



Precision Drone Services

Spraying | Spreading | Shading | Mapping



UK Wide Coverage

Located - Selby, North Yorkshire

Company no. 16042986

www.precisiondrones.co.uk

About Us

Precision Drone Services Ltd is an agricultural drone company based in Yorkshire

Precision drone services Ltd was founded in 2024. Like most of our customers we are a family run business, offering a new innovative service to the UK. Spraying and spreading from a drone is now legal in the UK for qualified and certified drone pilots. Our team have completed training at Harper Adams University where we obtained our CAA (Civil aviation authority) drone spraying qualifications and Lantra level 2 safe use of pesticides certification.

Precision Drone Services offers drone spraying solutions to agricultural and horticultural industries using state-of-the-art drone technology. We work as a remote pilot under AutoSpray systems operator authorisation. AutoSpray are the exclusive distributors in the UK for the XAG drones. XAG are the leading global manufacturer of spray drones. We are fully qualified and authorised to operate the large XAG P100 drones that boast an impressive 40L spray tank and 50L granule hopper. With several thousand flying hours complete, XAG is the best choice when it comes to spraying from drones. Flight routes are automated within 1cm accuracy to maintain even distribution. After refills, the drone simply returns to the exact location it started from, and the drone software will calculate the best route. If it can cover a strip on its return path it will complete this to save time.

Based near Selby in North Yorkshire, we are ideally situated to meet customer needs. The use of drones in agriculture has many benefits. It is not our intension to replace heavy machinery, but we can help in lots of ways to reduce carbon emissions, soil compaction and tramline ruts that increase the risk of leaching. The drone does not cause impaction damage to crops, it can fly over to hard-to-reach areas and fly above tall crops. The drones are also great with hills and variable application rates can be set for spot spraying.

Due to the nature of the industry, all our work is risk assessed and planned in advance of every job. Health and safety are our top priority, and we are fully insured to Civil Aviation standards for spray drone operations. All our mapped site preparation, risk assessments and method statements are documented and presented to each client prior to commencing our onsite work. A detailed worksheet is completed afterwards, which details all the areas covered and product usage quantities. The information pack is helpful and provides valuable information and proof for clients obtaining SFI payments.

The XAG P100 drone dispenses the product from an attached RevoSpray 3 Smart liquid tank. The tank holds 40 litres of liquid and is dispensed through two centrifugal nozzles. Rotational spray discs that can rotate between 1000 – 16000 RPM, allows us to adjust the droplet sizes to cater your needs and requirements. The high frequency pulse peristaltic pumps control the flow rate which gives us full control and precision for the product we want to apply.

The RevoCast-3 granule hopper has an 80L tank capacity. It features twin vertical centrifugal spreading disks that provide an even spread pattern and is highly resistant to wind deflection. The intelligent auger feeder can discharge at rates of up to 150kg/min. This equates to discharging a bag of fertilizer in 20 seconds with total accuracy!

Our Services

- **Fertilizer applications**
- **Cover crops (advantages of under sowing before the main crop harvest)**
- **Slug Pellets (TBC)**
- **Wildflower broadcasting**
- **Spot spraying options (reduce the amount of fertilizer required)**
- **OSR broadcasting (with under sowing & reseeded of failed areas)**
- **Willow tree & other biomass (apply fertilizer to established plantations (growth years 2 & 3))**

Currently we are prevented from applying pesticide products from drones. We are working as a remote pilot under the operational authorisation of AutoSpray Systems. AutoSpray are the exclusive UK suppliers of XAG drones. They are working hard getting new products approved by HSE including PPP products.

Our services consist of a pre-planned mapping of the field area/s, and a full risk assessment. On the days leading up to our visit we will monitor the weather and advise accordingly if the forecast is showing to be unsuitable for drone operation. New legislation for 2025 now allows us to fly in rainy conditions but this will depend on the type of product we are applying.

Service Overview

All products and applications that the drone will distribute will be supplied by the client. During the drone flight, we need to maintain constant VLOS (Visual line of sight) of the drone. The drone will make several return visits to the landing area during its flight to refill the tank/hopper with product and to exchange the batteries.

Weather

Drone operations cannot be completed during poor weather conditions as this may affect the quality of the product and application. We check the weather forecast days in advance of the proposed flight dates. Flight safety is our priority, and it is a requirement for our operational authorisation from the CAA. If we must cancel a drone operation, we will look to arrange another day with the client at the earliest convenience.

Working Hours

We are extremely flexible when it comes to working hours. Due to safety requirements for staff and the public, we can offer early appointments to complete jobs during quiet times if we are working close to public areas. These jobs tend to be fields which are in close proximity of the general public and busy roads. We can also arrange times later in the day to avoid peak times. Weekend bookings are also available at no extra cost. We are happy to discuss this in more detail if necessary. All drone flights must take place during daylight hours to abide by our operational authorisation and to maintain VLOS (Visual line of sight) with the drone. We are looking at option to allow night flights, more information on this will be available during 2025.

Get in Touch

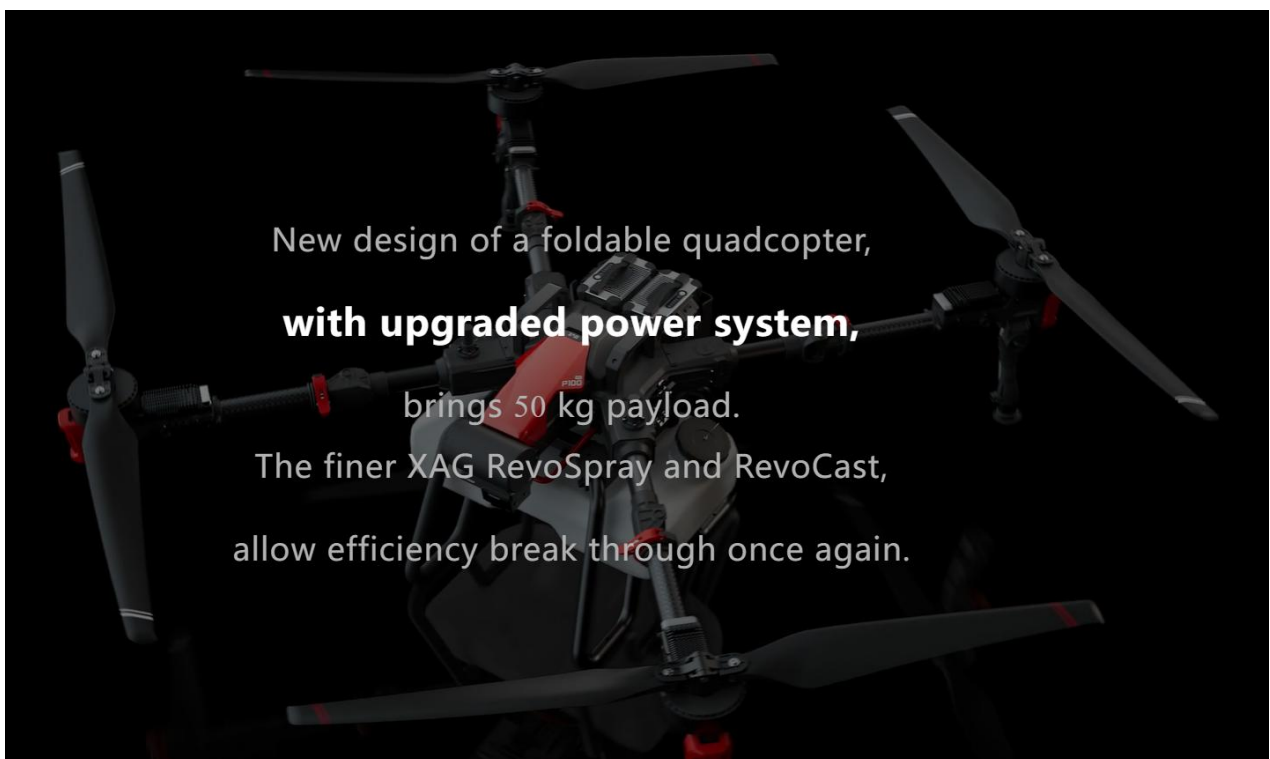
If you are interested in our services, please do not hesitate to contact us for further information. Like most of our customers, we are a family business and happy to discuss lots of new opportunities with you.

Steve Harrison

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Meet Our XAG P100 Drone



XAG RevoSpray 3

Variable-Rate Precision Spraying

Independent control of pump flow rate and droplet size
Rotary CDA nozzles never clog

50 L

Smart Tank

1-22 L/min

Adjustable Flow Rate

5-10 m

Spray Width

60-400 µm

Droplet Size Range



4D Imaging Radar

Highly Efficient, With Safety First

Dynamic obstacle detection with an increased range
Dual PSL cameras to keep track of field conditions



1.5-80 m

Detection range

13.8 m/s

Max. relative speed of
obstacle avoidance

XAG RevoCast 3

Seed and Fertilise from the Air

With twin vertical spreading discs and interchangeable augers. The RevoCast 3 can cope with windy conditions with ease

80 L

Hopper

150 kg/min

Max. Spread Rate

3-7 m

Spread Width

1-6 mm

Granule Size Range



SERVICE NOTICE

Unmanned aerial application services are provided by AutoSpray Systems Ltd as UAS Operator-of-Record under its Civil Aviation Authority Operational Authorisation (OA UAS 14429).
Local ASPN Pilots act as authorised delivery agents of AutoSpray Systems Ltd.

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Proud Member of the **AutoSpray Pilot Network**

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