

CROPLANDS

TREE CROP & KIWIFRUIT SPRAY RANGE

BUYERS' GUIDE • 2021

CROPLANDS.CO.NZ



IT ALL STARTS WITH A

Our very first machine made its way into an orchard nearly fifty years ago. Since then we've grown a lot, expanding our range to cover all sorts of tree crops, from apples and kiwifruits to nuts.

Our growth is reflected in the success of our customers. When they're able to protect their crop with a sprayer that's efficient and reliable, they prosper. This understanding of growers has seen Croplands sprayers a common sight in orchards around New Zealand.

Croplands machines are built with New Zealand's varying terrain in mind. Engineered to endure, this equipment gives growers the confidence to take on row after row. Saving time, reducing costs and maximising productivity.

And because our range is as diverse as the tree crops farmed throughout the country, there's a machine to suit every grower's needs.

TIMELINE

- '70 Croplands starts manufacturing and selling orchard sprayers. A new tank mould is developed and the distribution of Fieni airblast fans begins. Croplands starts exporting to Australia and the USA.
- '80 Trifan and self-propelled "Spraymaster" sprayers are released. Croplands is purchased by Nufarm Ltd and establishes an Australian base in Adelaide.
- '90 The Slimline 2000L and 2000L/3000L XL tanks are developed and released along with the innovative Straightening Vane (SV) fans.
- '00 The new 4000L tank range is developed and released with the versatile Quantum Mist fan, along with the unique HV4000 controller.
- '10 The refinement and completion of the QM500 and 380 Quantum Mist fans, along with next-generation 920 DSV, 1060 DSV and 820FE fans. The introduction of low-profile tanks enables 'crop-specific' sprayers: Smart Spray, Kiwiliner, Avoliner and a new self-propelled sprayer.
- '20 Quantum Mist 420 Orchard Tower and Rover Self-Propelled sprayer are launched.

TARTED PPLES...

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OUR SPRAYERS

The Croplands premium fan range delivers unparalleled coverage, performance and reliability. This is backed by New Zealand's leading fruit growers as they continue to use our sprayers to protect their high-value crops.

All our Airblast fans are engineered by Fieni, a global leader in agricultural fan design, manufacturing and innovation.

Croplands and Fieni have been collaborating since 1972, and together we set the standard for fan sprayer performance, efficiency, penetration and coverage. And with Fieni fans available from 600mm in diameter to 1060mm, there's a model to meet your orchard's needs.

Croplands Tower sprayers are fitted with Quantum Mist hydraulic-driven fans. Quantum Mist fans are smaller in diameter – 420mm or 500mm, allowing for multiple-head configurations to target crops more directly.

The Quantum Mist fan design is very popular in large-scale tree crop orchards, delivering excellent spray coverage at high travel speeds, so growers can enjoy exceptional efficiency while reducing costs.

To see how Croplands' market-leading fans perform in your orchard's unique conditions, contact your dealer for an on-property demonstration.

RS

Selection guide (by crop)

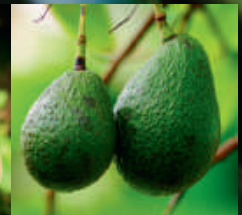
BUSH & TRELLIS

STONE & PIP

CITRUS

KIWIFRUIT

LARGE TREES



| | BUSH & TRELLIS | STONE & PIP | CITRUS | KIWIFRUIT | LARGE TREES |
|-------------------------------|----------------|-------------|--------|-----------|-------------|
| CROPLINER SLIMLINE | • | • | | | |
| AVOLINER 920 | | | | | • |
| KIWILINER 820 | | | | • | |
| CROPLINER ROVER | • | | | • | |
| CROPLINER XL | | • | • | • | • |
| CROPAIR 1000 | • | • | | | |
| CROPAIR 600 | • | | | | |
| CROPAIR 300 | • | | | | |
| QM 420 ORCHARD TOWER | | • | • | | • |
| QM TOWER | | • | • | | • |
| CROPLINER LINEAR TOWER | | • | • | | |
| HYBRID SPRAYER | | • | • | | • |

SUITS

LARGE TREE CROPS

MEDIUM TREE CROPS

CITRUS

CROPLINER SLIMLINE



The iconic sprayer of our orchard model line-up, the Cropliner Slimline model has been shaped for minimum crop interference.

Fans

Highly efficient FIENI DSV fans designed to generate more air with lower HP. Available in 820mm and 920mm DSV options. 3-fan pitch settings. 2-speed gearbox for spraying varying tree sizes, and/or crop development. Centrifugal fan clutch for smooth fan engagement.

Pump

Positive-displacement Annovi Reverberi (AR) BHS-170 high-pressure pump. Brass head/bronze manifold for maximum corrosion resistance.

Controls

Manual remote-mounted ARBMH50 controller standard. Optional rate controller selections on page 19.

Nozzles

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates.

Tank

2000L gel-coated fibreglass construction tank for high strength and smooth finish. Separate 30L freshwater tank.

Chassis/axle

Hot-dipped galvanised, full-length C-channel for strength and corrosion resistance. Heavy-duty adjustable length draw bar. Rear bumper for fan protection, tank sump protection.

Power required

Approximate engine HP requirements.
Model with 920 DSV fan = approx. 70 HP.
Model with 820 DSV fan = approx. 60 HP.



SUITS

NARROW ROWS OF TREES UP TO 3.6M

CROPLINER LINEAR TOWER



Developed by Croplands and Fieni with input from local New Zealand growers, the 920 Linear Tower delivers more accurate and uniform air output, targeted to narrow 2D-style tree plantings.

Allowing more even coverage and greatly reducing off-target spray drift when compared to conventional style fans, the Linear Tower also allows more accurate targeting of various zones of the tree.

Fan

The highly efficient 920 Linear Tower fan is designed for precise placement of air and droplets. Specially designed deflector vanes in the stainless steel volute distribute the air uniformly - ensuring even coverage in the narrowest plantings. 3 fan pitch settings, 2 speed gearbox for spraying varying tree sizes and/or crop development. Centrifugal fan clutch for smooth fan engagement.

Pump

Positive-displacement Annovi Reverberi (AR) BHS-170 high-pressure pump. Brass head/bronze manifold for maximum corrosion resistance.

Controls

Manual remote-mounted ARBMH50 controller standard. Optional rate controller selections on page 19.

Nozzles

5 single swing-over nozzle bodies in the lower tier and 4 double swing-over nozzle bodies in the top tier makes it easy to get the volumes into the zones where you need it most. 1 set (26) of stainless steel disc and brass cores and 1 set (26) of ALBUZ ceramic hollow cone nozzles to allow a wide range of application rates.



Tank

2000L gel-coated fibreglass construction tank for high strength and smooth finish. Separate 30L freshwater tank.

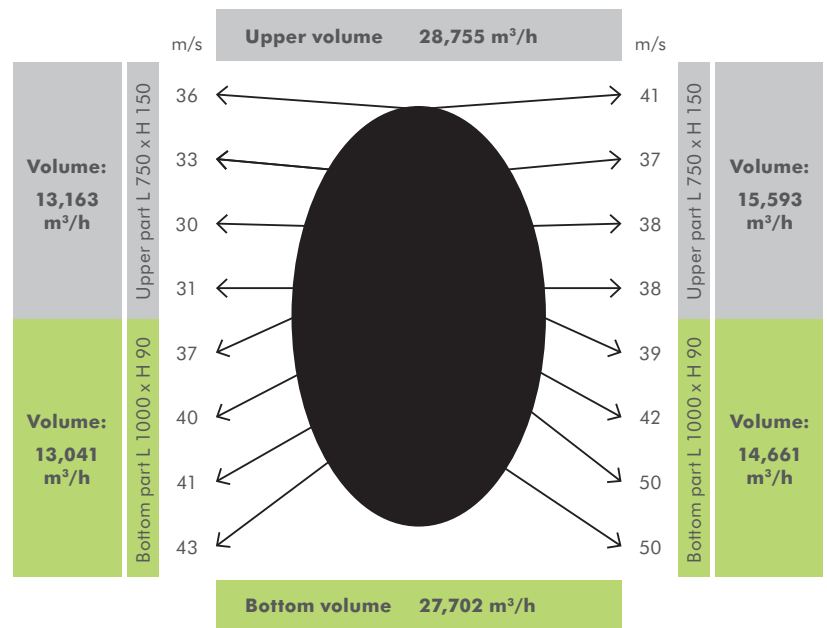
Chassis/axle

Hot-dipped galvanised, full-length C-channel for strength and corrosion resistance. Heavy-duty adjustable length draw bar. Rear bumper for fan protection, tank sump protection.

Power required

Approximate engine HP requirements.
 Model with 920 DSV fan = approx. 70 HP.
 Model with 820 DSV fan = approx. 60 HP.

Test D.913-57VNS H.90 basso-H.150 alto



SUITS

ORCHARDS

HIGH VALUE SPECIALTY BUSH & TRELIS CROPS

QUANTUM MIST™ 420 ORCHARD TOWER



Equipped with the new QM-420 fan with dual spray ring, the Quantum Mist 420 Orchard Tower is our latest sprayer. Available in 8 x head configuration, it provides superior spray coverage in tree crops up to five metres in height.

Tower

New fixed tower specifically designed for orchard crops. Robust design with manual width adjustments and simple set up for precise fan positioning to provide excellent spray coverage in medium-sized tree crops up to 5 metres in height.

RD



Fans

8 individual QM-420 axial-type fan heads, hydraulically driven simultaneously from tractor hydraulics or self-contained oil supply (optional Micro Power Pack). Delivering turbulent, high-volume air for optimum canopy penetration and coverage.

New optional upwind/downwind compensation. Controls individual left/right fan speeds from the cab to improve coverage in exposed conditions and minimise off-target spray.

Dual spray rings are fitted with a total of 10 x nozzles (inner x 5, outer x 5) for a 3-tier spray rate solution (low, medium and high), which reduces the need to change nozzle sizes and minimises off-target spray drift.

Fans are mounted in a new fan frame system, offering added protection and allowing for precise, simple fan position settings.

Drive

Standard tractor – supplied oil supply for fans.
Optional fully enclosed Micro Power Pack.

Pump

AR-185 LFP positive-displacement pump standard.
Higher volume, brass-pump option.

Controls

ECM 4-tap control with pressure adjustment and gauge. Optional rate control selections on page 19.

Nozzles

Ceramic cone-jet nozzles from ALBUZ are precision polished to ensure perfect sealing, giving precise flow rate and excellent resistance to chemicals and wear. 10 nozzles per QM-420mm fan, available in 80, 60 and 40-degree options.

Tank

High-impact, UV-stabilised polyethylene tanks fitted with separate flushing and freshwater tanks. Available in 3000 XL, 2200 XL and 2000 Slimline. Slimline model only 1400mm overall width.

Chassis/axle

Hot-dipped full-length chassis with single step. Self-steer draw bar standard. Single axles. Fixed on XL models. Width adjustable on Slimline model. Optional tandem axles available for compatible tank models.

SUITS

SMALLER ORCHARDS

BOUTIQUE OPERATIONS

CROPAIR TRAILED & LINKAGE

**CROPAIR 300L****CROPAIR 600L****CROPAIR 1000L**

| | | | |
|-----------------------|--|--|--|
| Fan | FIENI 600mm single-speed fan with adjustable pitch blades. | FIENI 800mm, 2-speed fan with adjustable pitch blades. | FIENI 800mm, 2-speed fan with neutral position. Adjustable pitch blades. |
| Pumps | AR 54 L/min high-pressure (40 bar) triple diaphragm pump. | AR 54 L/min high-pressure (40 bar) triple diaphragm pump. | AR 105 L/min high-pressure (50 bar), four diaphragm pump. |
| Controls | ARRM401 2 x tap remote-mounted manual control. Manual pressure regulating valve and gauge. | ARRM401 2 x tap remote-mounted manual control. Manual pressure regulating valve and gauge. | ARVDR50 manual 2 x tap control with manual pressure regulator. |
| Nozzles | 5 x brass rollover nozzle bodies per side. | 7 x brass rollover nozzle bodies per side. | 7 x brass rollover nozzle bodies per side. |
| Power required | Approximately 25-30 HP required. | Approximately 50 HP required. | Approximately 50-60 HP required. |

CROPLINER XL

The perfect solution for operations of all sizes. Multiple tank and fan size combinations can be perfectly matched to your tractor HP and budget requirements.



Fans

Highly efficient FIENI DSV fans in 820mm, 920mm and 1060mm sizes.

Pumps

Quality AR high-pressure pumps. AR BHA-140 (alloy) fitted on 1500L models. AR BHS-170 (brass) fitted on 2200, 3000 and 4000L models.

Controls

Manual remote-mounted ARBMH50 controller standard.

Nozzles

Brass roll-over nozzle bodies fitted with 1 set stainless steel disc and brass cores and 1 set ALBUZ ceramic hollow cone nozzles to allow a greater choice of application rates.

Tank

High-impact, UV-stabilised polyethylene tanks. Available in 1500, 2200, 3000 and 4000L tank sizes. Separate flushing tanks.

Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear bumper and leaf guard. Single fixed axle standard.

Power required

Approximate engine HP requirements.

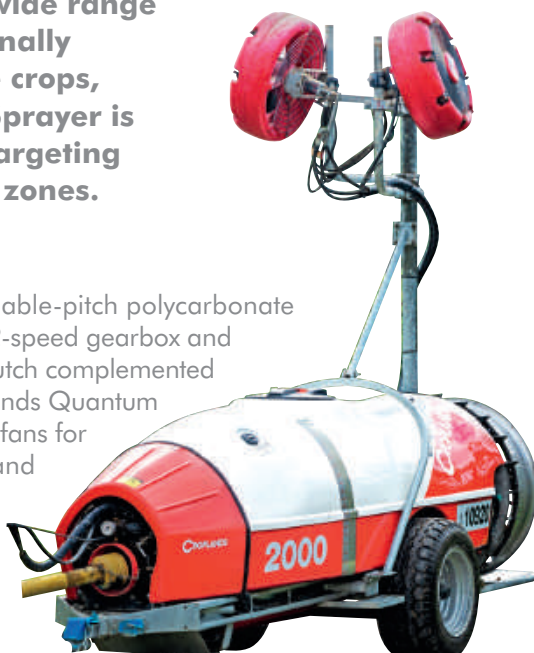
Models with: 820 DSV fan = 60 HP, 920 DSV fan = 70 HP, 1060 DSV fan = 105 HP.

HYBRID SPRAYER

Covering a wide range of conventionally planted tree crops, the Hybrid Sprayer is perfect for targeting specific tree zones.

Fans

920 DSV variable-pitch polycarbonate blades with 2-speed gearbox and centrifugal clutch complemented with 2 Croplands Quantum Mist QM500 fans for extra punch and targetability "up top".



Tower frame

Hot-dipped galvanised steel pole with support. Features adjustable brackets for a range of set ups across different crops.

Nozzles

14 x swing-over double-nozzle bodies per side with high-quality ALBUZ 80-degree ceramic cone jet nozzles. Each Quantum Mist fan has an additional 8 x ALBUZ 80-degree nozzles per side.

Drive system

Pump and 920 DSV fan are driven from the tractor PTO. The Quantum Mist fans are driven separately from the tractor hydraulics.

Pump

High-quality 4-diaphragm AR BHS-170 brass-headed pump with 163 L/min flow and 50-bar pressure.

Tank

2000L fibreglass construction with 30L hand-wash tank.

Chassis/axle

Hot-dipped galvanised, heavy-duty chassis with adjustable height axle, wheel scrapers, sump guard and adjustable drawbar.

SUITS

ORCHARDS

HIGH VALUE SPECIALTY BUSH & TRELLIS CROPS

CROPLINER ROVER





The lowest profile and most manoeuvrable self-propelled sprayer on the market. It can spray where a tractor and sprayer combination simply can't.

Fan

Highly efficient FIENI 820 DSV front-entry fan for kiwifruit. Downstream straightening vanes. Designed to generate more air with lower HP. See fan details on page 18.

Pumps

Quality AR BHS-170 brass pump fitted standard.

Controls

Fitted standard with HV-2400 auto-rate controller. See page 19 for details.

Nozzles

14 x brass roll over nozzle bodies per side, fitted stainless steel disc and brass cores.

Tank

2000L low profile tank. Key sprayer dimensions: length = 5580mm, width = 1870mm, height = 1370mm, dry weight = 2630kg.

Operator station

Fully sealed and air-conditioned cab with carbon filters. Easy navigation with reversing camera and LCD display.

Engine

4-cylinder turbo charged diesel engine.

Transmission

Mechanical drive.

5 x speed manual with high and low range.

Single speed reverse.

Speed ranges from 1-24 km/hr.

Selectable 2 or 4-wheel mechanical drive.

Selectable 2 or 4-wheel steer (with auto alignment and non-alignment indicator).

Hydraulically operated 4-wheel disc brakes.

Supplied on 400/60 x 15.5 flotation tyres.

AVOLINER 920



**Designed specifically for spraying avocados,
with a bigger fan and pump combination.**

Fan

Highly efficient FIENI 920 DSV (downstream straightening vanes) fan. Designed to generate more air with lower HP.

Pump

Positive-displacement Annovi Reverberi (AR) BHS-200 high-pressure pump standard. Brass head/bronze manifold for maximum corrosion resistance.

Controls

Manual remote-mounted ARBMH50 controller standard. Optional rate controller selections on page 19.

Nozzles

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates. Optional Top Gun assembly for taller trees.

Tank

Low profile 2000L high-impact, UV-stabilised polyethylene tank. Fitted with 120L flush tank and 4L hand-wash tank standard.

Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear and side bumpers.

Power required

Approximate engine HP requirements.
Avoliner with 920 DSV fan = approx. 70 HP.

KIWILINER 820



**Designed specifically for spraying kiwifruit,
where a shorter and lower profile is required.**

Fan

Highly efficient FIENI 820 DSV front-entry fan for kiwifruit. Downstream straightening vanes. Designed to generate more air with lower HP.

Pump

Positive-displacement Annovi Reverberi (AR) BHS-170 high-pressure pump standard. Brass head/bronze manifold for maximum corrosion resistance. Optional AR BHS-200 pump for higher volumes.

Controls

Manual remote-mounted Brass Block controller standard. Optional rate controller selections on page 19.

Nozzles

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates.

Tank

Low profile 2000L high-impact, UV-stabilised polyethylene tank. Fitted with 120L flush tank and 4L hand-wash tank standard.

Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear and side bumpers.

Power required

Approximate engine HP requirements.
Kiwiliner with 820 DSV fan = approx. 60 HP.

SUITS

BUSHES AND TRELLIS CROPS

CITRUS

MEDIUM SIZE TREE CROPS

AIRBLAST FANS



820MM FRONT-ENTRY FAN

Stainless steel volute.

Variable pitch, high-strength, glass-reinforced nylon blades – shaped for maximum air delivery with lowest possible power input.

2-speed heavy-duty gearbox and centrifugal clutch.

Stainless steel spray ring with 14 brass roll-over nozzle bodies per side.

Fully guarded for safety.

Eliminates trash build up on intake grill.

53,860m³/hour max air output.



820MM DSV FAN

Stainless steel volute.

Variable pitch, high-strength, glass-reinforced nylon blades – shaped for maximum air delivery with lowest possible power input.

2-speed heavy-duty gearbox and centrifugal clutch.

Stainless steel spray ring with 14 brass roll-over nozzle bodies per side.

Fully guarded for safety.

61,908m³/hour max air output.



920MM DSV FAN

Stainless steel volute.

Variable pitch, high-strength, glass-reinforced nylon blades – shaped for maximum air delivery with lowest possible power input.

2-speed heavy-duty gearbox and centrifugal clutch.

Stainless steel spray ring with 14 brass roll-over nozzle bodies per side.

Fully guarded for safety.

83,798m³/hour max air output.



1060MM DSV FAN

Stainless steel volute.

Variable pitch, high-strength, glass-reinforced nylon blades – shaped for maximum air delivery with lowest possible power input.

2-speed heavy-duty gearbox and centrifugal clutch.

Stainless steel spray ring with 15 brass roll-over nozzle bodies per side.

Fully guarded for safety.

108,618m³/hour max air output.

SPRAY CONTROLLERS

VISIO CONTROLLER

For growers who wish to monitor their spray application rate but prefer to control the application either manually or with basic electric controls. The Visio monitor offers a cost-effective solution. Coupled with a flowmeter and speed sensor, the Visio can display area applied, spray rate in L/ha, L/min and current speed.



HV2400

For growers looking for a basic spray rate controller. 2-section solenoid control with up to 10 pre-set application rates. Programmable alarm settings with L/ha and L/100m capability.



HV4000

For the professional operator, providing up to 4-section control of motor valves or solenoids. Pre-set row width and application rates for simple, on-the-go adjustments. Multiple screen selections, programmable audio and visual alarms and up to 10 individual operating histories to keep the operator informed. L/ha or L/100m capability. Fully integrated to NuPoint data management system and optional fan speed control.



BRAVO 180

For the professional operator requiring GPS integration and data transfer via USB. Up to 4-section control of motor valves or solenoids. Pre-set row width and application rates for simple, on-the-go adjustments. Multiple screen selections, programmable audio and visual alarms and up to 10 individual operating histories to keep the operator informed. L/ha or L/100m capability. Fully integrated to NuPoint data management system. Optional fan speed control and tank level indicator.



NATIONWIDE DEALERS

NATIONAL DISTRIBUTORS



PGG Wrightson Stores
Nationwide, contact your local store



Fruitfed Supplies Stores
Nationwide, contact your local store

| REGION | PHONE |
|---------------|-------------|
| Alexandra | 03 448 6999 |
| Blenheim | 03 578 3019 |
| Cambridge | 07 827 7129 |
| Christchurch | 03 349 9948 |
| Cromwell | 03 445 3730 |
| Feilding | 06 323 0050 |
| Gisborne | 06 863 1660 |
| Hastings | 06 873 0950 |
| Katikati | 07 549 1316 |
| Kerikeri | 09 407 9621 |
| Kumeu | 09 412 2711 |
| Levin | 06 368 0892 |
| Martinborough | 06 306 9699 |
| Motueka | 03 528 8680 |
| Ohakune | 06 385 8500 |
| Pukekohe | 09 238 0713 |
| Richmond | 03 544 6115 |
| Te Puke | 07 573 7907 |
| Whangarei | 09 470 2520 |

CROPLANDS ACCREDITED SERVICE AGENTS

| SERVICE AGENT | REGION | CONTACT | PHONE |
|--------------------------------|------------------------|-------------------|--------------|
| Keri Diesel Services | Keri Keri | Shane Mitchell | 09 407 5300 |
| Norwood | Whangarei | Greg Francis | 09 438 3719 |
| ME & AL Mannington | Kumeu | Mike Mannington | 09 412 8927 |
| Norwood | Pukekohe | Kevin Hamilton | 09 238 7189 |
| Splash Direct | Bay of Plenty | Craig Bell | 07 573 6138 |
| Norwood | Gisborne | Shane Preston | 06 867 9865 |
| Calnan's Spray Quip Services | Hastings | Greg Deck | 06 879 5720 |
| Spraying Equipment Specialist | Masterton | Vlodek Kwiatowski | 04 478 2258 |
| Brian Miller Truck and Tractor | Richmond/Waimea Plains | Brian Miller | 03 544 5723 |
| NS Rogers | Tasman Region | Nathan Johns | 03 528 9212 |
| Agrivit Ltd | Marlborough | Jeremy Watts | 03 572 8787 |
| Noble-Adams Machinery | Canterbury | Aaron Witbrock | 03 349 7862 |
| Norwood | Timaru | Tony Scott-Walton | 03 688 1133 |
| Jordan Mechanical | Central Otago | Neil Jordan | 027 290 5008 |

NATIONAL SALES & SUPPORT

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 Vic Barlow 027 475 2322

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 Leon Powell 027 700 0066

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 Rob Marshall 027 248 6822