

# Harvestimes

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**CLAAS**



## Two new 'butterfly' triples

**It is 15 years since the DISCO disc mower range was introduced, and with a total of 28 different models, it has grown to become one of the most extensive ranges on the market.**

For 2010 two new triple mower conditioners, the DISCO 8400 C CONTOUR and DISCO 9100 C CONTOUR have been added to the range, giving customers the option of five conditioner and two non-conditioner triple or butterfly models to choose from, with working widths from 8.10m up to 9.10m.

In order to reduce weight, and hence compaction, the new 8.10m DISCO 8400 C CONTOUR and 8.90m DISCO 9100 C CONTOUR are made using lightweight, higher strength materials. In addition, the mounting system for the two rear-mounted units is designed so that the mowers are positioned as close to the tractor as possible to reduce axle loading.

The two outer units are centrally suspended and incorporate the CLAAS ACTIVE-FLOAT hydro-pneumatic suspension system, which allows the operator to adjust the suspension pressure from the cab for a clean cut.

The outer units also incorporate an automatic breakback feature where, due to the 15 degree mounting of the pivot arm, when an obstruction is hit the whole mower unit swings back and lifts to avoid potential damage.

All three mower units utilise the well-proven CLAAS conditioner unit that is fitted with rubber-mounted steel tines. To further reduce wilting time, a full width spreader hood is also optionally available.

Both mowers use the CLAAS P-CUT cutterbar, which is designed to achieve an extremely even and clean cut. Drive to the discs is through a smooth running, low wear transmission using large diameter gearwheels, with an individual drive system for each cutting disc.

The P-CUT cutterbar itself is manufactured from high strength steel, and incorporates robust cutterbar skids underneath with Hardox inserts between each skid, and grooves on the underside of the cutterbar funnel away any built-up of earth for a cleaner cut.

In addition, each cutting disc is protected by the unique SAFETYLINK drive protection system, where defined shear points prevent gear and cutterbar damage should an object be hit.

As standard the cutting discs use the CLAAS quick knife release system, in which the knives are held in place using a spring leaf to ensure that damaged or worn blades can be quickly and simply replaced without using tools.

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## Scholarship winner

**Jonathan Bradbeer (centre) from Stroud in Gloucestershire, has been awarded the 2009 CLAAS Scholarship for Agricultural Engineering. Congratulating Jonathan is Alastair Tulloch (Head of After Sales, CLAAS UK) with Richard Langley (far right, Industrial Liaison Manager at HAUC); Jane Broomhall (near right CLAAS UK Group Personnel Manager) and Beate Kral (left, Human Resources/Management Development, CLAAS Group, Germany).**

Jonathan is in his second year at Harper Adams University College (HAUC) where he is studying MEng (Hons) Agricultural Engineering. As the winner of the CLAAS Scholarship Jonathan's fees for the second and fourth years of his studies will be covered, whilst in year three he will complete a 1-year sandwich placement at the CLAAS Group headquarters at Harsewinkel, Germany. As part of the Scholarship, Jonathan will also be offered a summer placement with CLAAS UK.

Launched in 2005 at the personal instigation of Helmut Claas, the CLAAS Scholarship is open to one second year student per year who is studying on either the MEng/BEng (Hons) or BSc (Hons) Agricultural Engineering, or the BSc (Hons) Agricultural Engineering Marketing and Management courses at Harper Adams.



# Updates for JAGUAR

**The JAGUAR 900 forage harvesters for 2010 are even more efficient thanks to further technological development of the range.**

## **New JAGUAR 300 HD Pro pick-up**

The new heavy-duty 3.0m wide Pro pick-up has been designed to efficiently handle the high outputs achieved by these machines. Where used on the higher powered JAGUAR 900 models, this new header will enable these models to handle the bigger swaths and increased output potential from the new 15m wide LINER 4000 rake.

Structurally, the new 300HD Pro pick-up is built around a high strength main frame. For speed and simplicity, the pick-up incorporates a quick-coupler drive attachment system which, along with the locking mechanism, are both located on the left-hand side of the pick-up.

The pick-up reel is fitted with five tine-bars to reduce the stress loading from working in heavy, dense crops and to aid collection of shorter material. As on current pick-ups, the new heavy-duty unit comes as standard with a double roller crop-press, but to provide greater strength this is manufactured using 25% thicker steel and features new end-caps designed to prevent crop wrapping.

To handle the increased crop-flow, the diameter of the intake auger has also been increased by 25%. The drive to the auger is via a strong, 2-speed gearbox and this is protected with an oil-immersed auger clutch designed to handle the heavier loading. As standard, the new 300HD Pro pick-up is fitted with robust, hydraulically folding pick-up wheels, a replaceable intake floor and scraper bars.

## **New V-MAX chopping cylinder**

For 2010, a new 20-blade V-MAX chopping cylinder will be fitted as standard on the JAGUAR 900 range.

The advantage of this new chopping cylinder, is that the 20-blade cylinder will provide a wide range of chop lengths from 4mm up to 22mm, but without the need to remove blades which was necessary on the 36-blade cylinder in order to achieve the longer chop lengths. By not needing to remove blades, a smoother, more even crop flow is achieved, reducing strain on the forager.

In addition, in order to handle larger, heavier swaths from wider rakes, the new 20-blade cylinder has a solid centre for greater strength and durability.



## **LINER goes wider**

**For many years the 12m wide LINER 3000 has been the rake of choice for contractors and farmers looking to quickly, cleanly and efficiently create large, well shaped swaths.**

For 2010 a new addition to the CLAAS LINER range is the LINER 4000 which has a maximum working width of 15m, making it ideal for use ahead of larger JAGUAR foragers.



The LINER 4000 has four equal sized 3.80m diameter rotors mounted on hydraulically extendable arms, giving a range of working widths from 12.20m to 15m and swaths from 1.50m to 2.60m wide.

Each rotor has 14 PROFIX tine arms, each with triple bearing support and carrying four dual tines, which if necessary can be quickly removed. The rotors are mechanically driven and feature a sealed, continuously lubricated rotor housing containing a long-life graphite iron cam track.

Each rotor is carried on a four-wheel chassis fitted with 650-8 10PR tyres and cardan suspension, making the rotor free to move independently of the chassis. This provides three-dimensional tracking across uneven ground which, combined with the ability of the tines to stay parallel to the ground, ensures a clean sweep. In addition, all four rotors are steered to avoid scuffing when turning.

The LINER 4000 is controlled using either the simple CST unit or the more advanced ISOBUS ready COMMUNICATOR terminal. In operation, in addition to setting the working and swath width, the terminal can be used to individually lift each rotor and to set the required working height, plus up to four rake heights can be individually stored and called-up. In addition, the operator is able to alter the headland lifting and lowering time sequence, and also lift height.

For transport, the LINER 4000 is carried on a sprung and hydraulically lowered 50kph rated chassis equipped with 620/40 R22.5 tyres for optimum stability. As each rotor is lifted, it automatically lowers to keep transport height to below 4.0m.

# Well matched team for quality silage

**Producing high quality silage and providing his customers with an exceptional level of service is central to Tim Bloye's foraging operation, and a major reason why he relies on CLAAS equipment.**

Based near Callington in Cornwall, since buying his first forager, a JAGUAR 682, in 1990, the foraging operation has grown to where B&B Contractors is harvesting around 4,000ha of silage, mostly grass, using two foraging teams based around 507hp JAGUAR 890 foragers.

"The emphasis has always been on quality," he says. "We are trying to get customers to focus on quality because of the impact this will have on milk yield or live weight gain, as it is the Margin over Concentrates which determines profitability."

With his own 120-cow suckler herd, using a diet based on grass silage with proteins of up to 18%, plus whole-crop and maize silage, and no concentrates. The aim is to take the calves through to finishing in 24 months with heifers weighing 320kg and steers 380kg.

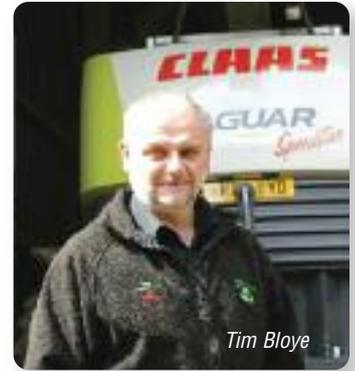
"We focus on helping customers cut their costs. We don't do this by being cheaper, but by being more efficient. To achieve this we need to work closely not only with the customer, but also our suppliers, and CLAAS is a key element in this."

"I don't focus just on purchase cost of machinery. The back-up, service and the advice that I receive from **Hamblys** and CLAAS is just as important. Also I place a lot of importance in the running costs of a machine over the whole term of its operation, and the JAGUAR's high residual value is a major influence in this."

The aim is that each team has the capacity to harvest 48ha a day, and supporting each of the JAGUARS are DISCO 3100 front and rear mowers, and either a LINER 2900 or LINER 3000 rakes.

"We start the foraging season with just one team working on the lower dairy farms and use the LINER 3000 for the lighter crops, then bring the second team in as the season gets busier and we start moving up onto Dartmoor, using the LINER 2900 for the heavier crops."

"I have always run JAGUARS because they have been so reliable and it leads the way, but CLAAS now also offers a very good portfolio of equipment. The mowers and rakes are well matched to the forager and the daily output of the team is sustainable for good clamp management, and is the most cost-efficient option."



Tim Bloye



## Maize power

**Faced with the challenge of what to grow on their land and so maximise potential, Severn Trent Water has turned to the one crop that does grow well on its high fertile sandy loam soils in Nottinghamshire – maize.**

Currently under construction on Severn Trent's farm near Nottingham is the UK's first industrial-scale energy crop anaerobic digestion plant. When it comes into operation next spring the plant will predominantly use maize grown on the farm to generate up to 15GWh of electricity a year.

Severn Trent farms a total of 2000ha in the Midlands, spread over three main units. The 730ha Stoke Bardolph Estate adjoins a large sewage treatment works which treats all the sewage from Nottingham. Forming part of the sewage treatment process, biosolids have been applied to the farm since 1880. Up until the introduction of NVZ legislation in 2000, the land was deemed 'dedicated' for the intensive application of sewage sludge.

Faced with restrictions on what can be grown on the highly fertile sandy loam soils, maize is the one crop that does grow well, with yields of around 50 t/ha at 32% fresh weight. As a result, virtually the whole farm is to be used for growing crops to fuel the digestion plant.

The requirement is immense. The two-stage digestion plant

uses a dry fermentation process to produce biomethane. This biomethane will power 2MWe of CHP (combined heat and power plants). One hundred tonnes of silage will be fed into the digesters each day. This equates to an annual requirement of 37,000 tonnes, all of which will be grown on the Severn Trent estate. Of the 37,000 tonnes, 34,500 tonnes will be maize silage, with the remainder being whole crop wheat. All of the harvested crop will be stored in five massive purpose-built clamps next to the plant.

To harvest the energy crops, Farms Manager John Jackson looked at a number of forage harvesters, before opting for a four-wheel drive CLAAS JAGUAR 870 Profistar fitted with an 8 row ORBIS maize header.



John Jackson

# JAGUAR cost cutter

**Keith Parks, who this year celebrates 40 years in business, has been operating CLAAS JAGUAR forage harvesters since 1995.**

His latest machine, a JAGUAR 950, was bought from **Southern Harvesters** two years ago to replace a JAGUAR 890 Speedstar. Whilst both are the same horsepower, there the similarities end, as not only is output from the new JAGUAR 950 some 20% higher, but he also finds it uses between 10-15% less fuel.

“We aim to average about 6.0ha an hour and the big benefit of the JAGUAR 950 is how smooth it is,” explains Keith, whose contracting business ACS Ltd is based near Midhurst in Sussex. “We rake 14m which brings the forward speed of the forager down so that more power is used for chopping. In addition we have changed to 16t trailers with ABS and air-brakes behind 50kph tractors and have a big loader on the clamp with a 4.0m buckrake to ensure the silage is clamped properly.”

Keith’s son Tristan drives the forager and for him one of the biggest differences between the new JAGUAR 900 and his old 800 model is the ease of maintenance and the speed with which blades can be changed.

“Because of the flinty soils in this area we do get a lot of blade damage. Because there are so many, we have Stop-Rock set on the least sensitive setting so that it at least picks up the worst of the stones, otherwise we would be forever stopping.”

“As a result we will get through at least three sets of blades a year, but changing them is now so easy. Access is fantastic and the fact that each blade is now held by just two bolts instead of four, makes the job far quicker. Also the fact that the blades retain their profile and don’t have to be rebevelled is far better.”

In addition to clearing around 1400ha of grass silage, the Parks also harvest about 160ha of whole crop and 280ha of maize.

“The maize area has dropped back a bit in favour of grain maize for crimping, and we currently harvest 560ha using our LEXION 570,” says Keith. “However there are three anaerobic digesters planned for the area, and with the future interest in biofuels the maize area will go up again.”

For harvesting maize, the JAGUAR is equipped with an 8-row ORBIS header, which Tristan finds is a great improvement on the old RU header, both in terms of terms of the way it feeds the crop into the forager, and also how well it follows ground contours.

As the operator, he has also been very impressed by the cab, due to the feeling of space and also the visibility it provides both the front and to either side.

“CEBIS makes it very easy to set up the forager and the ability to quickly alter the chop length to suit the crop is ideal. Generally I will run at between 14-17mm for grass and 10-13mm for maize, but for the last eight trailer loads I then shorten the chop length so as to get a better seal on the clamp.”



Tristan and Keith Parks

“Of the different makes I looked at, I chose the JAGUAR mainly because CLAAS is well established in the UK market and it was the most popular machine when we looked at what others are using,” he explains.

“We work to a maximum 65 hour week, so we needed a high capacity machine to maximise output, and the JAGUAR 870 has worked really well for us.

“In crops of up to 60t/ha we have been clearing about 1300 tonnes or 90 loads a day. I have been really impressed by the auto-steer system which is brilliant and essential to reduce fatigue on long days.”

To determine the ideal maize variety for energy production John, who is currently chairman of the Maize Growers Association, has been trialling 51 varieties this year.

“We are initially recording the dry matter yield, so cob size is more important than height, because this represents up to 60% of dry matter production. We will then send the top 12 varieties to our technical suppliers, Schmack Biogas, who will assess each variety’s gas capabilities in a mini digester.”

In operation, the silage will initially be loaded onto a walking floor that feeds the primary Euco digester. From here, it moves into the secondary circular Coccus digester,

from which the gas generated by the fermentation process is piped to two combined heat and power (CHP) engines. In all, from start to finish, the process takes around 60 days. After the maize has been digested, the spent digestate goes through a screw-press to leave a solid fraction that is high in NPK.

In addition to producing electricity and having digestate to spread on the land, heat is also produced by the CHP engines. Some of the heat is required to maintain the digesters at 42° (needed for the fermentation process) but the the plant will also produce surplus low grade heat and CO<sub>2</sub>, which has attracted interest from commercial glasshouse operators.



# Baling reliability

**Having changed make of baler to a QUADRANT 2200 Advantage last season, David Adamson has added a second machine for this year.**

Based on the high level of service he receives from **Sewards** and the quality of the product, in recent years David, who is based near Northallerton in North Yorkshire, has moved more towards the use of CLAAS equipment for most of his main machinery.

Since buying his first CLAAS tractor two years ago, he now runs three ARION 640s, plus an AXION 810 and three AXION 850s. New for this year is a JAGUAR 970 forage harvester, which marks a return to the brand after four years, and aside from the QUADRANT baler, he was also offered the opportunity to run a pre-production 8.9m wide DISCO 9100 C CONTOUR mower last year.

The QUADRANT 2200 Advantage replaced a different make of baler and was chosen because of its simplicity and ease of operation. David opted for the QUADRANT 2200 because he mainly bales straw, and very little silage, and felt that he could get high enough density without needing the pre-chamber available on the QUADRANT 3200.

“The main attraction of the QUADRANT 2200 was its simplicity compared to our previous make,” explains David. “It has no more shafts, chains or gearboxes than are necessary so there is very little to go wrong. Also the control box is extremely straightforward, making it far easier to operate.”

Last year was not an easy straw baling season in North



David Adamson

Yorkshire, but despite the difficult conditions, David still averaged about 700 bales a day, which was about 30% up on his previous baler.

“The QUADRANT size is ideal for stacking and transporting. In the past, most of the baling work has been for local farms who want the straw for their own use. But as the season went on last year we started doing more to go on wagons, mainly to Cumbria and a local merchant now wants us to do all of his baling, hence needing the second QUADRANT.”

“For what we want it to do, the QUADRANT 2200 is the ideal baler and I have been very happy with its reliability and performance; it just keeps going all day long without missing a beat.”



# 33% more ROLLANT output

**Having run every ROLLANT UNIWRAP model, baling contractor Andrew Tovey was the ideal candidate to test the new ROLLANT 455 UNIWRAP.**

“The new 455 is very easy to set-up and use, and for anyone looking at a combination baler this has to be a serious choice. It’s far better than anything else on the market in terms of output and bale quality.”

Comparing the 455 UNIWRAP with his 355 version Andrew, who bought the balers through **Vaughan Agri** at Frome and is based at West Harptree near Bristol, has been consistently achieving outputs of 60 bales/hour from the new 455 UNIWRAP compared to 45 bales/hour from the 355 – an increase of 33%.



Andrew Tovey

He puts this significant improvement in output mainly down to the increased speed of the wrapping unit, but Andrew also highlights the new drop-floor under the ROTO-CUT chopping cylinder as having a positive effect on output.

“The fact that the wrapper is now fully integral to the baler makes it far more robust and the transfer of the bale to the wrapping table is very positive. It ensures that the bale is set correctly, and even on very steep hillsides I have not needed the hillside kit.”

“Such is its speed, the wrapping unit is no longer the limiting factor to output. I have tried to outbale the wrapper, but couldn’t manage it. The intake is far higher and it easily copes with three 3.0m swaths put into one using a LINER 2800.”

“The drop-floor system is fantastic and because it will sense a potential blockage, and then open slightly to let it through, that is a great advantage especially in heavy crops,” says Andrew. “To now also be able to alter the pressure of the MPS system has certainly helped increase bale density, and because the pressure is spread over all three rollers this reduces wear and tear.”

“The ROLLANT 455 produces a really tight, dense bale and I am consistently achieving bale weights of 1 tonne.”

“I can’t speak highly enough of the new ROLLANT 455 UNIWRAP – it makes a bale to be proud of. My customers have certainly noticed the difference and commented on how good the bales are, so they are happy. But just as importantly, the increased output means that I now have spare capacity to take on extra work, or more time to devote to other jobs – so there is a knock-on benefit throughout the whole of the business.”

# High density baling

**In 1976, Jack Evans was quick to realise the benefits of round bales when he bought one of the first round balers in South Wales.**

His son, John, now uses a ROLLANT 355RC to make over 1000 silage bales a year. In addition to grass silage it is used to bale 40ha of straw, plus red clover, and whole crop oats and peas. Thanks to the increased bale density due to the variable hydraulic pressure and MPS systems, so pleased has John been with the end results, this year he will be discontinuing clamp silage and relying totally on round bale silage.

“When my father bought that baler back in 1976, labour was already becoming more expensive and difficult to find, so he could see the benefits that round bales would bring,” explains John, whose son Hywel is a technician with local CLAAS dealer **Riverlea**.

The first CLAAS baler to arrive on the 140ha farm near Llantwit Major in Glamorgan, of which 113ha is organic, was a ROLLANT 85 bought in 1984 that produced a 1.5x1.8m bale. This was followed by a ROLLANT 66 with netwrap and subsequently a ROLLANT 250 Roto-Cut in the mid '90s, which was replaced by the new ROLLANT 355 in 2008.

“The bale density from the ROLLANT 355 is fantastic and the ability to alter the baling pressure, and hence the density of the



bale depending on the crop, is extremely useful. The grass silage bales are now weighing about 700kg compared to 400-500kg before. Because of this not only do the bales hold their shape better, but we also use less netwrap.”

“The higher density also affects silage quality. As a result my baled silage was better quality than the clamp silage last year. The baled whole crop oats and peas, which is undersown with red clover, was especially good and had tremendous feed value.”

One of the problems with organic grass is uneven maturity, so by changing to baled silage, this will give John the convenience to cut and bale fields as they mature. Farming on the coast, he will also have the flexibility to work around the weather windows, especially when baling red clover as the crop is prone to leaf shatter, so is very weather dependent and has to be handled gently.

“I have always enjoyed baling and the new ROLLANT 355 is an absolute joy to use. The new control unit makes it easy to monitor the baler and the ability to reverse the rotor in the event of a blockage is a great help. Added to that I know that should I have a problem, Riverlea will do their utmost to get you out of trouble, which is very reassuring,” he concludes.



Hywel and John Evans



# Triple cost saving

**Changing from trailed mowers to a new DISCO 8400 CONTOUR has helped N J Emery & Sons improve efficiency but at the same time cut costs.**



Graham Emery

With a foraging team headed by a JAGUAR 950, prior to buying the new 8.10m wide DISCO 8400 CONTOUR butterfly mower last year, the Emery's used two trailed combinations to mow the 1000ha they cut each year around Fishers Pond in Hampshire.

The DISCO directly replaced a 5.00m wide combination, and the benefits of changing to the single triple combination have been considerable.

"Southern Harvesters had a demonstration unit mounted on an AXION 850 which we used to cut 60ha and were immediately extremely impressed with the whole combination," explains Graham Emery. "The ease with which the mowers took out that width of grass in one pass, and the simplicity of operation, was fantastic."

"By replacing two mowing units with just the one triple, there is the saving of one man and a tractor, which are then released for other jobs, so there is a knock-on benefit right the way through the business."



"By allowing the three mowers to float as individual units and to have the ability to alter the ground pressure when necessary, means the mowers leave a very clean finish, and customers have commented on how pleased they have been with the quality of cut. Also the spreader hood on the mowers leaves a nice, even blanket of grass for wilting ahead of rowing up with a LINER 2900."

Graham also adds that another big benefit of the DISCO 8400 is that because the rear units are close-coupled to the tractor, the rear overhang is minimal, and the use of modern materials means that whilst the mowers are very robust, they are sufficiently light that they can be used on a 210hp tractor.

"Obviously again there is a cost and fuel saving in not needing a larger tractor. We did try a competing set of triples, which were good but immensely heavy - the rear units alone were an extra 1200kg."

"Our old trailed mower was nearly 9.0m long, but by being mounted and close-coupled the rear units on the DISCO don't project so far and we find that they are much easier to get into tight spaces."

"Finally one of the biggest differences is that our old mower had bolt-on blades, so the quick knife change system makes turning or replacing the blades so much easier and quicker," concludes Graham.

## The ideal rake

**Ease of use and reliability are the main reasons behind Andrew Stapleton relying on LINER 3000 rakes for his two foraging teams.**

Working in partnership with his brother Michael, who runs the 364ha family dairy farm, Andrew annually harvests around 3500ha of silage, 90% of which is grass, and they were finalists in this year's Farmers Weekly 'Contractor of the Year' awards

Based near Skipton in the Yorkshire Dales, weather is a major factor in Andrew's choice of machinery. His first LINER 3000 was bought in 2003 from **Rickerby** and now, in addition to the two LINER 3000's, he also operates a LINER 2900, and VOLTO 1050 and 770 tedders.

"This is a high rainfall area, with between 50-60 inches a year," explains Andrew. "As a result we often have very short weather windows in which to work and I would think we must grow some of the heaviest crops in the UK, especially in a late season. As a result we need machinery that not only offers a high capacity, but is robust enough to ensure reliability in order to make the most of the short weather windows."

"The big advantage of the LINER 3000 is that it is easy to use and service, but also very reliable and built to cope with big, heavy crops, unlike previous machines where we would have problems with cracking. Also when we come to replace them after four years, the resale values are far better than any other make."

"For the first three weeks, moisture contents can be up to

80%, so we will ted everything to help bring the moisture down to nearer 30%. The beauty of the LINER is that it is easy to adjust the machine to crop conditions. In early heavy crops we will run it with the arms about half-way out, and then go to full-stretch in second and third cuts. It leaves a nice, even row with a good, clean finish. It's easy to transport and you can use the LINER 3000 anywhere where you would take a two-rotor rake."

"We mainly use the new LINER 2900 ahead of the balers and on beef farms higher in the Dales where we just take one big cut. Due to it having more tine-arms, the LINER 2900 leaves a very smooth, even row and the fact that you do not have to remove tine arms for transport makes it easy to move and helps save time."



Andrew Stapleton



# TELEMATICS web monitoring

**The new unique TELEMATICS web-based information system enables operators to monitor and record for later analysis, settings and output information via any web-enabled device.**

As on the combines, every 15 seconds the TELEMATICS system on the JAGUAR takes a 'snap-shot' of all aspects of the machine's current settings and performance, and stores all of this data on a PCMCIA chip card within CEBIS.

Using a GPRS mobile phone connection, all this information is then uploaded every 15 minutes to a dedicated secure web server, or in the event of a signal not being available the data will be stored until a connection can be made. The operator can then access all of this information using a computer, or any web-enabled hand-held device, via a dedicated individual login.

Many recorded machine parameters can be compared using the TELEMATICS system. For instance, it is possible to monitor fuel consumption but also because TELEMATICS will record each time the knives are sharpened, the impact this will have on fuel consumption can be analysed.

By overlaying information received on Google Earth maps, it is possible to establish the location of the JAGUAR, which will be particularly useful for service support, or to monitor how a machine is progressing and so be able to inform the next customer how soon the foraging team will be with them.



# QUANTIMETER YIELD MONITORING

**The new yield monitoring and mapping system available on the JAGUAR 494 range for the first time allows spot and total yields to be accurately measured, and for that data to be used in the creation of yield maps for further analysis.**

Potentiometers in the feeder roller housing initially record the amount of crop being picked-up. This information is then compared to data from moisture sensors located in the chute to establish an accurate yield total.

This information can then be stored and downloaded for subsequent use with yield mapping software.

# AUTO FILL system

**Awarded a Gold Medal at the recent Agritechnica Show, AUTO FILL uses a 3D camera to enable the chute to automatically follow the trailer, and actively seek out empty space.**

Using 3D digital camera technology originally developed for the CLAAS CAM PILOT tractor steering system, the camera unit mounted on the forager chute initially assesses the dimensions of the trailer, and then monitors the fill level and distribution of the forage in the trailer, and actively look for 'empty' space to be filled.

The Auto Fill system comprises three elements – a 3D digital camera, a monitor in the cab and a chute lighting system that is linked to and follows the position of the flap. In addition the Jaguar has to be fitted the CLAAS SPOUT PILOT system, which automatically adjusts the angle of the flap relative to the position of the chute.

Having engaged AUTO FILL via the multifunction joystick, within a second the camera will build up a 3D image of the trailer, measuring its length, width and depth. Once the camera has locked on to the dimensions it will then continue filling automatically.

The camera is also able to detect the point of impact of the chopped material and during filling, monitors the built-up of material in the trailer, and will seek out space in the trailer to be filled, and move the chute to that point.

In dark and dusty conditions, the powerful working lights located on the end of the chute enable the AUTO FILL system to continue working efficiently, and as the flap moves, the lights move to ensure that the impact point of material being blown into the trailer can be clearly seen by the camera.

Once the trailer is full, or should the operator need to deactivate the system during filling, all they have to do is simply manually move the chute and this will immediately deactivate Auto Fill.



# Serving customers in south-east Ireland

**Irish contractor Trevor James operates a family run business in the south-east corner of Ireland at the base of the Blackstairs Mountains, close to the Carlow and Wexford county borders.**

Farming in this region of the country is very much a mixed affair with a good mix of tillage, dairy, beef, sheep and a few horses thrown in for good measure. As such, Trevor has to

cater for a broad range of needs which helps keep the business going all year round, sowing approximately 800ha of cereals and harvesting about another 800ha of grass and maize silage.

Trevor runs a mixed fleet of equipment with a number of CLAAS products forming the cornerstone of his business. The line-up includes two CLAAS combines, a LEXION 440 (1999) and 450 (1998), a CLAAS JAGUAR 900 (2007) forage harvester, a CLAAS DISCO 3050 AS

(2008) mower with grouper/swather and a CLAAS AXION 840 (2008) tractor.

Much of the agricultural kit Trevor uses, not just the CLAAS products, are supplied by local dealer Maurice Kelly of **Kelly's of Borris**. Trevor cannot praise the technicians at Kelly's of Borris enough, "The lads are all very experienced, most have been with Kelly's for a long time and really know their stuff. In peak times they are available at the other end of the phone 24/7." He adds, "As an agricultural contractor, it is critically important to be able to provide a good service and if something goes wrong it is good to find someone on the other

end of the phone. If it can't be fixed straight away, Kelly's always have a suitable replacement on stand-by."

The newest piece of harvesting kit in Trevor's line-up is the CLAAS JAGUAR 900 forage harvester. His machine features four wheel drive which Trevor says, "is essential for maize harvesting where conditions are not always great. It's very important on the harvester, especially for opening out maize or whole crop silage fields where you are towing the trailer behind you. In four wheel drive the harvester has fierce traction in the field which helps not tear the place up."

Trevor is very impressed with the performance of the 623hp JAGUAR 900 and says: "The 900 has about another 100 horsepower over the previous machine, a JAGUAR 880, and is never lacking in power. It's a faster machine than the 880 and with that extra power is on top of its work all the time."

Crops are mown using the AXION 840 tractor and CLAAS DISCO 3050 AS disc mower conditioner with a grouper. In praise of the mower Trevor says; "It's a good mower, is very simple to operate and does a great job in tough and lodged conditions. The AXION 840 is so manoeuvrable for a big horsepower tractor and with plenty of ground clearance, is ideal for the front and rear mowing combination."

In addition to grass foraging work there is some extra work coming in from green energy crops. Semi-state agricultural research and advisory board Teagasc, (and private concerns) have put a lot of work into successfully growing and harvesting bio-energy crops, in particular willow and miscanthus.

"This year we harvested about 150 acres of miscanthus for Wexgen, a local energy company in its infancy. It went well and has the potential to extend the silage season and the JAGUAR's use."

Despite the current economic stagnation in Ireland at the moment, Trevor feels that farmers will always need contractors, as they could not afford the specialist machinery that is required for some farming operations such as maize sowing and harvesting.



Trevor James

Trevor James' CLAAS AXION drilling barley with a 4 metre Simba Horsch Pronto 4DC.



# Apprentice Graduates

**Seven graduates, who have all qualified with an Advanced Apprenticeship in Landbased Service Engineering (NVQ Level 3), in addition to achieving LTA2 status, recently received their graduation certificates from Clive Last, Chairman of CLAAS UK.**

The successful students are:  
 Daniel Plant (**Manns**, Halesworth); James Harrison and Wesley Stephens (**Kirby**, Market Harborough); Philip Winter (**Seward**, Beverley); Daniel Kjelstrup (**Southern Harvesters**, Kent); James Heath (**Vaughan**, Frome) and Shane Madley (**Vaughan**, Dorchester).

Having completed this first stage in their agricultural engineering education, the graduates will have the opportunity to work towards CLAAS Master Mechanic status for specific products, before potentially progressing to the higher Master Technician level, which also accord the technicians the relevant higher LTA3 and LTA4 accreditations.

CLAAS has been at the forefront of the development of the Landbased Technician Accreditation (LTA) in the UK, which aims to set a universal standard by which the skill of a technician can be benchmarked, assessed and validated.

CLAAS currently has 450 technicians registered, including 32 at the highest LTA4 level, which is more than any other manufacturer



## Look out for our mobile shop!

**Keep an eye out for the CLAAS Mobile Shop which will be at a number of shows and events over the course of this summer and autumn.**



The CLAAS Mobile Shop will be at the following shows and events:

**Hambly's Grassland Event** (Duchy College, Launceston - May 4): **ScotGrass** (Dumfries - May 11): **FTMTA Grassland Event** (Gurteen College, Ireland - May 20): **Suffolk Show** (Ipswich - July 2-3): **Cereals 2010** (Royston - June 9-10): **Pewsey Vintage Show** (Pewsey, Wiltshire - June 12-13): **Royal Highland Show** (Ingliston, Edinburgh - June 24-27): **Royal Norfolk Show** (Norwich - June 30-July 1): **Gordons Local Shows** (July 24-31 & August 1-8)



## CLAAS Kids summer offer

**If you are going to any of the shows listed where the CLAAS Mobile Shop is present, remember to fill out this form and hand it into the shop in order to claim your CLAAS KIDS Free Surprise Gift!**

This offer is only open to CLAAS KIDS members. This form has no monetary value and can only be redeemed for a single member's gift at the CLAAS Mobile Shop.

✂

Name: ..... Age: .....

Address: .....

.....

.....

CLAAS KIDS membership number: .....

Parent/guardian signature (if under 12): .....

This offer is only open to CLAAS KIDS members. This form has no monetary value and can only be redeemed for a single member's gift at the CLAAS Mobile Shop.



# Tried, Tested, Perfected.

The new **ROLLANT 400 series, 454, 455 and 455 UNIWRAP**; tried, tested and perfected in the UK, by our customers – for our customers. Here's what they have to say:



## Andrew Tovey, Somerset:

"I ran a test version of the UNIWRAP 455 for the 2009 season. The output and density was fantastic and due to the automatic drop floor system, you really had the confidence to push the machine to its limit. The new net braking system ensured a perfect bale no matter what the crop or conditions".

## Archie Smith, Lanarkshire:

"The ROLLANT 454 performed really well and I have been extremely pleased with the capacity of the baler. The intake is really impressive... The ROLLANT 454 makes a very tidy bale that's easy to wrap and the operator got on very well with it".

Contact your local CLAAS dealer today for more details or a demonstration.  
Or call CLAAS UK on tel: 01284 763100.

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