

BLUE LAKE MILLING ROLLS OUT PLC LOGIC WITH INSTANT SUCCESS

Introduction

When it comes to your everyday oats, to the naked eye they look like quite a simple product. But when you delve into it further, there is definitely a fine art in producing and distributing this staple Australian product from paddock to plate (or bowl in this case), and Australian manufacturer Blue Lake Milling are at the top of the game.

Established in 1973, Blue Lake Milling (BLM), based in the cereal-growing region of Bordertown, South Australia, is a leading manufacturer of premium Australian Oat and Grain products, specialising in oat milling production of flagship lines that include Rolled, Quick and Instant Oats. Utilising traditional and innovative milling techniques, Blue Lake Milling also innovates, manufactures, packages and distributes an extensive range of niche cereal flakes, bran, flours and premixes.

"We employ 120 people over two sites, one in Bordertown and one in Dimboola, with ever increasing tonnages of finished product," says Jeremy Neale, Site Electrician at BLM. That output has grown over the years as the business has expanded due to being able to acquire surrounding land to expand their operations, meaning a new and improved warehouse, packing room and hulling facilities.

Project Overview

"The electrical component of that expansion has been a massive task. We have essentially changed from relay logic to PLC logic, which has been really good for the company," continued Neale.

It wasn't until five years ago, when Visy Automation was contracted to build and install BLM's new packing room, that the world of possibilities that PLC Logic provides really opened up to them.

"Once we completed the packing room, we could see a lot of benefits from the PLCs," says Neale.

"The company could immediately see the data and information that we could get back, and they could use that to calculate their yields. The amount of information they got back was huge, so they just wanted more of the same."

"We were really pleased with the Allen-Bradley® product Visy Automation used, it was easy to understand, easy to setup and everything just worked really well. We decided then and there to move on to that with everything else we have continued to do so as to standardise across the operation," Neale continued.

"We started with the hulling room where we removed a relay logic switchboard and replaced it with a switchboard containing an Allen-Bradley®

Compact Logix PLC from Rockwell Automation and saw a massive benefit straight away, with all the data coming back. Our yields increased and we could track and log it daily.

We then said let's look at the same thing in the roller mills where we are always looking at improving efficiencies. With the PLC Logic we were able to log critical data and alarms in a lot better way for the operation of the mills to catch a problem before it happens.

We started this project 12 months ago and it has been such a great success. We got it done in time and we got it done on budget," says Neale.

The Allen-Bradley® PowerFlex 525 was a steep change for BLM as they had never networked drives before and it was something that they weren't really looking at for the obvious problem of people coming in and changing parts and not being able to program up the drive. With the device replacement technology, where the device is saved in the PLC, they were able to make that change. The safety component of the set-up was another bonus, ensuring standard safety across the operation.

With the change in equipment occurring across the plant, training of BLM staff was critical to the success of the new installation. "One of the great things that NHP offers us is local training. Being five hours from Melbourne and three hours from Adelaide, it is a long way to go for a day or two of training. Recently one of my colleagues went to Mt. Gambier to undertake some training on RS Logix 5000, which makes it much easier," says Neale.

The Solution

"Our relationship with NHP is great, our local rep in Michael Millhouse is fantastic in calling in on us, and having local people and local stock provides peace of mind for any issues we may encounter. Oats are a low margin product so we need to sell large quantities – installing the Allen-Bradley® product means that our system won't let us down, it's very good quality and rarely if ever breaks down, which can be a costly experience. But we have the back-up support if and when we need it," says Neale.

The future at Blue Lake Milling looks bright, with some large projects planned out for the year ahead, which is exciting for the company, exciting for the people who work there and exciting for the town. So what can we do to help support this local Australian company? By enjoying a healthy bowl of oats for breakfast of course!

"Oats are a healthy product, good for you, lower your cholesterol, and are easy to cook, everybody loves oats," laughs Neale. We couldn't agree more.

Project Fact File

Project: Blue Lake Milling

Location: Bordertown, South Australia

Details: Due to a recent site expansion, a build of a packing room was required where PLC logic needed to be installed.

NHP Products/Services:

- Allen-Bradley PowerFlex 525
- Allen-Bradley Compact Logix PLC
- Local training of plant staff

