# Martin Lishman

# PRODUCT OVERVIEW













# **Pile-Dry Pedestals & Fans**

The fastest low volume cooling and drying system for all bulk stored crops in all storage situations



### P2 Pile-Dry Pedestal

For grain stored at c.3m (10') with surcharging up to c.4.5m. Includes base stand and end cap. Spaced at 6m (20') centres. Basic height 10' (3m).

Standard Pedestal Extensions - each extension requires a connector
P2 3' (0.9m) Extension
P26' (1.8m) Extension
P26T
P2 Connector 8" (200mm) long
P2C

#### P3 Pile-Dry Pedestal

For grain stored at c.4.5m (15') and up to 12m deep. Includes base stand and end cap. Spaced at 10m (30') centres. Basic height 16' (4.8m).

Standard Pedestal Extensions - each extension requires a connector
P3 3' (0.9m) Extension
P3 6' (1.8m) Extension
P3 Granector 16" (400mm) long
P3C

#### P4 Pile-Dry Pedestal

For grain stored more than 7m deep in fast-fill stores. Basic height 7m, including all extensions and connectors, end cap and base stand. Spaced at 10m (30') centres.

Standard Pedestal Extensions - each extension requires a connector
P4 3' (0.9m) Extension
P46' (1.8m) Extension
P46 Connector 16" (400mm) long
P4C

Versions for bins and silos available. Please enquire.



#### P3 FloorVent Pedestal

An alternative to under-floor ducts in deep stores, hopper-bottomed bins & silos. Includes perforated pipe, conical end cap, floor mounting plate and marker pole

P3/FV



#### **Pedestal Rape Sleeves**

Ready-made shaped hessian sleeves for use with Pile-Dry Pedestals when cooling rape, linseed & other small seeds.

For P2 Pedestal P2HESSIAN
For P3 Pedestal P3HESSIAN
For P4 Pedestal P4HESSIAN



### Pile-Dry Fans - aluminium body with carry handles

#### For P2 Pedestals

1.1kW, 1.5 HP, max air flow 1400cfm (2380m3/h), max pressure 61/2 wg (1550PA)

Single Phase F2/1/B
Three Phase F2/3/B

#### For P3 Pedestals

1.5kW, 2 HP, max air flow 1875cfm (3190m³/h), max pressure 6¾"wg (1670PA)

ressure 6¾"wg (1670PA)
Single Phase F3/1/B

2.2kW, 3 HP, max air flow 2225cfm (3780m³/h), max pressure 7½"wg (1870PA)

Three Phase F3/3/B

F2/BLOWPLATE

 $\underline{\textit{Manual Fan Starters}} - \textit{must be used with all Pile-Dry Fans unless controlled} \\ \textit{automatically. Please enquire.}$ 



### Fan Adapters

**Larger Fan Adapter** - larger fans can be used with an adapter to increase the cooling and drying speeds of Hot Spot Spears and Pedestals

- to fit F2 Fan to Hot Spot Spear - to fit F3 Fan to Hot Spot Spear - to fit F3 Fan to P2 Pedestal Ped86Adapter



#### Blowing Adapter - If Pile-Dry Fans are required to blow

- to fit F2 fans Blowing adapter plate

- to fit F3/3/B fans Blowing adapter plate F3/BLOWPLATE

# **Trouble-Dry Spears & Fans**

A choice of aeration spears and fans to deal with all hot spot problems, provide fast cooling of grain and spot drying



Trouble-Dry Standard - for up to 15 tons in one area. Includes 2.3m (7'6") aeration spear, handle and 130W fan

> TDS with Grain Spear **TDSR** with Rape Spear

Trouble-Dry Extra - for up to 35 tons in one area.

Includes 2.3m (7'6") aeration spear, handle and higher capacity 130W fan

with Grain Spear **TDEB** with Rape Spear **TDERB** 



Trouble-Dry Ultra - for spot drying and extra-fast cooling.

Includes 2.3m (7'6") aeration spear, handle, fan adapter and 1.1kW fan

TDU/1 1ph with Grain Spear TDUR/1 with Rape Spear TDU/3 with Grain Spear 3ph with Rape Spear TDUR/3

#### Trouble-Dry components:

Trouble-Dry Standard Fan - 130W, 275cfm (470m³/h), 1¾"wg (436PA), 2m cable FTDS Trouble-Dry Extra Fan - 130W, 400cfm (680m³/h), 2"wg (500PA), 2m cable, 13A plug FTDEB Trouble-Dry Ultra Fan - 1.1kW, 1.5 HP, 1400cfm (2380m3/h), 61/4"wg (1550PA) 1ph F2/1/B F2/3/B 3ph Trouble-Dry Grain spear - 7'6" (2.3m) grain hot spot aeration spear TDG TDR Trouble-Dry Rape spear - as above, but with smaller perforations for rape ventilation Trouble-Dry spear handle - strong, extra long handle with single bolt clamp TDH

# **Temperature Monitoring Packages**

### Portable Monitoring Packages

MiniTemp hand held digital temperature monitor with fast response stainless steel sensor





MiniTemp monitor with - 600mm sensor, for bales

- 1.5m sensor, for grain CQ/MTM/PS15

- 2m sensor, for grain

CQ/MTM/PS600 CQ/MTM/PS2

### Static Monitoring Packages

MiniTemp Blue Bluetooth crop temperature monitor and logger with iOS/Android App and rigid pvc crop temperature sensor





### MiniTemp Blue with:

- 2m rigid pvc sensor, for grain CQ/MTM10BLUE/2M - 3m rigid pvc sensor, for grain CQ/MTM10BLUE/3M MiniTemp Blue Waterproof for compost with:

CQ/MTM10BLUE/CP - 2m rigid stainless steel sensor

### Store Monitoring Packages

Suitable for use with MiniTemp monitor and Temperature Differential Controller. Includes multi-sensor selector, up to 12 rigid pvc sensors with extension cables or flexible cable sensors.

### in bulk crop stores





Crop Store Packages with multi-sensor selector and:

- 6 x 2m rigid pvc temperature sensors,

CQ/MULTIPACK/6 3 x 20m & 3 x 30m extension cables

12 x 2m rigid pvc temperature sensors, 4x 20m,

4 x 30m & 4 x 40m extension cables CQ/MULTIPACK/12

### in potato box stores



Potato Store Monitoring Packages with multi-sensor selector and:

- 3 x 20m & 3 x 30m flexible cable sensors CO/MULTIPACK/FLEX6

- 4 x 20m, 4 x 30m & 4 x 40m flexible cable sensors CQ/MULTIPACK/FLEX12

All components of monitoring packages are available separately - please ask for details

# **Automatic Fan Control**

Temperature Differential Fan Control - fast, energy-efficient crop cooling.

Includes ambient & crop temperature displays, frost setting, manual/autoswitch, 2m rigid crop temperature sensor with 20m extension cable, air temperature sensor with 10m extension cable.



<u>Static controller</u> - to control any quantity of fans. Add automatic fan starters (see below)

FC049/A



<u>Portable controller</u> - to control up to four single or five 3 phase fans. Includes built in starters and timers, fan power plugs and sockets. Please specify fan quantity, current rating and phase

FCBM...

Temperature Differential Control with Crop Temperature Monitoring Create a simple logging system by adding up to 12 crop temperature sensors and a multi-sensor switch. See components listed on page 3.

<u>Thermo-Humidistat Fan Control</u> - simple control of crop drying and cooling. With adjustable temperature & humidity settings, temperature & RH sensors



<u>Static controller</u> - to control any quantity of fans. Add automatic fan starters (see below)

FC003



<u>Portable controller</u> - to control up to four single or five 3 phase fans. Includes built in starters and timers, fan power plugs and sockets.

Please specify fan quantity, current rating and phase FCBM/TH...

#### Barn Owl Stand-Alone Temperature & Humidity Fan Control

- comprehensive control of crop drying and cooling. With 8 drying & cooling programmes, ambient RH & temperature sensor with 10m extension cable, one or two 2m crop temperature sensors with 20m extension cables



<u>Static controller</u> - to control any quantity of fans. Add automatic fan starters (see below)

Single control channel
Dual control channel

BARNOWLCONTSAD



<u>Portable controller</u> - to control up to four single or five 3 phase fans. Includes built in starters and timers, fan power plugs and sockets. Please specify fan quantity, current rating and phase

Single control channel
Dual control channel

FCBM/BO...
FCBM/BOD...

### **Static Controller Automatic Fan Starters**

Each fan connected to Static Automatic Fan Controllers requires an automatic starter with overload protection. Multiple fan starters are also fitted with a time delay. Does not include phase drop protection. Please specify fan current rating & voltage or phase.

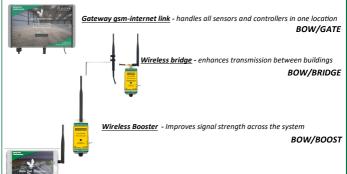
For first fan With timer for additional fans

FCSA/... eg. FCSA/1/6.3-10A FCSA/T/... eg. FCSA/T/1/6.3-10A

# Barn Owl Wireless

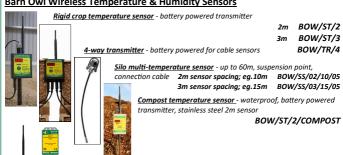
Crop temperature monitoring, automatic fan control, data storage and management

Barn Owl Wireless Hub Units - with 240v power supply



<u>Silo Sensor Transmitter</u> - Multiple transmission unit for silo sensors **BOW/MSU** 

### **Barn Owl Wireless Temperature & Humidity Sensors**



Wireless CO2 sensor - as above with CO2 sensor BOW/CO2 Barn Owl Wireless Automatic Fan Control - independent control of drying and cooling.

Wireless ambient temperature & humidity sensor - waterproof transmitter with 240v



power supply and detachable sensor with 3m cable

Portable controller - to control up to four single or five 3 phase fans. Includes built in starters, fan power plugs and sockets. Please specify fan quantity, current rating and phase BOW/BM/...

For each fan controlled BOW/SA/... eq. BOW/SA/1/6.3-10A

StoreVent Extractor Fan Control - these fans can be controlled by:

- the Single or multiple static fan controller and automatic starter - an output on a portable controller
- a switched output on a portable controller and a remote automatic starter (see Page 6 for more details of the StoreVent system)

BOW/ST/ATH/A

# **StoreVent**

Crop store air extraction system to maximise the efficiency of crop cooling and drying systems

<u>Belt-Drive Fan Units</u> - substantial airflow and low energy use; galvanised steel housing, stainless steel impeller, fitted with bird mesh and integral backdraught shutter.



Airflow (m³/s)	Pressure (Pa)	Watts	Height/width (mm)		
4.6	60	750	960	1ph	SV800/1BELT
				3ph	SV800/3BELT
7.1	100	750	1150	1ph	SV1000/1BELT
				3ph	SV1000/3BELT
12.1	100	1500	1380	1ph	SV1250/1BELT
				3ph	SV1250/3BELT

Air intake Louvres - Class B (95-99% rain protection), aluminium construction, 30mm flanged frame, integral drip cill, bird-proof mesh



Size - w x h (mm)	
1000 x 1000	SV1000
1100 x 1100	SV1100
1200 x 1200	SV1200
1250 x 1250	SV1250
1500 x 1500	SV1500

# **StockVent**

Stock building ventilation equipment to improve air quality, combat heat stress and enhance productivity

<u>Belt-Drive Fan Units</u> - as StoreVent above, but without weather shutter and with suspension or floor mounting options.



Airflow (m³/s)	Pressure (Pa)	Watts	Height/Width (mm)		
4.6	60	750	960	1ph	SVK800/1
				3ph	SVK800/3
7.1	100	750	1150	1ph	SVK1000/1
				3ph	SVK1000/3
12.1	100	1500	1380	1ph	SVK1250/1
				3ph	SVK1250/3

 $\underline{\textit{Manual Speed Controller}} \text{-} \textit{Inverter Speed Controller for StockVent belt-drive fan. Ask for details.}$ 

SVK/SC

<u>Turbulator Fans</u> - lightweight, low-cost, 1ph fans, for year-round ventilation and air movement to reduce condensation and improve air quality



Airflow (m³/s)	Air throw (m)	Watts	Width (mm)	
1.70	40-45	280	460	SVKT450
1.37	40-45	90	510	SVKT500
2.86	45-50	280	660	SVKT630

Ventilation Sock System - fan, polythene duct/sock, gateway kit, air straightener and cowl



450mm x 24m SVKSV450/S 630mm x 34m SVKSV630/S 710mm x 34m SVKSV710/S

Free-Standing/Wall Fans - milking parlours

Typhoon Floor Fans - air circulation



1.83 130 SVKWALL
3.83 170 SVKFLOOR



Airflow (m³/s) Watts 1.83 180 *SVKTY450* 

# **Moisture Meters**

**Protimeter Grainmaster** - with the complete service package and Grainmaster i2 App



#### Protimeter Grainmaster i2-S

GRN3000i2-S

Includes grinder-compressor, hard carry case, spares package, free first year service voucher and Grainmaster i2 App for iOS and Android to download and record moisture and temperature readings

## **Protimeter Grainmaster Optional Sensing Probes**



Grain temperature (1.5m) GRN6046 GRN6138 Bale moisture (600mm) GRN6155 Bale temperature (600mm)

### **Protimeter Balemaster** - to measure straw and hay bale moisture



#### Protimeter Balemaster

- with 600mm bale moisture probe

Optional Balemaster Temperature Probes

GRN6165

GRN6154

- 600mm

GRN6153 - 1.5m

Agrolog Wireless Moisture & Temperature Probe - remote grain measurement



- with 2m portable sensor and data monitoring App GRN6200



Wood moisture meter & 600mm probe

GRN6156

Field Check - budget priced moisture meters





Field Check - whole grain meter Field Check PLUS - ground grain meter

CQ/FIELD CQ/FIELDPLUS

# **Crop Quality & Testing**

Grain Sampling - for lorry or crop store





Single Head Spear - 2.6m long, 2-piece, 50g sample Solid Core Spear - 2m long, 290g sample, 8 holes Stretch Core Spear - 2m long, 480g sample, 8 holes CQ/SHS CQ/SCS CQ/SCSSP

## **Ambient temperature & Relative Humidity measurement**









CQ/HYGJUMBO CQ/HYGWALL CQ/HYGDIG CQ/HYGTUNNEL

CQ/CLIMATRACK

Jumbo thermo-hygrometer - for static use Panel thermo-hygrometer - for static use Portable thermo-hygrometer - hand-held

**Tunnel thermo-hygrometer** - remote sensor

ClimaTrack - Bluetooth ambient temperature and RH monitor and data logger with iOS/Android App



# Insect Monitoring - for empty stores or stored grain





**Insect floor trap** (empty stores) - box of 5 **Insect pitfall trap** (stored grain) - box of 10

CQ/TRAP/FLOOR CQ/TRAP/PIT

### **Crop Measurement** - hectolitre weight of grain



Hectolitre measure - with scales, funnel & 1 litre cylinder

CQ/HTLR

### **Crop Protection** - advanced bird scaring



#### Scarecrow B.I.R.D. System

- 10 bird pest distress calls, fully IP rated, low energy consumption, unobtrusive **BIRDSYSTEM** 

# <u>Digital Weigh Scales</u> - compact, lightweight, budget priced, general purpose hanging scales



- 10Kg max, 10g increments, Accuracy +/-0.5%
- 15Kg max, 20g increments, Accuracy +/-0.5%
- 50Kg max, 50g increments, Accuracy +/-0.5%

CQ/SCALE/10K10 CQ/SCALE/15K20 CQ/SCALE/50K50

The above are the most popular models. We can supply from a huge range to suit your requirements. Please contact us for more information.

# **Potato Quality**

TuberLog Electronic Potato - identifies sources of damage and bruising in all types of potato handling machinery



### TuberLog PTR400

- Data Logger, PC Software + Android App



POT/PTR400

TuberLog PTR500

- as above plus Android 7" Tablet

POT/PTR500

Potato Harvester Mister - reduces bruising in dry conditions. Delivers a mist of water onto notatoes and harvester webs and rollers



Harvester Mister 250 - 250 litre tank, mounting frame, 12 volt pump, pressure regulator, agitation, in-cab switchbox, 1m boom, misting nozzles SP/HM002

Potato Hot Box - overnight assessment of potato bruising. Includes uPVC casing, sample trays, heater, fan, humidity generator



POT/HB/125 Hotbox 125 - 125 tuber capacity, 5 trays Hotbox 250 - 250 tuber capacity, 10 trays POT/HB/250 POT/HB/750 Hotbox 750 - 750 tuber capacity, 30 trays, wheels (110v versions also available)

Potato Dry Matter - field, traditional and digital testing equipment



Field Kit - scale, corer, calibration chart POT/DMK Salad Potato Field Kit - as above, with salad corer & chart POT/DMKS

Zeal Potato Hydrometer - traditional system, with wire basket

Standard D4500 - 17-25% dry matter Specialist - D4501 - 14-23% dry matter

POT/HYDROMETER POT/HYDROMETER4501 POT/HYDROMETER4502



Weltech Digital Hydrometer (PW4) - instant results of % dry matter, % starch, underwater weight and specific gravity POT/HYDPW4

Includes wire hasket & chain

- **D4502** - 18-27% dry matter

Potato Sugar Testing - potato glucose self-testing kit



Glucolis Blue Sugar Kit - including potato juice extractor POT/GLUCOLISBLUE

Potato Testing - quality assessment equipment



POT/SQUARESS

plus 42mm

Chip Colour Chart POT/CHIPCHART

POT/FRYER

Chip Cutter Set POT/CHIPCUT

Potato Temperature Spikes - for individual tuber temperatures



T-Bar spike sensor - 13cm long, data-hold

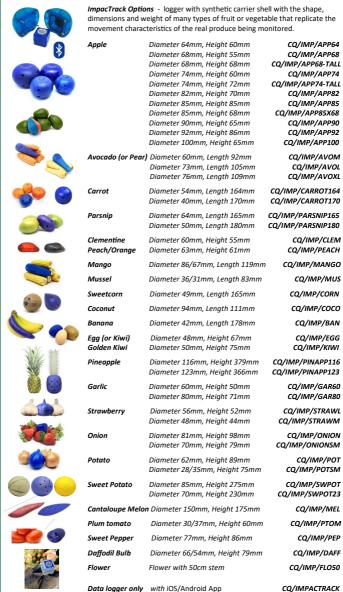
- accuracy +/-1°C

POT/TBARTHERMO POT/TBARHIGH - accuracy +/-0.3°C

See Page 3 for details of bulk and box store temperature monitoring packages

# **Impact Sensing**

ImpacTrack - real-time monitoring and logging of damage and temperature during handling and transport of fresh produce, with Bluetooth transmitter and iOS/Android App



<u>BeetLog Electronic Sugar Beet</u> - identifies sources of damage and bruising in all types of sugar beet handling machinery



BeetLog PTR600

- Data Logger, PC Software + Android App

BeetLog PTR700 POT/PTR700

POT/PTR600

www.martinlishman.com

- as above plus Android 7" Tablet

# **Compact Sprayers**

### ATV MOUNTED

Mini-Spray - 70 litre tank, 12 volt pump



- hand lance only

- hand lance & 1m boom

SP/BASIC SP/MS/001 SP/MS/006

SP/MS/009

- hand lance, 2m boom, pressure regulator, switchbox - as above with 2.5m height adjustable boom

TRAILED

Mini-Spray - 70 or 125 litre tank, 12 volt pump, hand lance



- with 2.5m height adjustable boom - with 3.5m height adjustable boom SP/MST/70 or 125/009 SP/MST/125/009/35

Midi-Spray - 250 litre tank, pressure regulator, 4m boom, manual/electric control



- standard specification with 12 volt pump SP/MDT/250/12V/ME - as above with engine drive SP/MDT/250/ME

Options: hose reel & lance, bout marker, 6m or 8m boom, electric control PRO specification - engine drive, 9m hose reel, electric control

SP/MDT/250/P/FE

DEMOUNT

Mini-Spray - 125 litre tank, 12 volt pump, hand lance



- with 2.5m height adjustable boom

Options: bout marker, 6m or 8m boom

- with 3.5m height adjustable boom Options: 9m hose reel, bout market

SP/MSD/125/009 SP/MSD/125/009/35

Midi-Spray - 250 or 350 litre tank, pressure regulator, 4m boom, manual/electric control



- standard specification with 12v pump SP/MDD/250 OR 350/12V/ME SP/MDD/250 OR 350/ME - as above with engine drive Options: bout marker, 6m boom, electric control, induction hopper, legs

Options: 9m hose reel, 6m, 8m boom SP/MDD/250 OR SP/MDD/350/P/FE

- PRO specification - engine drive, induction hopper, electric control

TRACTOR MOUNTED

Mini-Spray - 70 litre tank, 12 volt pump, 3-point linkage



SP/MSM070/001 - hand lance & 1m boom - hand lance, 2.5m height adjustable boom, SP/MSM070/009 pressure regulator, switchbox Options: 2m boom, hose reel, bout marker

Mini-Spray - 125 litre tank, 12 volt pump, 3-point linkage, hand lance

- hand lance, 2.5m height adjustable boom,



- hand lance & 1m hoom

SP/MSM125/001 SP/MSM125/009

pressure regulator, switchbox Options: 2m boom, hose reel, bout marker - as above with 3.5m height adjustable boom SP/MSM125/009/35

Midi-Spray - standard specification, PTO drive, pressure regulator, 4m boom, manual/electric control



- 200 litre tank - 300 litre tank SP/MDM/200/ME SP/MDM/300/ME

Options: hand lance, 9m hose reel, bout marker, 6m boom, electric controls, induction honner

Midi-Spray - PRO specification, as above with electric control, 9m hose reel, induction hopper



- 400 litre tank - 500 litre tank

- 600 litre tank Options: bout marker, 6m or 8m boom

SP/MDM/400/P/FE SP/MDM/500/P/FE SP/MDM/600/P/FE

**PEDESTRIAN** 

Nano-Spray - 36 litre tank, 24 volt pump, self-propelled, variable speed, lithium battery pack with charger, pressure regulator



- 1.5m folding boom

SP/NA/36/P/20

Micro-Spray - PRO specification, 150 litre tank, 24 volt pump, self-propelled, variable speed, battery powered with charger, pressure regulator



- 2.5m height adjustable boom

- 3.5m height adjustable boom

Options: bout marker, 9m hose reel and hand lance

SP/MC/150/P/25 SP/MC/150/P/35

# **Soil Testing**

# Soil Testing Kits - 'on the spot' soil management tests



Soil PH Tester - fast, accurate measurement of soil pH

- handheld reader with consumables to carry out at least 25 tests SOILPH/PACK

- handheld wireless reader with Bluetooth and smartphone app and consumables to carry out at least 25 tests

SOILPHW/PACK

#### Options:

- handheld reader with starter set of consumables

SOILPH

- handheld wireless reader with App and starter set of consumables SOILPHW - consumables to carry out at least 25 tests with either reader SOILPH/CONS

Soil Conductivity (EC) & Temperature Meter

Instant readout of conductivity & temperature of soil

SOILECT

Option: consumables pack for the soil EC meter

SOILECT/PACK



Soil Testing Kit - tests for pH, N, P & K (25 tests) Option: replacement reagents for 25 tests

SOILTEST SOILTEST/CONS

### Soil Samplers - stainless steel with titanium components



Hand - 30cm x 10mm sample; total length 35cm

SOILSMPLR5001

Foot rest - 30cm x 14mm sample: total length 81cm Hammer head - 60cm x 13mm sample; total length 81cm

SOILSMPLR5006 SOILSMPLR5012

Other sizes and types available - please enquire

Soil Compaction Tester - penetrometer with pressure gauge

SOILCOMPACT



Soil Compaction Tester - with 2 tips for soft or firm soil

# **Compost and Soil Temperature**



#### Portable monitoring packages

MiniTemp hand held digital temperature monitor and stainless steel temperature sensor with T-handle grip. Measures up to 110°C. - 600mm

- 2m

CQ/MTM/PS600 CQ/MTM/PS2



#### Static monitoring package

MiniTemp Blue Bluetooth waterproof temperature monitor and data logger with iOS/Android App and 2m stainless steel temperature sensor with T-h Measures up to 110°C.



All components of monitoring packages are available separately - please ask for details

(See also Barn Owl Wireless compost temperature monitoring on P.5)

To view the full range of equipment in the Martin Lishman range, information can be viewed and downloaded from www.martinlishman.com.

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