Power Curbers Inc., Volume 22, Issue 2

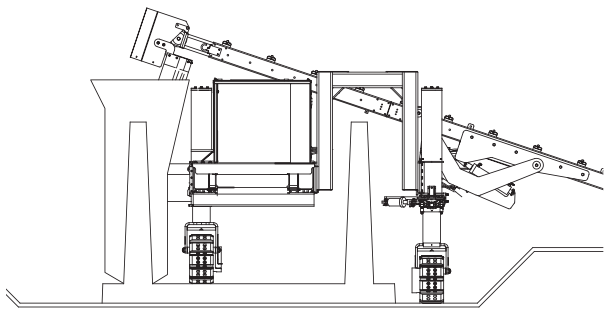
Recipient, E-Award for Excellence in Exports, US Department of Commerce

POWER CURBER PROFILES

Our Commitment Shows

2m Walls in Australia

'Because of Power Curbers, this has been a great project for us.'



Top Left: Brothers John and David Baldwin met the challenge of the massive walls required for the canal with their custom-engineered Power Curber 5700-C-MAX machines.

Left: The sides were not only unusually tall, but the bases were only about half the width of a typical barrier wall. Here you can see how Power Curbers' engineers custom designed the mold, straddle leg, and belt conveyor to fit this unique application.

Above: The 3.8 m (12 ft 5.5 in) base of the canal was poured with a custom paving mold that accommodated the steel reinforcements needed to secure the side walls.

When Australian firm Baldwin Civil NT was approached about constructing a regulating reservoir as part of the new Inpex natural gas project in the Northern Territory, they didn't even know if it was possible to slipform a 2.1 m (6 ft 10 in) high wall.

"Originally, the contractor looked at doing it with one of two processes – form and pour or pre-cast," said founder David Baldwin. "We knew those weren't viable options timewise but couldn't find information on whether you could even slipform a wall of that scale."

So David, along with his brother and business partner John, called Power Curbers for help.

"Power Curbers was the first call we made and we got a very positive and professional response. Within a short time we had the drawings and they said 'we can do it.' We took a trip to North Carolina and purchased the machines," David said.

The canal was built using a three-pass operation: first, the 3.8 m (12 ft 5.5 in) base was poured with a 5700-C-MAX using a custom paving mold that allowed reinforcement anchors to protrude through the concrete for tying in the canal walls. Then, each 2.1 m side wall was poured over steel reinforcements to complete the canal, which will funnel stormwater runoff through 226 outflow pipes and filter it back into Darwin Harbor.

This unique application called for creative engineering and detailed planning. The two 5700-C-MAX machines Baldwin chose were perfect for such a project because of their versatility and the ability to customize the features to suit the job. A custom-engineered straddle leg allowed the machine to fit inside the canal to pour the side walls, and the C-MAX was also heavy enough to handle the massive mold for pouring the base of the canal. A custom-designed belt conveyor was also needed to feed the concrete to the hopper on top of the tall barrier mold.

"Power Curbers, with their team of engineers, came up with the right mold on the first go and we've had great success," said David.

After perfecting the concrete mix, the 21-person crew produced a high-quality product that required little finishing. Their records for a single day's pours were 274 m on the wall and 251 m on the base. In total, they poured over 15,600 linear meters (51,151 ft) of concrete. "For us, the slipform process has been quite successful. Using slipforming has really accelerated the process for us and it's worked out really well," said John.

The Inpex project itself is an undertaking of grand proportions. Natural gas will be collected from the Ichthys Field in the Timor Sea off the northwest coast of Western Australia and transported through a 42" subsea pipeline more than 885 kilometers (550 miles) to the onshore LNG (liquefied natural gas) processing plant at Blaydin Point near the city of Darwin. It will be the longest offshore gas pipeline in the southern region and the fifth longest in the world. The project is expected to produce 8.4 million metric tons of LNG per year.

"It's a huge project with tight time constraints. Because of Power Curbers, this has been a great project for us," John said. We've been very satisfied." PC

The 5700-C-MAX was heavy enough to wield enormous custom molds for smooth pours, but was also compact enough to fit inside the canal to pour the side walls.

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Asphalt contractor takes on concrete work

Albuquerque Asphalt faced a common problem for asphalt contractors – to subcontract or self-perform concrete work. Though they handled dirt work and asphalt in-house, subbing concrete and underground work left them short of the 50% self-performing requirement to bid work as a prime contractor on many jobs. When an experienced concrete crew became available last fall, the decision to bring work in-house became an easy one. Shortly thereafter, another decision – what type of slipform machine to choose – took more work.

Albuquerque Asphalt had worked around one Power Curber competitor and bought asphalt paving equipment from the dealer of another, so the field was wide open. The leadership of Albuquerque Asphalt did their homework, traveling to jobsites in three different states and watching all three brands in action. After seeing the machines pouring, the decision was clear. The Power Curber 5700-C was the fit for their curb and gutter and sidewalk needs.

President Bob Wood and Vice President Jacky Spencer spent weeks researching machines; in the end, the operator-friendly design, compact size, and labor saving features of the 5700-C won them over. "When we saw the size of the machine and the simplicity of steering the front track only, we knew it was what we wanted," explained Spencer.

After taking delivery in February, Albuquerque Asphalt went right to work, pouring over 30,000 linear feet of curb and gutter on three DOT jobs around the city. The results were positive and immediate. "We've been told by two long-time concrete contractors that we're pouring the best looking curb in town" stated Wood. "We've run the numbers and doing it ourselves has helped the bottom line."

By May, Albuquerque Asphalt took on six-foot sidewalk. The project, a widening of State Highway 528 in Bernalillo, NM, enabled the company to utilize crews and equipment from throughout the company. During our visit, the 5700-C poured sidewalk, while only six feet away their asphalt crew simultaneously paved parallel to the sidewalk.

Like the choice to get into concrete work, slipforming the sidewalk wasn't an easy decision. "I thought we should do the sidewalk by hand and save on the mold investment. But when we realized we'd get off the job five days earlier by slipforming it, I changed my mind," reflected Spencer.

In July, an opportunity arose to pour a golf cart path on an area municipal golf course improvement project. With existing sprinkler heads located only 18" from either side of the intended path, the 5700-C squeezed in between, allowing Albuquerque Asphalt to pour the job in center-pour setup. Like the curb and gutter and offset sidewalk jobs, the work went smoothly and productively under the watchful eye of many city officials.

Concrete Superintendent Saul Garcia has become a believer in the Power Curber. "I like the machine. The auger keeps a good mix all the way to the hopper. My operator ran another machine, but loves the 5700-C." His thoughts were echoed by Spencer. "The learning curve was fast. Having a crew that knows what it's doing lets me spend time on other things. I don't have to worry with this crew."

Both the decision to add concrete to the package of services they offer and the decision to do it with a Power Curber have been good ones. The machine's performance and support from the factory have been outstanding. Wood summarized it this way: "They've done everything they said they were going to do and the machine's making us more profitable. We can't ask for more than that." PC

Wayne Irby from Power Curbers' product support team offers guidance and know-how to Albuquerque Asphalt's machine operator as the 5700-C pours a clean, smooth 6' sidewalk.

The widening of a state highway in New Mexico was a prime opportunity for Albuquerque Asphalt to show their skills with slipforming.

POWER CURBERS CELEBRATES 60 YEARS

A message from the president:

1953

Power Curbers is founded in Salisbury, NC. The company's first machine, the 55-A Automatic Extruder, mechanized previously time-consuming manual processes and would revolutionize curb and gutter work.

1970

The Curb King Model 6500 is introduced, holding the patent for the first 4-crawler slipform machine. It was the first machine to pour in the offset position, now an industry standard.

1985

The first machine of the 5700 series, the Power Curber 5700, makes its debut. The 5700 series has become the largest selling slipform paver in the world.

1991

Power Curber machinery is chosen to pave 31 miles (50 km) of railbed and 62 miles (100 km) of sidewalk for the Eurotunnel project 120 feet beneath the floor of the English Channel. Three custom-built 8700 machines slipformed the railbed and both the left- and right-hand sidewalks on the sloped wall of the tunnels from Calais, France, in a record 9 months. The other half of the tunnel, done by hand from Dover, England, took 17 months to complete.

1994

The 5700-B is introduced, featuring an enclosed auger for better mixing capability and increased productivity.

2001

Power Curbers acquires Anvil American, becom the largest sellin manufacturer of stringline guidan systems.

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POWER PAVERS SPOTLIGHT

Location: Odessa, Ukraine

Contractor: MPP SAS

Project: Paving streets in and around an apartment complex.

Specs: 4 m (13 ft) wide x 15 cm (6 in) thick

Paver: Power Paver SF-1700

Future Plans: Roads and seaports near Odessa

When my grandfather started Power Curbers with his partners in 1953, he was committed to an idea and never gave up on it. He fought a patent suit in the late 50s that almost broke him, but he won. There were imitations of his machines on the market, but he whipped all of them. His innovations changed this industry in remarkable ways.

My dad joined the company in 1959 and took the company to the next level. Dad was the man who put the company on the map and he instilled in all of us the values that we hold today. "Our Commitment Shows" because he taught us how to treat customers.

We all talk about how time flies, and let me tell you that my 37 years here have been airborne! At last count, we have machines in 91 countries; contractors all over the world are using our machines to help build the global infrastructure in revolutionary ways. Our growing international dealer network lets us offer our overseas customers the same service and attention to detail that we are known for in the US.

So we salute all of the people who have helped build this company over the past 60 years, and we thank those contractors that trusted us and bought not just machines, but their place in the Power Curbers family. We're ready for the future with some innovative designs (shhh…more on that later…) and continued dedication, value, and service to our customers.

Dyke Messinger
President & CEO

2002

Power Curbers enters the concrete paving business by creating Power Pavers, Inc., based in Cedar Falls, IA. Power Pavers maintains a product line previously built by CMI and produces well-engineered and highly productive machines for paving roads, airports, and canals up to 40' (12 m).

2004

The 5700 Super-B is introduced with 50% more horsepower and faster production.

2007

The 5700-C is announced, featuring the capability to pour on either the left- or right-hand side and Smart-Amp controls, giving the machine operator greater flexibility for adjusting sensitivity.

2007

The Power Curbers corporate headquarters moves to a new manufacturing facility that is geared to customer response. The new facility allows for an intense focus on delivering the utmost value to customers, with manufacturing designed to eliminate waste, drive down lead times and drive up parts delivery.

2009

The 5700-C-MAX package is developed, upgrading the capabilities of the 5700-C to allow for completing larger profile pours, such as variable barrier walls, and adding more flexibility for use in unique applications.

2012

3-D Stringless capabilities are added to the 5700-C, allowing for more flexibility on job sites as well as increased productivity without the need for setting and removing stringline.

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Return Service Requested

UPCOMING TRADE SHOWS

PhilConstruct 2013
November 6-9
SMX Convention Center
Manila, Philippines
Booths Wd01 and Wd11

World of Concrete 2014
January 21-24
Las Vegas Convention Center
Booth C5414

ConExpo 2014
March 4-8
Las Vegas Convention Center
Booth 61140 (South Hall 1)

POWER CURBERS POWER PAVERS PROFILES

Volume 22, Issue 2 — Power Curbers, Inc.

Creative Solutions for Canal Project