

No Challenge Too Steep (or Deep) For Easy Arm

Facing an uphill challenge doesn't make many people sweat at an environmental sewage pump manufacturer in the northeast. In fact, it's what they deal with every day.

As a manufacturer of sewage grinding pumps and septic systems, many residential and light commercial customers seek the aid of these specialty systems when a simple gravity septic system won't work. That's because the pumps they build actually push waste uphill.

At the heart of the grinding pumps is the "pump core", which is then placed into the shell of the septic tank. The pump core weighs just less than 100 pounds, measures 46" tall and has a 17" diameter at its widest point.

When assembly of the grinder pumps is complete, they are moved by conveyor to the final inspection station. At this work cell, an operator moves the core from the conveyor to a water tank where it is fully submerged in water and connected to a diagnostic machine. Full functionality of the core is tested here in about three minutes, after which they are removed from the tank, drained, and either approved for shipment or rejected for failing one of the critical tests.



With the release of a new series of the grinding pumps, the company needed to create an additional inspection station to increase the number of pumps it could inspect in a day. In the existing work cell, a floor supported bridge crane work cell covers the entire work area and features a large manipulator to assist in lifting the pump cores and placing them into the water tanks.

"It wasn't the worst way of doing the job," said the Engineering Technician. "It got the job done, but with the new station we wanted to find a better way and hopefully reduce downtime. We wanted something that wasn't a big structure, which gave us more speed without sacrificing control."

What they found in their search for a better solution was Gorbels Easy Arm®, which exceeded their strict requirements. The



freestanding Easy Arm® is tucked in the corner between work cells, and with a 10-foot articulating arm, the crane easily covers the entire work cell without taking up valuable floor space. The unit also features a remote mount pendant handle, which allows the tanks to be lowered into the water tanks without the risk of splashing the controls.

“We’re very happy with the Easy Arm®,” said the Engineering Technician. “In the two years we’ve been using it, we’re able to consistently test dozens of pump cores per hour, and we’ve had no injuries at all, no complaints of fatigue. With our older work cell, our employees would get very worn out keeping that pace. Now they aren’t complaining of fatigue, and the range of motion is so much better.”

While introducing a new lifting method can often be an uphill battle, employees found the Easy Arm® to be very user friendly, and quickly noticed a difference.

“It works much better than I would’ve thought,” said the work cell operator. “It’s so smooth, and the control I have for placement is much better than what we were using.”

Since installing the Easy Arm®, the new inspection cell has become the primary station, whereas the previous testing station is mostly used for overflow.

“It’s so unobtrusive, and we don’t have the issues of downtime we were having before,” said the Engineering Technician. “I feel like we’ve got so much more flexibility now. It’s been great.”