



A new Ropa Panther 2 harvester is performing well for North Norfolk farmers GW Harrold & Partners and Robinson Farms (Carbrooke) Ltd.

First season with new brand proves a success

Two Norfolk farms growing more than 800ha of sugar beet between them have swapped harvester brands after almost 20 years loyal to a previous manufacturer. **David Williams** reports.

GW Harrold & Partners and Robinson Farms (Carbrooke) Ltd farm separately, but for the past seven years have combined resources during the annual beet harvesting campaign, sharing a harvester and operator. Approximately 4,800ha is farmed across north-west Norfolk between the farms, in an area well served by machinery dealers including sugar beet harvester specialists.

Having their own self-propelled machine allows lifting to be timed to suit the crop and conditions, and to match factory deliveries. The farms' latest acquisition is a brand new Ropa Panther 2, supplied by sole importer CTM Harpley Engineering Ltd, and is the first of its type to be delivered in the UK.

"It's transformed our beet lifting and I think its ease of use and gentle handling of the crop is second to none," commented main operator Harry Gill. "Last season was my first on a beet harvester and I got on well with the previous machine but, when we had a demonstration of the latest Ropa, its advantages were obvious."

Convinced by demo

Harry said that with CTM based just a few miles away it made sense to consider the brand, but that excellent back-up from the dealer for the farms' four CTM-manufactured cleaner loaders experienced over many years was also a factor.

"The demonstration allowed comparison of our previous machine

with an equivalent model from the Ropa range in the same field and it was quickly obvious that we could increase output but use significantly less fuel," he explained.

The Panther 2 has a 21t hopper mounted on an articulated body with the pivot just behind the cab. Four large flotation tyres include a pair of 800/70R38s at the front and 900/60R38s at the rear on a steering axle. Combining a 60-degree articulation angle and the steering rear axle results in an extremely tight turning circle, and the ability to crab steer with the chassis at a slight angle to the direction of travel, so that each of the four flotation tyres travel over different ground for effective weight distribution.

An anti-roll system includes floating axles linked to 4 stabilising cylinders, reducing sway by 50 per cent and improving row and depth control.

An option selected by the farm, which has many gently sloping fields, is automatic leveling allowing the chassis and cleaning system to remain horizontal while travelling up, down or across slopes up to 7 degrees.

Extra lift control

The latest Panther 2's new RR lifting unit provides extra control over earlier versions. Large 850mm depth control wheels and intelligent 3-point suspension ensure accurate ground following. Counter-rotating, oscillating lifting shares, each with individual automatic adjustment ease beet from



Operator Harry Gill says the cab is comfortable and the harvester is great to drive, allowing him to minimise losses and crop damage.

the ground, and feed direct to a 7-roller transfer table which replaces the previous 6-roller version for improved pre-cleaning with minimal damage.

Few beet are missed or dropped and Harry said this is partly due to the individual lifter depth control. "Usually a constant stream of beet from each lifter maintains even crop

flow across the front of the roller table but where there is a gap because of a drilling miss or a wheeling, it's possible lifted beet from either side could fall forward off the front of the table and be lost underneath. However, when this header detects a lack of crop in one or more rows the lifters drop down to skim the surface, providing a constant flow of soil filling the gap and preventing beet being lost. It works really well, and manually disengaging it immediately demonstrates how many beet it saves.

"This season has demonstrated its ability to automatically adjust to the working conditions very well," he continued. "The late spring of 2018 and then the severe drought meant that when the beet eventually grew, many were pushed up out of the ground. In areas where this occurred we easily reduced the scalper pressure to minimise the risk of the beet being snapped off at ground level, and in one field we removed the knives altogether and ran the flails at maximum height, just to remove adequate foliage.

"An advantage of beet transfer from the shares to rollers over other systems is less contamination by dirt and stones resulting in reduced crop damage," explained CTM director of sales Nigel Mountain. "From the front edge to the rear, the rollers are clear of the ground so they are not constantly picking up soil and stones which have to be separated from the beet later. This allows gentler cleaning, with less bruising and more of the fragile taproot preserved."

Harry agrees; "I have a clear view of the rollers from the seat and there is no doubt they provide a constant, even feed to the cleaning turbines which allows throughput to be optimised and protects the crop. Comments were

continued over...



The latest RR header includes automatic individual lifter depth adjustment. The view from the cab is excellent.

Crab operation allows the weight to be evenly distributed across the ground.



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made by several people when they knew we were considering the Panther that the rollers would struggle on some of our heavier soils and that a turbine-type transfer table would be better, but even on some very heavy marsh land we had no problems. Looking at heaps on the field headlands this season and the number of taproots sticking out, it's obvious that the Panther 2 is very gentle on the crop, and gives us the maximum saleable yield."

Turbine cleaners

From the roller table beet are transferred to the turbine cleaners, which are also improved on the latest model. The diameter is increased by 75mm, providing a larger cleaning area and an improved tine profile includes a squarer edge. Tines are singular rather than double so when breakages occur only one needs replacing saving time and cost.

"During the season as the weather turns colder and wetter, the working conditions usually require pig tails to be fitted for more aggressive cleaning in place of the bar gates.

"Because bar gates are gentler on the crop most operators use them as long as possible and this season we have heard from operators of the new model working in a wide variety of soil types that they have been able to delay fitting pig tails until later," added Nigel.

Many fields include gentle

slopes demonstrating the benefits of automatic leveling and the Ropa's ability to harvest in a crab orientation distributes weight evenly, reducing compaction. "It's been interesting hearing comments from ploughmen working the beet stubbles," commented Harry. "Our previous harvester left the land fairly level, partly because there was a scraper between the two rear wheels, but they have commented that this year the field is more level and consolidation more even across the surface."

Significant fuel savings

The Volvo Penta engine is a 6-cyl, 16.12-litre producing up to 3,200Nm of torque and 768hp. Performance adjusts automatically to meet the working load, increasing revs during unloading and when climbing steeper slopes. On the day Farmers Guide visited, fuel consumption averaged 22 litres/ha. "The engine speed varies very little, and tends to sit at a constant 1,100rpm, increasing to 1,300rpm during unloading," said Harry. "It's very fuel efficient and although seasons vary making direct comparison difficult, we know diesel savings compared with our previous machine are significant. It averaged 30 litres/ha. We tend to refuel the Ropa's 1,300-litre tank every two days."

The engine meets current exhaust emissions standards without Adblue, although this is likely to be needed for

future versions as legislation tightens, explained Nigel. "For now though, operating without Adblue is a benefit for users as there is less maintenance required and in the long-term it will help maintain higher resale values as many countries prefer the simplicity of an Adblue-free engine."

Day-to-day maintenance is straightforward with most lubrication through an automatic greasing system, although a few require daily or weekly manual attention. The lifter is hinged between the front flail and the lifting shares, allowing easy access for servicing, and the articulated chassis with a wasp-like waist provides great access to the cleaning turbines.

The cab is comfortable commented Harry, and the controls take little time to get used to. "After just a day I was completely familiar with most controls and adjustments," he explained.

"Visibility is excellent down to the header and back along both sides. There is a great view during unloading, partly because the articulated chassis angles the elevator forward closer to the cab. Cameras provide a view of the cleaning system and help me protect the crop from damage.

"Rather than run at maximum speed all the time I tend to watch the turbines, making sure they are kept full without being overloaded for effective cleaning and minimum bruising."

Harry said during an average 11-hour working day he lifts approximately 17ha of beet at 8.5-9.0kph. "Just before Christmas we lifted 71ha in 4 days, but a lot depends on the number of trailers allocated to cart beet from the harvester to the headland."

Features rated highly by Harry include the LED work lights. "They light up the lifter and roller table better than daylight, so I leave them on all the time," he said. "But after using them the standard halogen front headlights seem dull, so I'm going to request that they are upgraded before next season."

A dedicated joystick on the left armrest controls unloading "I tend to drive with my foot on the speed control pedal as it makes it easier to fill trailers evenly. The joystick includes memory buttons for each trailer, so the elevator height and reach is set automatically."

The main joystick on the right armrest controls most harvesting functions, including setting the crabbing angle. Along with manual adjustment there are two preset angles, and one touch of the button selects either. "Usually I just select the maximum for optimal weight distribution, but when we are opening up the field and need space to get the trailer along-side I can select a half-way position just as easily. It's used frequently and it's a handy feature. What is also a help is that when I hit the 'stop' button, flow from the hopper to the elevator is stopped, but the elevator continues running until it is empty."

Because the farms have many small and irregular-shaped fields, good manoeuvrability is essential and Harry pointed out that in spite of its size, the Ropa can turn on a 12-row headland where there are grass conservation strips or 18 rows without.

The shared beet harvester has to travel between work areas by road, and 40kph transmission saves considerable time compared with the previous 30kph machine.

Maximum crop

In mid-January, the Ropa had recorded 625 running hours of which 400 were harvesting and 660ha of beet had been lifted. "I enjoy operating the Ropa," concluded Harry.

"Back-up from CTM has been excellent so far, it's got a great cab with easy controls helping me get the best results. With few losses in the field and taproots protected almost all the crop ends up on the heap, so it's very rewarding for the driver." ■

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