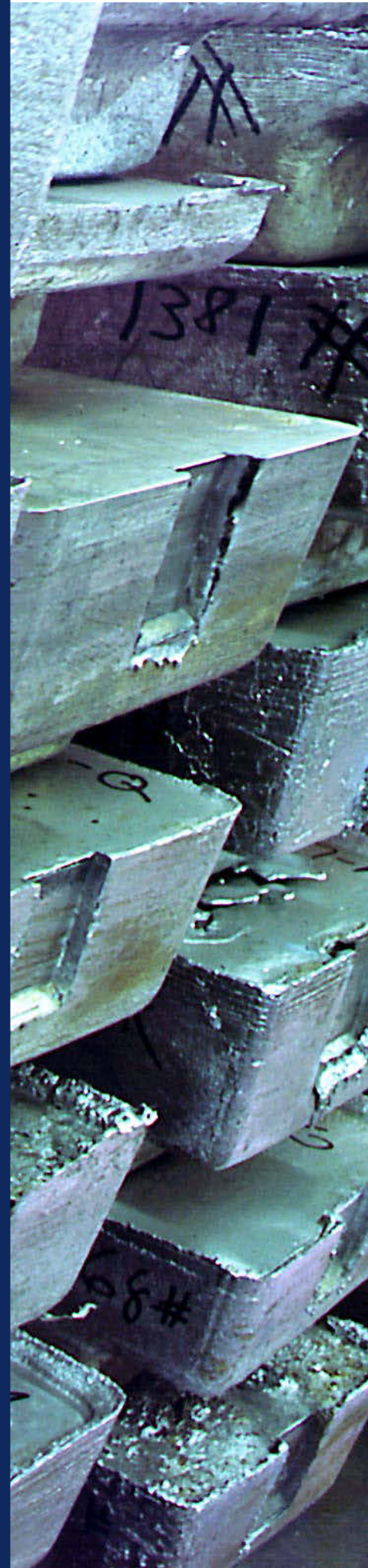


*Trademarks
of the
“right”
solder
are easy
to find
because
they
belong to
Metallic
Resources*





*For over ten years,
Metallic Resources
has been working
with the solder industry
to develop products
that out perform
the competition.
As a leader in
developing and
producing electrolytic
solder, they would like
to show you what
makes them the
supplier you've
been looking for.*

The Company

Metallic Resources is built around a staff of "hands-on" experts...experts that understand the metallurgy of solder and mechanics of soldering... experts that know the practical aspects and needs of production soldering. Metallic Resources wanted the ideal solder manufacturing plant based on an electrolytic process. This dream has been more than realized. In fact, Metallic Resources' commitment to the industry and the environment makes the Twinsburg, Ohio operation a model facility for processing, handling and storage of solder.

Electrolytic refining of metals is not a new concept. Actually, it has been used successfully for a number of years for refining copper and gold. To-day, this same process is used to recover many other precious metals.

Refining tin and lead with an electrolytic process is a scientific approach to making solder that requires none of the witchcraft used with other methods. This type of processing of solder requires Metallic Resources always starts with metals as source materials. This assures them of having the lowest possible contaminates right from the start.

Simply, the electrolytic process causes the impurities to be removed by ion attraction. There are several advantages to removing the impurities in this method. First, the electrolytic process never adds any new contaminants to the tin and lead. Secondly, ion attraction is a non-selective process meaning it removes all the impurities leaving only pure tin and lead. Because Metallic Resources' electrolytic process produces only pure tin and lead, they can control the quality, mixture and consistency from batch to batch to a degree that is hard to imagine.

Lastly, electrolytic process is environmentally friendly. Metallic Resources' facility is considered a "closed-loop" system. This means not only are all the metallics recovered but all residual materials are captured; even the airborne particles.

When you combine this with their computerized quality control and tracking system, you have a basis for a dependable, competitive supplier. But this is only the beginning of the entire story.



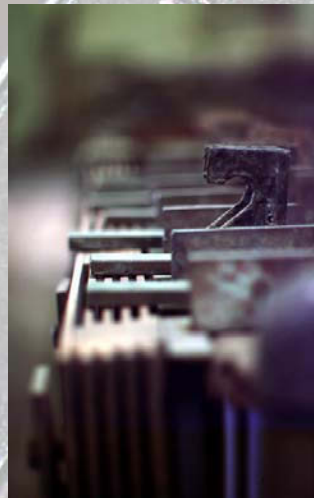
Performance

Metallic Resources' experts practical experience has always been key benefit. They knew no one solder would satisfy every soldering process available. And they understood something even more important — the bottom line. A great solder would always have less waste, produce more joints per pound and be consistent from batch to batch. Or more simply, a great solder needed to make more dependable joints for less cost per joint.

And that's what they've created. Let's look at just one such solder, Metallic Resources' premier Four 9's™. It was designed for Wave and surface mount technology. It performs just as well with all fluxes especially the new less aggressive "No-Clean" fluxes. That's because the Four-9's™ solder has low fluidity and improved wetting characteristics. The Four-9's™ solder is so pure and consistent that it could be eliminated as a factor in SPC program calculations.

Metallic Resources' Four 9's™ solder does sounds pretty good if you're involved in SMT. But remember it is only one of Metallic Resources' line of production solders. Each solder that Metallic Resources offers is specifically designed and field tested to meet a particular assembly process.

Each offers benefits that clearly separate Metallic Resources from the rest. And all of this with a degree of consistency and uniformity between batches of solder that is unparalleled in the industry. We're not talking about improved performance and consistency in a single batch or an average of ten batches but in every batch of solder produced by Metallic Resources.



Panel for Process Diagram

**If it
sounds
to good
to be
true...
that's
O.K.**

Pick up the telephone and call Metallic Resources. They'll send you documented comparison studies that will show you what I'm talking about. Not a study performed in a lab or performed for a day. I'm talking about real comparison testing with brands of solder you know, in production solder equipment you are familiar with, at manufacturers who's names are just a little bit to big to mention here, with cost comparisons after 90 days of continuous soldering. The truth is always the truth and I know you want to know the truth.



Support

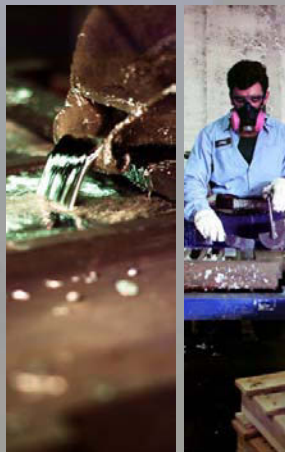
There are companies that will tell you the truth of soldering is "the purer the solder the better it will perform". Metallic Resources thinks that is only half of the truth.

Sure Metallic Resources' solders always provide the performance that you wanted — better wetting, consistent flow & reflow, lower pot temperatures, less drossing, and low viscosity. But that's not enough. You need more. Metallic Resources provides more like a meaningful definition of the word "support".

Metallic Resources' support starts when you pick up the telephone to call them. They have programs structured to support any need you might have. If that means you need a specially formulated solder. That's not a problem, Metallic Resources can do it. What if you need quick delivery? Again no problem, Metallic Resource is there to keep you running at your best no matter what.

Metallic Resources' staff has the experience and knowledge to show you how to extend your pot life and prevent drossing...how to get more joints per pound. Remember, they know a lot more than just solder metallurgy. They know how to get a best solder joint from your process.

JIT programs, special formulations, pot testing, performance evaluations; they're with you one hundred and ten percent. This is just a small part of the normal service and support Metallic Resources' customers get. Take for example their material traceability. Every batch of solder is fully tested, certified and has complete traceability. The certificates are included in every batch you will receive. Just the normal everyday service and support that a supplier of the best solders should and does provide, Metallic Resources. What this all adds up to is one thing — better productivity, higher throughput and less costs — without a headache.



A Final Thought

Company...Performance...Support. These are the key factors a solder manufacturer and their solder must provide; consistently "day-in" and "day-out". That's why you need a company like Metallic Resources, Inc. and a solder like Four 9's™.

Metallic Resources is the leader in developing and producing electrolytic solders. Solders that have the quality and performance to meet your specifications. Solders that offer true performance/cost benefits — a clear mark of excellence.

And with each bar of solder comes a staff of "hands-on" experts and Metallic Resources' support to you and your soldering process. Not just in the home office in Twinsburg, Ohio but in your facility everyday or anyone of their distribution centers throughout the United States. All of this results in a final product that has smoother, brighter and stronger joints with far less solder per connection.

Shouldn't Metallic Resources be working for you today?



Metallic Resources, Inc.

2116 Enterprise Parkway • Twinsburg, Ohio 44087
216/425-3155 • Fax 216/425-2180



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