reduces its diameter size and inhibits its ability to conduct thermal energy efficiently to the joint.
The tip **A** has a smooth progressive taper allowing good conduction from the heater source to the substrate.

The above diagram is a representation of how each tip performed when soldering a 2 layer board (light load) and a 10 layer board (heavy load). The temperature was the same for both tests and a bench mark line added to signify the requirements of Lead free. This shows that by maintaining the source temperature (typically 370°C) and just changing the geometries you can achieve much better thermal performance.



Hand Soldering & Rework Product Guide

PS-800 & MFR Range

