



Cattle Feed Paddock Irrigation System

Customer: Arabon Seafoods

Location: Bowen, QLD

Case Study ID: CS-14

Date: June 2016

Overview

Arabon Seafoods is a Queensland small business specialising in the sale and export of locally-sourced live, chilled and frozen seafood. Arabon Seafoods contacted Dowdens Mackay in mid-2015 and requested a site visit and quote.

Within a week, the Dowdens Ag Team took measurements and discussed options with the business owners. A system was designed to suit the area and application, and the quote was delivered. Arabon Seafoods was happy with the design and pricing and instructed Dowdens they would budget for this system in 2016.

Fast forward to mid-2016, working closely with the business owners, Dowdens had successfully refined the quote and sourced all materials to be supplied. The purchase order arrived with Dowdens in late May 2016 - the irrigator was delivered to the site on Friday 24th of June.

Head Office

9-15 Industrial St
Mackay QLD 4740
Ph: +61 7 4969 4949
Email: info@dowdens.com.au

Brisbane Office

24/140 Wecker Road
Mansfield QLD 4122
Ph: +61 7 3828 7000
Email: brisbane@dowdens.com.au

Rockhampton Office

4/415 Yaamba Road
Park Avenue QLD 4701
Ph: +61 7 4923 6969
Email: info@dowdens.com.au

Proserpine Office

2 Mann St
Proserpine QLD 4800
Ph: +61 7 4969 4940
Email: info@dowdens.com.au

The Problem

Arabon Seafoods required a broad acre irrigation system to water their cattle feed pasture located in Bowen, QLD. The system had to be simple to operate, water-efficient and cost-effective to run.



Our Solution

Dowdens designed an efficient energy and water use irrigation system for Arabon Seafoods that utilises a Valley Two-Wheel-Linear Irrigator - the ideal irrigator for smallholder growers with limited access to electricity - together with a Nelson Spinner Sprinkler Package, Nelson 110VAC Shut-Off Valve, Valley Autopilot GPS Ready Control Panel and a Yanmar 10kVa 3-Phase Diesel Generator Set.

The Valley Two-Wheel-Linear Irrigator is a reasonably standard machine in its configuration, but its application to Arabon's cattle feed pasture is a departure from local practice. Most irrigation in this region is typically provided by low-pressure boom-type irrigators that are far less efficient regarding energy and water consumption when compared to the Valley machine.

The system is required to pump water directly from onsite bores to the Valley Two-Wheel-Linear Irrigator watering 3.5 ha of cattle feed pasture. The irrigator's purpose is to provide water to a 'bailable' hay crop which is periodically onsold to local graziers as stock feed. The installation of a Valley linear irrigator has dramatically reduced the number of irrigation runs that Arabon Seafoods has previously undertaken with their smaller boom-type irrigator to water the same crop area.

Valley Two-Wheel-Linear delivers the ability to easily tow or swing the machine around to cover more acres. Valley's easy to operate 'Autopilot GPS Ready Control Panel', enabled other Arabon Seafoods personnel to operate the irrigator more easily. This had always proved difficult in the past, using a more dated irrigator. The GPS Ready Valley Autopilot Control Panel allows linears to perform functions similar to a centre pivot automatically. The AutoPilot Linear measures the lateral position and direction of travel of the linear, allowing operations to be easily programmed to run automatically.

Head Office

9-15 Industrial St
Mackay QLD 4740
Ph: +61 7 4969 4949
Email: info@dowdens.com.au

Brisbane Office

24/140 Wecker Road
Mansfield QLD 4122
Ph: +61 7 3828 7000
Email: brisbane@dowdens.com.au

Rockhampton Office

4/415 Yaamba Road
Park Avenue QLD 4701
Ph: +61 7 4923 6969
Email: info@dowdens.com.au

Proserpine Office

2 Mann St
Proserpine QLD 4800
Ph: +61 7 4969 4940
Email: info@dowdens.com.au

Dowdens Pumping & Water Treatment Mackay are the sole Valley Irrigation Master Dealers for the Mackay / Whitsunday region enabling the best possible pricing and unmatched product support for all of our customers. The entire project was overseen and managed by the Dowdens Pumping & Water Treatment Mackay Agricultural Sales Team.

Key Components

- Valley Two-Wheel-Linear 'hose-drag' Irrigator with a 2.74m Overhang & 2 x 43.37m Lateral Spans
- Valley Autopilot GPS Ready Control Panel
- Nelson Spinner Sprinkler Package
- Nelson 110 VAC Shut-Off Valve
- Yanmar 10kVa 3-Phase Diesel Generator Set
- 220m of 3½" Crusader Irrigator Hose

Project Design Philosophy

Dowdens Pumping & Water Treatment's design philosophy for this project was:

- Cost-Effectiveness
- Current Best Practice
- Ease of Installation
- Simple & Effective System Operation
- System Reliability & Delivering Reduced Ongoing Maintenance Requirements.



Brands used in this project



Head Office

9-15 Industrial St
Mackay QLD 4740
Ph: +61 7 4969 4949
Email: info@dowdens.com.au

Brisbane Office

24/140 Wecker Road
Mansfield QLD 4122
Ph: +61 7 3828 7000
Email: brisbane@dowdens.com.au

Rockhampton Office

4/415 Yaamba Road
Park Avenue QLD 4701
Ph: +61 7 4923 6969
Email: info@dowdens.com.au

Proserpine Office

2 Mann St
Proserpine QLD 4800
Ph: +61 7 4969 4940
Email: info@dowdens.com.au