

Industry Updates

Great Long-Distance Pumping Meets Greater Long-Term Reliability

If you've recently walked along our southern coastal beaches, you may have a GIW Industries Inc. WBC pump to thank for the extra sand between your toes. These highly versatile pumps are used as dredge pipeline boosters to help replenish beach areas along coastlines destroyed by hurricanes. However, their uses extend far beyond sunny shores with WBC pumps in applications ranging from Florida phosphate mines to Ukraine iron ore mines.



"These pumps have a very good NPSH [net positive suction head] that allow you to pump at higher flows and higher speeds, and it is designed so that the material coming into the pump will not have any restrictions," says GIW Senior Product Manager Ronnie Willis.

For customers engaged in hydrotransport or tailings removal, these qualities make WBC pumps long-lasting, low-maintenance options. And thanks to a few cutting-edge updates, the unique qualities that set these pumps apart have gotten even more extraordinary. Willis explains how these improvements make WBC pumps more user-friendly and economical than ever before.

- **Patented design updates** — Thanks to a few tweaks to the already efficient WBC design, Willis points out that WBCs are well-equipped to handle pressure and material fluctuations.

"It has a patented bolt circle on the front of the pump, and that design, along with the exterior plate designs, helps contain the pressure spikes you might see in the system," he says.

Additionally, engineers added a patented diverter.

"It acts like a dam: When slurry comes in contact with this step, it prevents the larger particles from flowing down into the suction eye," Willis says. "The particles are diverted into the clearing vanes of the impeller and then expelled back into the pump's discharge flow — reducing wear and allowing the pumps to operate longer without maintenance."

- **Unbeatable ease of maintenance** — Unlike competitors' pumps, which require complete disassembly to get to inner workings, WBCs are designed to provide operators with easy access to the wet-end wear parts.

"Some competitors have double-wall pumps with an outer and inner casing, and these pumps are more difficult to work on because you have to split the outer casing to get to the inner one," Willis explains. "With our pumps, there's a plate on the exterior of the casing that you can remove and get right to the components. This ease of maintenance is one of the things that makes the WBC pump unique."

- **Easy access pedestal** — "We've designed a special pedestal that allows you to get to the bearing assembly hold-down bolts easier and makes maintenance a lot faster," Willis says.

This innovative design makes things easier on operators.

"If you're pumping a very aggressive slurry, you could adjust the pump as often as once a month; less aggressive slurries may only require adjustment every six months, and now it's easier to do that," Willis adds.

- **Adjustable suction liner** — Although GIW professionals have been using adjustable suction liners on MDX and LSA pumps for some time, they've started installing adjustable liners on WBC and TBC pumps as well.

"We've come up with a way to adjust the stationary suction liner towards the impeller using special bolts," Willis says. "In low- to normal-pressure applications, this can be done while the pump is running or when it's shut down."

- **Improved hydraulic design** — "To help a customer improve production, we've redesigned the WBC pump he was using and included the diverter technology, resulting in improved efficiency, produced head, and wear," Willis says.

This is especially beneficial for customers running fixed-speed motors.

"If you can get an impeller that puts up more head and uses the same amount of power, you can pump further down the pipeline," he explains.

This provides customers with more volume and greater distance at the same power, making them much more cost-effective.

- **Enhanced material options** — To meet any application challenges, WBCs are available in a variety of materials, including white iron and Gathane, a proprietary GIW urethane material.

"When you have large material that you're pumping, white iron is better for those kinds of sharp materials because it's very durable. But for some of the fine materials that we pump, like tailings, the Gathane-lined casing and suction liner are ideal," says Willis.

And for ultra-aggressive applications that require ultra-long wear life, GIW's impressive specialty materials, Endurasite and Enduraclad, are also options.

These are just a few of the ways GIW professionals are making WBC pumps stand out. As Willis points out, updates like these are commonplace at GIW, where the focus is to continue developing the heartiest, most efficient, and most reliable pumps and pump parts on the planet.

"We're constantly improving wear and efficiency on our pumps, and this was just another example of how we do it," Willis says.



At GIW, we have the experience, capacity, and rock-solid solutions necessary to meet your needs in every respect. If we can assist you in any way, please contact us at 1.888.TECHGIW (832-4449) or [visit us online](#).