UltraSpan Technologies, MB R3T 0M6, Winnipeg, Canada

How a Shotcrete Leader Found Success in Hollow Core



Multicrete Precast Inc is an industry leader in precast production, providing value-added solutions to diverse construction projects across Canada for over 25 years. Staying true to its vision, Multicrete has continuously expanded its product lines and services portfolio to provide comprehensive solutions through its seven branches. The group's notable projects include work on the Library of Parliament in Ottawa, Light Rapid Transit north line in Edmonton and Precast tower footings for more than 3200 km on new power lines in Manitoba.

Overview

At the forefront of countless precast projects, Multicrete was eager to explore the potential of hollow core slabs due to its profitability, versatility, and increasing dominance in the construction industry. Hollow core offered the shotcrete producer an opportunity to move up the value chain and open doors to multiple projects. In 2020, Darren Swire, Director of Multicrete, decided to set up a hollow core plant to penetrate the competitive regional market.

Challenges

Multicrete had to offer high-quality slabs at competitive prices and lead times to gain market share from established producers. Other equally essential challenges included Multicrete's limited hollow core production experience and general labor shortage. As a result, its management team looked for a partner to address these challenges prudently.

Solution

Given the challenges, Multicrete identified UltraSpan's EXT Series Extruder as the perfect solution and promptly acquired it along with ancillary machinery for the complete hollow core plant. In addition, the Extruder's modular design allowed an opportunity to keep the initial costs low by starting production with just one power unit and one cassette and adding more cassettes as more jobs were won.

This Extruder enabled Multicrete to cast high-quality slabs with smooth bottom finishes and no strand slippages.





Multicrete Precast Inc is an industry leader in precast production, providing value-added solutions to diverse construction projects across Canada for over 25 years.

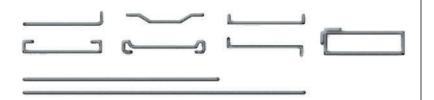
CPI – Concrete Plant International – 4 | 2022 www.cpi-worldwide.com

PROGRESS GROUP



Straightening, cutting and bending





- Flexible
- Efficient
- Low maintenance

The MSR 20 line with its sophisticated rotor straightening system enables numerous types of automation.

It offers customized solutions for the processing of large wire diameters off coil and guarantees a quick wire diameter changeover.

PRECAST CONCRETE ELEMENTS





Given the challenges, Multicrete identified UltraSpan's EXT Series Extruder as the perfect solution and promptly acquired it along with ancillary machinery for the complete hollow core plant.

The Extruder's minimal maintenance costs and use of up to 23% less cement than usually helped the hollow core producer overachieve on prices as well as quality.

The Extruder auto-mode, moisture control system, and lack of on-the-fly adjustments further reduced operational expenses by eliminating the need for labor during the casting process. Its simple design and online operator optimizer helped Multicrete focus on other labor-intensive operations in the plant. Fewer moving parts in the Extruder and the quick service and parts delivery ensured Multicrete had more uptime to meet their customers' lead-time requirements. Multicrete earned

even more lead-time advantage with the Extruder's quick-change cassette system and patented casting mechanism that produced minimal waste.

Outcome

With the exciting expansion into hollow core with the UltraSpan Extruder system, Multicrete won several hollow core projects and quickly gained a strong foothold in the market. The Extruder offered a quick payback and allowed Multicrete to expand its hollow core portfolio with different slab widths.



"We've been very successful to date with hollow core, we've had numerous compliments on the quality and finish. It's very reassuring to know that, as we produce, we are sending out quality material and our customers are very happy", Darren remarked.



PROGRESS GROUP sponsored the free download possibility of the pdf of this article for all readers of CPI. Please check the website www.cpi-worldwide.com/channels.progress-group or scan the QR code with your smartphone to get direct access to this website.



FURTHER INFORMATION

PROGRESS GROUP ULTRASPAN TECHNOLOGIES

UltraSpan Technologies 165 Fennell Street MB R3T 0M6, Winnipeg, Canada T+1 204 9923200 info@ultraspan.ca www.ultraspan.ca www.progress.group

CPI – Concrete Plant International – 4 | 2022 www.cpi-worldwide.com