

Dean's Tips & Tricks SHC800™ Wear Panel Installation

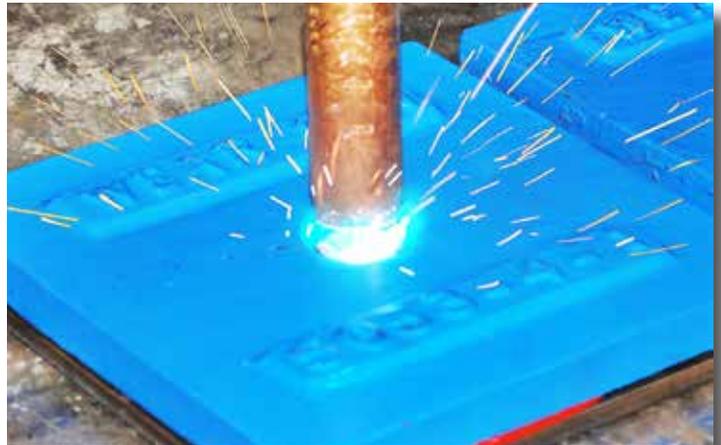
I'm Dean Green, **Wear-Concepts Project Maintenance Manager** and **Field Crew Supervisor**. I've been inside of hundreds of plants and repaired thousands of wear problems in facilities just like yours. Along the way I have developed some great methods for installing a variety of different wear solutions. I'd like to share some of my tips & tricks with you.

When we install **Solid SHC800™ Wear Panels**, we are, in a sense, pulling out the “big guns” in the fight against wear. Every time they are installed either on fabrications in the shop or in the field, I think to myself, “We won't be replacing that any time soon.” And we don't!

SHC800™ Wear Panels can be installed two ways. One method uses plow bolts. The other method is plug welding. Both ways are effective. Which one you use will be determined upon accessibility to the backside of what you are attaching them to and frequency of holes drilled. In some severe applications where plow bolts are used, an upgrade may be needed. Hardfaced and Tungsten capped plow bolts are also available.

When we plug weld the **SHC800™ Wear Panels**, we use a Plug Insert and a 309/310 stainless steel wire rod for dissimilar metal welding. Understand that plug welding isn't really welding the panel to the backing. The welding process fills the tapered hole in the plug insert to hold it in. Care must be taken **NOT** to overheat the **SHC800™ Wear Panel**. If the panel gets overheated, it can crack. We always fill the hole in stages, tacking it in a little at first in order to hold the panel in place; and then we add a little more rod to fill it up. And finally the last bit to cap it off. When capping off the plug weld, a 2865 wire can be used to hardface it. Extreme care must be taken **NOT** to touch the **SHC800™ Wear Panel** at any time! Again, **DO NOT** overheat the **SHC800™ Wear Panel**.

The fit is what you also have to be careful of. Just like when tile is installed, everything should be laid out ahead of time. **SHC800™ Wear Panels** should be installed in a staggered pattern like brick so that seams don't line up. A seam lining up creates a channel,



and channels create patterns for material to flow in. Material flowing in a pattern will cause those places to wear prematurely; whereas, staggering breaks up flow and causes even wear. Careful planning and measurements will pay off in the long run. Make a plan, work the plan, and the plan will work.

SHC800™ Wear Panels are a cast product; therefore, the edges are not perfectly smooth. Though in most situations you won't be looking for an absolute precision fit, inspect every panel's edges for imperfections. Keep in mind that **SHC800™ Wear Panels** can be cut and ground. A plasma torch is the quickest method to trim a panel, but not as clean as an angle grinder. Many times whatever you cut off one end can be used somewhere else. Reusing drops can cut your costs.

Another trick is cushioning. There are those areas that need a little bounce. This can be achieved with one of two methods. One way is to add a little ring of Wear-Con's 100% RTV Silicone on the backside of the **SHC800™ Wear Panel** before you place it. Make sure to use our **Red Hi-Temp 100% RTV Silicone** in your high-temperature situations. Another option is to have us **RubberLine™** the back side of your panels. Presto! Now you've got more bounce for an ounce. This will really extend their life.

Because **SHC800™ Wear Panels** are used in the high-impact zones, there is usually a transition between the panels and some other wear lining. We use a lot of **Triple Bead 90™**, (**TB90™**), **Wear Compound** in those transition areas. **TB90™** conforms and makes transitions very well. Because **TB90™** is an epoxy-based material, it bonds to all surfaces. Time and time again when I have gone back to inspect jobs we have done where **TB90™** was used as a transition, it has always held up!

Sometimes less is more. The smallest size **SHC800™ Wear Panel** is 6" x 6". In many situations, that's all that was needed. One thought out, well-placed small panel in just the right strategic spot can make all the difference between High maintenance and low maintenance. At other times more is more. The use of large amounts of **SHC800™ Wear Panels** can have an initial high cost but massive long-term return on investment residual. Can **SHC800™ Wear Panels** work for you? A better question is, "Where should Wear-Concepts' **SHC800™ Wear Panels** be working for you?"

