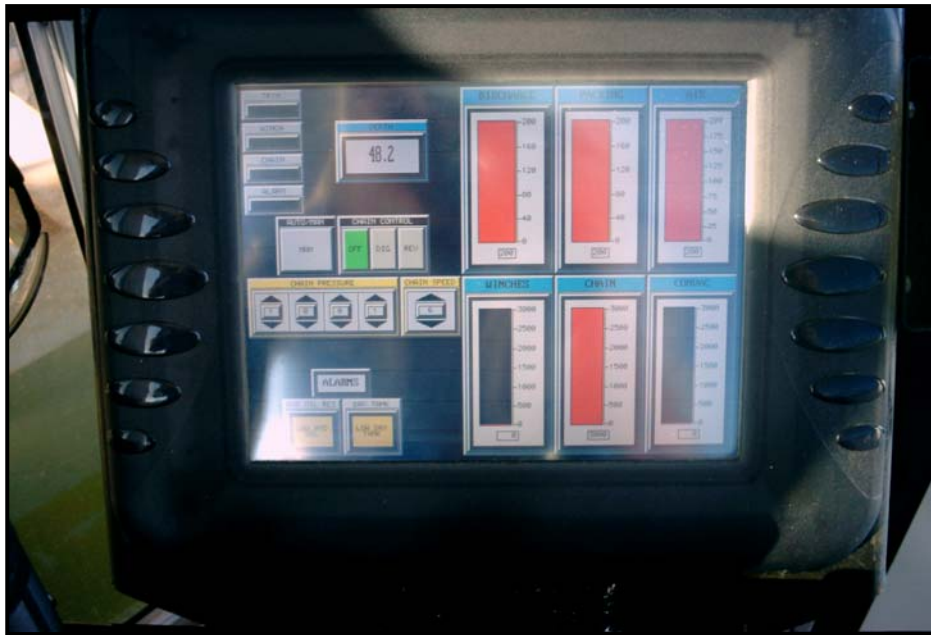


Linear Cutter Automation System

Relentlessly Pursuing Production.



The linear cutter is a very effective and easy to use sand & gravel mining device. The only problem is that the ease of use often makes it a challenge for even the best operator to stay attentive and focused for an entire operating shift. The LCAP is the solution to the problem.

The LCAP maximizes the productive capability of linear cutter dredges by automating the repetitive drudgery of raising and lowering to maintain production. The system automatically and relentlessly works to maintain excess pumpable solids at the suction inlet. The LCAP is an automation system designed to assist, not replace the dredge operator. The LCAP will make any dredge operator better, and help a good operator become great.

The LCAP uses PLC control technology and a touchscreen operator interface. The operator enters the desired operating setpoints, selects Auto mode, and the system automatically operates the hoist winch and cutter as required to obtain and maintain production. A HOWDEEP depth gauge system is incorporated into the LCAP to provide a depth input and display so that the operator can set a maximum digging depth and avoid digging holes. In addition to the automation, the system also includes a full set of manual controls for the hoist winch and cutter.

The LCAP gives the operator the tools to match the digging effort and digging speed to the digging conditions. Controlling these parameters minimizes wear on the cutter and reduces the cost per ton of material produced. If the cutter stalls the system automatically goes through a progression of steps to clear the stalled condition and resume digging.

Starting with the first installation in 2001 and continuing today, the LCAP has proven to be an affordable and practical dredging automation system that really works! The LCAP is available on all new Twinkle dredges and can be retrofitted to existing dredges.

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