

ADTOOL Product Update

Special Interest Articles:

- Lead Free Solder Wire
- Hand Soldering Tips
- New Web Site
- New Wrist Strap & Constant Monitor
- Metcal Upgrades
- New Product Line
- Fall Specials

Questions?

Drop us a line at

1-800-361-6727

or

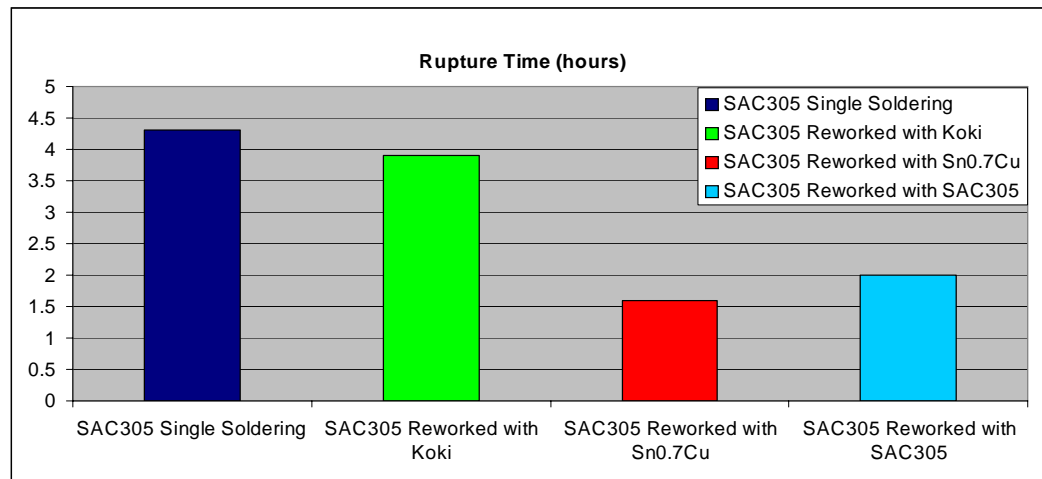
sales@adtool.ca

The Jury is in!

Across the country, we have now discovered the amazement of Koki's lead free solder wire. We can talk about literature, specifications, technical reports and snazzy marketing all we want. With our simple and crude test, we have shown that Koki has beaten any solder wire we have encountered for not only performance but solder joint quality and tip life savings as well. We actually saw one customer drop from 3 times tip usage back to just around 1.25 times.

In addition to this, new tests have shown that after a 2nd soldering operation, Koki indicated the highest creep strength of any of the alloys tested. In fact, it was stronger than and SAC305 joint reworked with SAC305.

For further details or for the complete report, contact your local Adtool representative.



	Koki Solution	Brands Encountered			
		A	B	C	D
Wetting or wicking	Excellent	Good	Fair	Poor	Poor
Fillet	Excellent	OK	Poor	Poor	Poor
Flux charring or dark residues	None	None	Some	Some	None
Spiking or flagging of the joint	None	Yes	Yes	Yes	Yes
Solder tip usage is double or more	No	Yes	Yes	Yes	Yes
Flux splatter	Minor - None	Average	High	High	High
Green Residue on Copper?	No	Yes	No	No	No
Flowed around test?	Yes	Yes	No	No	No
Cost per <u>X</u> Diameter, 500 gram spool					
Solder tip usage is double or more	No	Yes	Yes	Yes	Yes

Adtool Launches New Web Site



Beginning last summer we completed the project of adding an online catalogue on our web site as a resource for our customers. We are continuing to add products and feedback from our customers is very important. We will try to incorporate their thoughts and feelings as we progress.

Don't forget to drop by and check out our additional specials at www.adtool.ca.

COOPER Hand Tools

Soldering Tips

- When it comes to soldering irons, "the tip is the tool". The rest of the iron holds and heats the tip and controls its performance. But the tip is the critical component that must transfer heat efficiently and reliably to the connection point. Inadequate or improper tip maintenance is a leading cause of soldering problems. What's the best way to avoid trouble? The key to good tip maintenance is to keep the tip tinned with a thin coating of solder at all times.
- This solder coating also forms a heat bridge between the tip and the parts being soldered. It's difficult to heat parts efficiently with a point contact alone, as occurs with a "dry" (untinned) tip. With a tinned tip, the coating tends to flatten out as the tip touches the connection, creating a larger surface contact area - which in turn forms a more efficient heat path.
- Proper tinning also optimizes tip life. Most tips consist of a copper base material, plated with iron to prevent erosion. Iron, however, tends to oxidize rapidly. When oxidation occurs, the tip becomes covered with a black or brown scale, which will not wet with solder - greatly reducing heat transfer. This is commonly known as "burn-out". Burned out tips are usually discarded, though they may often be cleaned carefully with a fine abrasive and retinned.
- To prevent burn out, always keep the tip tinned with a thin coat of solder - not only during soldering but also when the iron is sitting at idle in the holder. Very often, an operator will wipe the tip clean before returning the iron to the holder and will not retin the tip until starting the next soldering task. This will cause rapid burn out. Also be sure to tin new tips as soon as they are heated to the solder melting point; otherwise, they can burn out within minutes.
- Another common cause of early tip failure is the use of active fluxes, either as liquids or cored in the solder. They can cause rapid surface oxidation, which forms pinholes in the plating. The tin will then enter into solution with the copper base material, creating large holes or pits on the tip surface.
- Be aware that the water-soluble fluxes, which are corrosive at high temperatures, can be especially damaging to tips. Many companies use water-soluble fluxes only during wave soldering followed by thorough aqueous cleaning to reduce flux residue on the circuit board.
- The use of wire solder cored with water soluble flux during touch-up and rework operations will still result in very rapid tip failure. One way to minimize the problem is by using a non-corrosive rosin core flux during rework.
- The use of "no-clean" fluxes is increasing worldwide. "No-cleans" are designed to be used for soldering very clean parts where minimal cleaning action is needed. This very mild cleaning action is usually insufficient to clean normal oxides off soldering iron tips. After a short amount of use the tip becomes badly oxidized, will not wet with solder and exhibits the "burn-out" appearance of black or brown scale coating the working surface. To clean tips oxidized due to using "no-clean" fluxes, it is best to flush the tip several times with a rosin activated flux cored solder. This should remove the oxides, unless the oxidation has been allowed to build up excessively. Once cleaned, the tip surface should be covered with a thick coating of solder.



**Smart Design
Make it Perfectt
for Lead-Free**



Metcal PS-800E Solder System

PS-800E High Performance Production Soldering System

The PS-800E is a compact system for repetitive soldering and touch-up that operates on Metcal SmartHeat® Technology. The new coil assembly and tip range offers a larger conductive area which allows for more efficient transfer of thermal energy to the tip resulting in high quality solder joints.

Coil Assembly & Tips

The PS-800E uses a combination of a coil assembly and tips which results in lower cost of ownership. The coil assembly, under normal conditions, should only need to be replaced twice per year while the tips (\$8-\$12) can easily be replaced as needed.

Auto Sleep Stand

Included with this high performance solder system is an Auto-Sleep Stand, which helps increase tip life by allowing the tip to idle at a lower temperature, thereby reducing oxidation.

\$135 US



New Product Line:

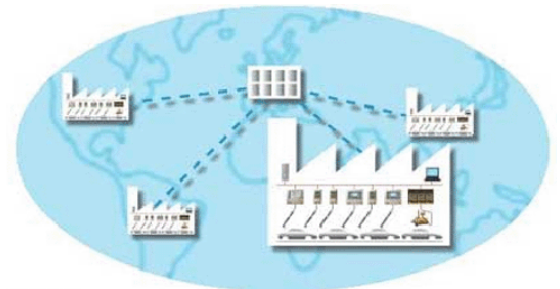
We would like to welcome to the family ATLAS Copco!



Atlas Copco has the right power tool for your job. Choose from nearly 3,000 air powered, electric or battery tools and a wide range of accessories. Give us a call. Our global organization is dedicated to serving you, wherever you are!

Transducerised torque control -Very High Accuracy Digitork TM control – High accuracy

- Typically for safety critical applications
- Electric Nutrunners with direct Torque measuring
- Transducer to confirm torque and Angle
- Controller Unit
- Traceability of the results
- Networking possibility



Digitork TM control - High accuracy

- Quality Critical applications
- Electric Nutrunners with indirect Torque measuring
- Digitork TM is a unique Atlas Copco Torque Control over measuring of current, frequency, voltage, temperature

Mechanical torque control - Average to high accuracy

- Specified torque level and torque accuracy.
- Mechanical torque control shuts off at pre-set level.
- Includes RE-type tools for process control.

Operator guided - No torque control

- No specified demands for torque accuracy.
- Operator monitored and controlled process.
- Stalling and non shut-off tools.



Fall Deals

Anti-Static Wrist Strap with Built In Constant Monitor P/N: EPS-01



Features

- Sensitivity adjustment trimmer
- Non-allergy, high class SUS316L stainless steel
- When poor ground contact occurs, user is alerted with LED's and audible alarm
- Easy wearing and stretch-free band for user comfort
- Low battery LED alerts user when battery life reaches 20%
- Replacable battery will last for approximately 500 8hr work days.

Includes:

- 2 x 4' green or blue high temp mat
- 2 snaps installed
- 1 adjustable green or blue wrists strap w/ coil cord, alligator clip and banana plug. P/N 211C10 G or B
- 1 common point ground

Cut and shipped the same day!

Full Rolls Are Available

**ESD Mat Package
\$39.95**



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United States

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Smart Design Makes it Perfect for Lead-free



There is no need to buy new stations to replace your Metcal MX-500 or SP200 Solder Stations.

The MX-500 and SP200 have an excellent reputation for being robust, powerful, maintenance-free and long-life.

Now for just **\$75.00** per station you can re-new your MX-500 or SP200 solder station with the purchase of a new hand piece and sleeper stand. The sleeper stand is the new workstation that OK International launched within the last year. It puts the hand piece to sleep when it is in the cradle thus extending tip life and decreasing cost of ownership.

No need to go to the expense of:

- Changing out Inventory
- Re-Training Staff
- Down-Time due to change over

Further Special Are Available at www.adtool.ca