



#### Leave something to be proud of. That's the Mzuri philosophy

Our passion is helping farmers and landowners leave behind a landscape and industry to be proud of. Whether that be through greater financial security of the family business or ensuring a stable ecological environment that is fit to feed the future – we offer crop establishment solutions that make a real difference.



# Specialists in conservation seeding

Dedicated to conservation farming, we offer the complete choice of direct drilling equipment which includes the Pro-Til, iGen and iPass range of single-pass drills, the Rehab low disturbance subsoiler and the Rezult straw rake.

Engineered and built in Great Britain to the highest of quality standards, the Mzuri system has been developed by farmers and is a direct result of continuous consultation with growers. As such, it has been specifically designed to provide real-time solutions to today's farming challenges of rejuvenating soil structure, reducing crop establishment costs and increasing yields. All of our products have undergone rigorous testing and have been trialled on our own farm prior to launch.

When you deal with Mzuri, you can rest assured that your business is in safe hands. We aim to offer only the best – from product inception, design and quality, through to customer service and technical support. Not content to stop there, we continue to invest into research and trial work so we can bring you the latest advances in direct drilling – both in the form of our state-of-the-art product features and best practice advice. This is why Mzuri is now recognised as a leading one-pass establishment system, unrivalled in cultivation, reconsolidation and seed placement accuracy.



# **Rising to the** challenge

With continually rising input costs and low profit margins, today's farmers are under more pressure to produce better yields, whilst simultaneously reducing farm expenditure than ever before. In addition, there are persistent weeds and crop diseases to keep on top of against the backdrop of tightening regulation and the reduced choice of pest and disease management options.

On a larger scale, crop production outputs need to increase by twofold to meet the forecasted population growth by 2050. Cereals production has already doubled in the past four decades thanks to a combination of greater fertiliser and pesticide inputs, water management techniques and the introduction of new crop varieties and technologies. However, this has

not come without a price to pay. Intensive farming including repetitive ploughing and misuse of agrochemicals is having a detrimental impact on the environment, destroying precious ecosystems and causing soil deterioration. As a result, many growers are suffering plateaued yields, battling persistent weeds and fending off crop disease.

Agriculture is facing a huge challenge of balancing the shortterm farm profitability against securing a sustainable farming future.

Luckily, Mzuri has the perfect solution for this seemingly irreconcilable task. The answer lies in working with nature to restore the health of our most valuable asset - the soil. Subsequently, growers can enjoy increased yields and significantly reduce their expenditure.

#### Mzuri. A profitable yet sustainable solution.

A result of years of research and continuous trials, Mzuri have developed a unique system that can help growers to both look after the bottom line and safeguard the land for future generations. Used as part of a wider crop management strategy such as a minimum four-year rotation, our patented one-pass direct drilling technology can quickly improve soil structure, enhance productivity and increase profits.

The Mzuri way. Intensive farming that does not cost the earth.



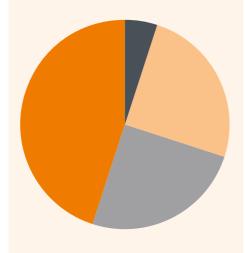
## Soil. The most valuable asset

## Drilling down to the core of healthy soil

Soil structure and fertility plays an essential part in healthy crop establishment and development. Not only does it provide a growing medium and anchoring for roots, this complex living ecosystem regulates the plants' water and air supply, provides nutrients and is home to a multitude of interdependent organisms which can improve soil health and aid plant growth.

As well as its mineral components (a combination of silt, sand and clay), soil is typically composed of organic matter, air and water which fill the small pores between the mineral particles and are vitally important for a healthy plant development.

Plant roots and soil organisms need oxygen to respire and good soil aeration is thus an essential ingredient of a healthy soil.



- Organic matter 5%
  Air 25%
- Water 25%
- Mineral 45%

Limited oxygen availability restricts the respiratory process and creates anaerobic conditions which hamper root development and encourage the growth of anaerobic bacteria responsible for denitrification.

Plants absorb water though their root system and fully rely on it for growth and access to nutrients such as nitrates, phosphorus, potassium and soluble sulphate. Excess water, however, can damage plant roots and good soil structure is key to ensuring unrestricted water supply and circulation.

Healthy soil requires a sufficient proportion of both water and air: low moisture content makes nutrient uptake difficult resulting in plant stress, whereas poor aeration leads to the development of anaerobic conditions, restricting the reproduction of beneficial soil organisms.



#### **Organic matter matters**

Constituting the smallest soil fraction yet playing the leading part is organic matter - a combination of living organisms and dead components such as straw stubble and previous crop roots. Soil harbours a fascinating variety of organisms - from worms, mites and beetles to a multitude of micro-organisms such as bacteria, protozoa and fungi - which are not visible to the naked eye yet are equally important in the wider ecosystem chain. Their benefits are immense and wide-reaching, particularly when it comes to efficient food production and the reduction of agrochemical effects on the planet. Not only do they help the decomposition of organic particles and turn them into nutrients which are instantly accessible to the plants, they keep soil in good shape, protect roots from soilborne diseases and regulate greenhouse gasses.

Often referred to as 'the soil food web', myriads of organisms in this closely knit community co-exist and rely on each other for food and energy.

Bacteria decompose organic matter, mineralising the nutrients they contain and converting them into a form that can be instantly absorbed by plants. As well as enriching soil fertility, these useful members of soil biological community release hormones that stimulate plant growth and produce antibiotics to fight root diseases.

Fungi also feed on surface litter and release enzymes which break them down into simpler forms. They also help to bind soil particles thus improving soil composition.

Certain types of microbes including nitrogen-fixing bacteria and mycorrhizal fungi live in the rhizosphere – a zone of soil around that root of the plant - where they form mutually beneficial relationships. The roots release carbon which is used as food by the microbes and the plant is supplied with essential nutrients in return. Nitrogen-fixing bacteria deliver nitrate which can be readily absorbed by the roots whereas mycorrhizal fungi offer minerals such as phosphorus to the host plant. The symbiotic relationship makes the plants less prone to disease and drought stress and stimulates fine root growth, subsequently increasing nutrient uptake.

Protozoa, a group of water-residing beneficial organisms which feed on bacteria and fungi, facilitate the ease of nutrient uptake to the plant thanks to their ability to convert nutrients into mineral forms that can be instantly utilised by plants.

#### **Nature's structural** engineers

However, the largest contributors to soil maintenance are earthworms. It takes up to a thousand years to produce the top few centimetres of soil and its rate of formation is proportionately linked with the number of inhabiting worms. Capable of moving and mixing vast amounts of topsoil, these structural engineers are responsible for creating soil macro-pores which are vital for efficient oxygen and water circulation. Furthermore, earthworms shred surface residue and pull it down into the ground, making it more accessible to microbes which can then process the debris and convert it into humus.

Inversion tillage techniques and intensive use of pesticides have a detrimental effect on earthworm populations and the wider soil fauna community, disrupting the natural process of soil rejuvenation and maintenance. Reducing such interference as much as possible is therefore the first step towards effective soil management.



## **Powering the cycle**

The energy to sustain the soil food web comes from sunlight which enables photosynthesis to occur a process in which plants can convert carbon dioxide and water into carbohydrates and oxygen required to power their growth. In order for this cycle to continue, all the three elements - nutrients, water and sunlight - are required.

#### Straw. Just leave it

Nature's way of enriching the soil, the secret to ensuring continuous nutrient availability lies in leaving previous crop residue exactly where it belongs - on the surface.

Plants rely on soil organisms to process organic material such as straw and chaff and turn it into readily-accessible minerals to feed the roots. As the organic matter is being continuously decomposed and converted into nutrient-rich humus, it also means that it has to be constantly replenished for the cycle to carry on. Leaving straw on the ground rather than taking it away or incorporating it does just that.

As well as enriching the soil, surface straw also helps to regulate moisture which is the second vital ingredient in the cycle. The mulching provided by previous crop residue reduces water evaporation, thus ensuring moisture

availability to the root of the plant. Furthermore, it acts as a barrier to protect the soil against the elements and prevent erosion caused by wind and heavy rainfall.

#### Getting the light right

Finally, the cycle is dependent on a good supply of sunlight. Research shows that better yields are associated with higher levels of light intensity. Although growers have no control over sunlight, they can maximise light availability by planting crops in wider rows. Such planting systems allow more light in to enable the entire plant to harvest the sunlight, resulting in higher yields.

Top layer: Home to insects and a range of beneficial micro-organisms which break previous crop residue down and convert it into soil nutrients.

#### 2nd layer: Topsoil

(humus-rich layer of soil that provides the best growing medium for plants). Abundant in soil micro-organisms, topsoil is a zone where seeds germinate and plant roots thrive.

3rd layer: Subsoil (rich in small mineral particles that plants need for growing).

4th layer: Weathered parent material

5th layer: Parent rock



and speed up plant

beneficial micro-

organisms such as

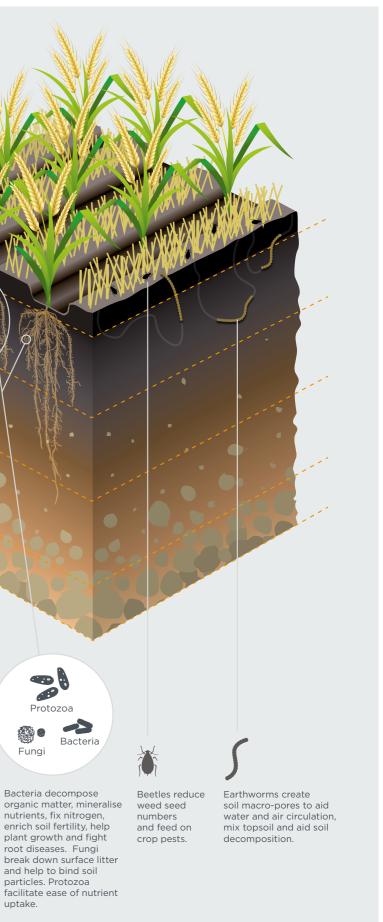
and mycorrhizal fungi.

Nematodes Mites

**\*** Fungi

Mycorrhizal roots aid Beneficial nematodes mineral nutrient uptake help to regulate rates of decomposition and growth. Rhizosphere nutrient mineralisation a zone around the roots Mites break down old of the plant - harbours material and enrich soil with nutrients nitrogen-fixing bacteria

uptake



# Breaking the cycle of unsustainable farming

Intensive conventional agriculture is having a huge negative impact on soil. Repetitive ploughing destroys its natural structure and releases nitrogen dioxide and carbon dioxide into the atmosphere, contributing to greenhouse gases.

By burying surface residue – natural organic matter – nitrogen gets locked up in the seedbed resulting in the need for increased synthetic fertiliser application and additional costs.

Furthermore, the orthodox practice of baling straw removes the ecosystem's food source which is necessary to power the cycle of the soil food web. It also takes away the natural thatching which protects the ground from heavy rains, seals in moisture during dry spells and prevents soil erosion.

Multiple machinery operations associated with conventional crop establishment techniques cause soil compaction and capping, resulting in restricted plant performance, poorer yields and reduced profits. Most importantly, ploughing disrupts the soil's sensitive biological ecosystem, destroying natural habitats of many important soil organisms. Consequently, the invaluable services provided by each organism group deteriorate or stop altogether. Small earthworm populations mean poorer aeration, water circulation and overall soil structure. The reduction in beneficial microbes reduces plant access to natural nutrients and makes them more prone to soilborne diseases.

To repair the damage, further intensive soil preparation operations are needed which include multiple machinery passes and higher fertiliser inputs. As well as having cost implications in terms of time, diesel and capital investment, the practice renders lower yields compared with non-inversion farming techniques.



# Mzuri. A concept with a difference

The unique range of Mzuri single pass drills are capable of carrying out multiple operations including seedbed preparation, fertilising, drilling and reconsolidation in a single pass. As the system eliminates a number of unnecessary steps, the same soil to seedbed preparation takes only a fraction of the time compared with conventional establishment. The significant reduction in requirement also applies to labour and capital investment.

Not only is the Mzuri technique more cost-efficient, it produces impressive results. The drill only cultivates a narrow strip, leaving the rest of the area intact and allowing nature to do her work. The seed is accurately placed in close contact with the aerated, moist, fine crumb structured soil. Users have the option to position a band of fertiliser below the seed, providing it with the ideal conditions for quick and easy germination. Independent press wheels following the fertiliser and seeding coulters offer unparalleled reconsolidation for perfect seed to soil contact.

In the untilled zone, soil structure and its inhabiting fauna are fully preserved leading to improved aeration, moisture retention and nutrient supply to the established plant roots. Subsequently, growers can enjoy better yields whilst ensuring the long term viability

of the business through a more effective management of their "factory floor" - the soil.

Furthermore, the Mzuri system promotes the use of previous crop residue which, left on the surface, provides food for the soil's living ecosystem. The micro-organisms slowly work the organic matter back into the ground and break it down into humus and instantly available nutrients. The most effective use of straw by far, the presence of surface litter vastly improves soil structure and fertility.

Recognising this, the Mzuri single pass range has been specifically designed to cope with large amounts of surface residue. It is capable of drilling directly into all types of crop residue, including straw from little or no prior cultivation, which also helps to retain moisture and acts as natural thatching to protect from the elements. Equally, Mzuri's performance is just as impressive following conventional primary cultivations as it greatly reduces soil compaction caused by numerous machinery passes.

In addition, Mzuri is capable of drilling in a choice of narrow or wide row spacings which makes it highly versatile and compatible for work with a broad range of crops. Wider spacing allows more light in between the rows, enabling the plant to make the most out of light interception. This means that the entire surface area of the plant from top to base can be used to harvest the precious sunlight and convert it into energy. The result is a healthier, bushier crop leading to an increase in yields.



Single pass	<ul> <li>Reduced machinery requirement</li> <li>Less fuel</li> <li>Lower capital investment</li> </ul>	• Lower crop establishment costs	<ul><li>Significant savings</li><li>Increased profit margin</li></ul>	Improved farmi efficiencies
operation	Reduced labour			
	Less farm traffic	<ul><li>No soil compaction</li><li>No soil capping or slumping</li></ul>	<ul><li>Improved soil structure</li><li>Enhanced plant health</li></ul>	Higher yields
Untilled inter-row	• Undisturbed soil eco-system	<ul> <li>Enhances soil structure</li> <li>Restores fertility</li> <li>Improves aeration</li> <li>Helps water drainage</li> <li>Supplies plants with nutrients</li> </ul>	• Enhanced plant health	• Higher yields
Surface straw	<ul> <li>Retains moisture</li> <li>Prevents water and wind erosion</li> <li>Provides organic matter</li> </ul>	Improves soil fertility	• Enhanced plant health	• Higher yields
Wider planting spacing	Better light     interception	<ul> <li>Reduces fungal disease</li> <li>Bushier, stockier plants</li> <li>Increased seed production</li> </ul>	• Enhanced plant health	Higher yields





# **Effective crop establishment: science or lottery?**

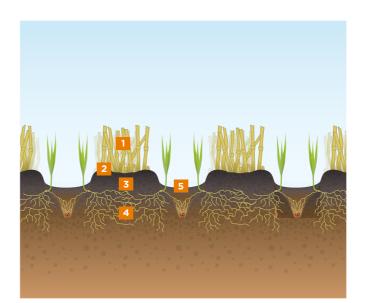
There are a number of elements that make up the formula for successful crop establishment. Firstly, good soil structure is paramount as it helps with aeration and water infiltration. Sunlight warms the ground and encourages the seed to grow. Organic matter, such as previous crop residue and straw on the surface, enriches the soil and retains moisture.

However, arguably the most important condition for quick germination lies in the preparation of the perfect nursery seedbed. Seeds prefer friable, moist, yet well-draining soil to germinate in. Contact with air and straw will result in failed germination: therefore. the seeding strip must be well consolidated to remove air pockets and be free from contaminants for optimum seed to soil contact. Next, accurate planting depth is key as it ensures uniform emergence which is particularly important for effective crop management later on. Plants also benefit from fertiliser placement just below the seed to speed up root development.

Finally, optimum levels of light throughout the life of the plant reduce fungal disease and result in bushier, stockier plants.

The degree to which these conditions are met may often mean the difference between success or failure. Luckily, armed with this knowledge, growers can be in control of their fortune. By adapting correct crop management systems and choosing the right type of machinery for the job, the lottery element of crop establishment can be removed and replaced with failsafe results.

# Don't gamble with your crop establishment



- 1. Long stubble protects the soil from capping and erosion.
- 2. Chopped straw remaining on the surface provides a barrier to evaporation and encourages vital worm activity.
- 3. The undisturbed soil provides essential capillary water for quick germination.
- 4. Untilled soil is rich in nutrients, oxygen and water promoting quick, healthy root development.
- 5. By only disturbing soil within the seeding zone, nutrients are mineralised and good soil to seed contact is achieved to provide the ideal environment for each seed to germinate quickly. Additionally, band placement of fertiliser directly below the seed further supports strong early growth right out of the gate.

#### Benefits of the Mzuri System

- Even germination across the whole field, particularly noticeable on the headlands.
- The uniform growth of the crop makes timely herbicide application easily achievable.
- The elimination of multicultivation operations saves both wear and tear costs and capital investment.
- There is a huge reduction in soil compaction and erosion due to the cut in processes in preparing the seed bed – the same tramlines can be used year after year.
- The Mzuri non-inversion tillage system will increase the soil's organic matter and worm population; this will in turn further improve the soil structure and fertility.
- The physical condition of the soil will quickly improve to a more friable structure with a better balance of air, minerals, humus and water. The biological condition is also enhanced, with a healthier activity of microorganisms (bacterial and fungal).
- Tilling only a targeted area will make dramatic savings in cultivation costs with huge reduction in fuel and labour costs.

## **Five golden rules to** successful crop production

At Mzuri, we firmly believe that your wider crop management strategy is just as important as your choice of the drill for best results. Here are our top five recommendations to help you get the most out of your system.

### **Assess your** soil health and cultivation techniques

Rotate your crops

## Leave previous crop residue on the surface

Assessing the old way of establishment, identifying soil issues and being open to new management practices are the first steps towards successful crop production. Soil harbours a fascinating range of biodiversity which is essential to its health and strong crop development. Intensive cultivation techniques cause compaction, have a detrimental effect on soil structure and destroy the habitat of many beneficial organisms. Whilst zero tillage, on the other hand, preserves the soil, it introduces the risk of poor germination by failing to provide the seed with a friable nursery bed, rendering it unsuitable for some conditions.

#### Mzuri recommendation: selective tillage.

Selective tillage is important because it:

- Restores soil structure and fertility
- Improves aeration and drainage
- Supplies plants with natural nutrients
- Offers the ideal seeding environment

The need for crop rotation must be recognised as part of a successful crop management programme. Growing the same crops in succession can result in weed, pest and disease-prone crops and contribute towards soil exhaustion.

#### Mzuri recommendation:

A minimum four-year rotation (cereals, green crop, cereals, green crop).

Crop rotation is important because it:

- Allows a better spread of labour due to different timings of the operation
- Helps to control weeds and reduces their resistance to chemicals
- Reduces crop disease
- Assists with surface straw management
- Enables users to alternate between narrow and wide row spacings for optimum light interception

Surface straw is widely recognised as one of the quickest ways to improve soil structure and fertility. Previous crop residue provides organic matter for the soil's living ecosystem which breaks it down into nutrients and makes them instantly available to the plants. Without it, the valuable services provided by the soil's micro-organisms would greatly diminish or stop altogether.

#### Mzuri recommendation:

Leave all straw and previous crop residue on the surface.

Leaving straw on the surface is important because it:

- Supports the soil's biodiverse ecosystem
- Retains moisture
- Reduces water and wind erosion

**Provide the** crop with optimum levels of light

Wider row spacing allows more light in between the rows. enabling the plant to make the most out of light interception. This means that the entire surface area of the plant from top to bottom can be used to harvest the sunlight and convert it into energy.

#### Mzuri recommendation: Wider row spacings.

Wider row spacing is important because it:

- Produces bushier, stockier plants
- Results in increased seed production
- Reduces fungal disease due to better air movement



## Minimise the risk associated with crop establishment

To ensure even and quick crop establishment, a strip of clean, friable and moist soil is required around the seed. A moist, friable strip of soil provides such a perfect nursery seedbed whereas other establishment techniques are not weatherproof and can have inconsistent success rates.

#### Mzuri recommendation:

Opt for a drill that can cope with surface residue and offers a clean strip of tilth, accurate seeding depth and good reconsolidation.

A narrow band of tilth is important because it:

- Prepares the perfect nursery seedbed whilst leaving the rest of the soil undisturbed
- Retains moisture whilst providing excellent water infiltration at the same time









# The Mzuri Range

















### **Pro-Til**

## **Pro-Til Select**

wider row spacings.

## **Pro-Til Xzact**

The innovative Mzuri Pro-Til Xzact combines a direct drill and a seed singulation seeder, meaning that one drill can now seed all types of arable and precision crops - in a single pass.

## iGen

## **iPass**

The Mzuri iPass has been specifically designed to offer high output, efficient low disturbance seeding direct into stubble and cover crops, while retaining its ability to drill into cultivated ground.

## Rezult

The Rezult straw rake marks a major advance in straw and stale seedbed management, and is the ideal tool to control black-grass, cut slug activity and accelerate straw decomposition.

## Rehab

## Razorback

in Britain.



#### The Mzuri Pro-Til one-pass drill offers strip tillage and direct establishment into stubble and cover crops without compromising the quality of the seedbed.

As well as all the benefits of a standard Mzuri Pro-Til drill. the Mzuri Pro-Til Select series can drill in a choice of narrower or

Retaining Mzuri's proven seeding technique, the Pro-Til iGen is an innovative mounted direct drill designed for high-output, low disturbance seeding without compromising on establishment.

The Rehab is a specially designed low surface disturbance subsoiler - it increases available oxygen and nutrients to promote quick root development and a healthy plant.

Our range of innovative vegetation management equipment, including the Auto-Level Self-Levelling Reach Mower, and the RT Series Rotary Mower. Tried and tested quality, designed and built



26

## 32

## 36







24

## **Pro-Til** An innovative range of one-pass drills



- 1. Optional front disc to cut through surface residue
- 2. Auto-Reset or Shear Bar leading tine ensures good root development and cleans the sowing strip of surface trash to produce a clean till of moist friable soil
- 3. Band placement of fertiliser below the seed reduces fertiliser requirement and ensures early nutrient accessibility
- 4. The staggered wheels remove air pockets and reconsolidate the tilled strips
- 5. Excellent soil to seed contact is achieved by hydraulic pressure exerted to each individual seed depth wheel
- 6. Individual depth adjustment to each of the semi-pneumatic coulter depth wheels accurately controls seed placement
- 7. Hydraulically operated adjustable pressure harrow ensures a level uniformed seed bed



The Mzuri Pro-Til one-pass drill offers strip tillage and direct establishment into stubble and cover crops without compromising the quality of the seedbed. By cultivating a small uniform till and placing the seed at a controlled depth, the Pro-Til provides the ideal soil environment for each seed to germinate quickly and grow to achieve its full potential.



The Pro-Til's leading leg cultivates a targeted area and leaves the crop residue on the surface between the tilled strips to retain moisture and organic matter to improve soil structure and fertility.

The tines and wheels are alternately staggered to give ample space for trash to flow through, making the Pro-Til suitable for use through a wide range of crop residues. The independent patented pivoting coulter units are each connected to a balanced pressurised hydraulic system, which ensures an even soil pressure to each of the rear press wheels. This controlled pressure ensures an accurate seed depth and excellent soil-to-seed contact across every row.

The Pro-Til is specifically designed as a single pass 'stubble to seed bed' drill, however it is equally at home with inversion systems. Being so versatile, whether drilling directly into stubble, minimally tilled land or even

after the plough, makes the Pro-Til the ideal machine to simplify the transition towards permanent direct drilling.

The metering unit simply consists of a variable speed electric motor and a gearbox driving a specific seed roller. A selection of seed rollers is provided to suit all seed types. Calibration is straightforward and accurate - simply push an electric button, weigh the collected seed and enter the amount into the control panel.

The in-cab drill management system provides on-the-move seed rate adjustment plus all of the normal essential seed drill control and monitoring functions.

The Pro-Til range is available in 3 and 4 metre trailed versions.

### **Zone A - Cultivation**

The leading serrated disc cuts through the surface straw allowing the residue to flow freely to either side of the tilled strip. Available as auto-rest or Shear Bar the tine, coupled with replacement point and wing, cultivate the seeding zone to ensure a clean strip of moist, friable soil, free from surface residue. Band placement of fertiliser below the seed reduces the fertiliser requirement and ensures early nutrient accessibility, providing essential support for quick, strong and healthy establishment.

### **Zone B - Reconsolidation**

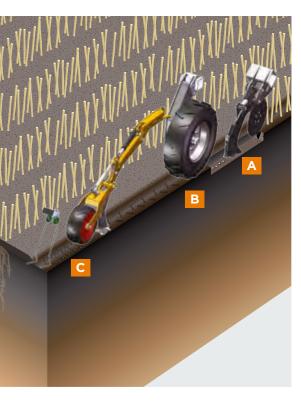
A key feature with the Pro-Til's unique design is the fact that all of the machine's weight is evenly spread across all of the cultivated strips, fundamental in reconsolidating the tilled strip to remove air pockets, widely recognised as very necessary to ensure quick, healthy root development.

### Zone C - Seeding

The coulter tool bar works totally independently to the cultivation zone, ensuring easy adjustment and constant seed depth control. Each coulter hydraulically exerts pressure to each of the seed depth wheels to ensure accurate seed placement and excellent seed to soil contact for quick and even germination.







## **Pro-Til** An innovative range of one-pass drills

## **Pro-Til Options**



Specification	Pro-Til 3T	Pro-Til 4T
Working Width	3m	4m
Transport Width	2.95m	2.8m
Hopper Capacity	2800 ltrs	2800 ltrs
Optional Dual Hopper	3400 ltrs	3400 ltrs
Row Spacing	33.3cm	36.3cm
No. of Coulters	9	11
Tractor Requirement	180hp +	240hp +
Working Speed	6-15km/hr	6-15km/hr
Format	Trailed	Trailed

"The standout feature for me is the consistent establishment from corner to corner across a wide range of soils in a mixed farming system"

Will Massie, Staffordshire

#### **Key features of Pro-Til range:**

- 1. Auto-Reset or shear bar front tines
- 2. Variable seed metering unit
- 3. Choice of seeding coulters
- 4. Hydraulically driven fan
- 5. Seed flow monitors
- 6. Hydraulic bout marker
- 7. Adjustable pressure harrow hydraulically operated
- 8. Semi-pneumatic seed packer
- 9. Fully integrated drill management system
- 10. Independent pressurised seeding arms coupled with adjustable wheel for very accurate seed depth across the field
- 11. A choice of seeding widths with the Select series



Pivoting Front Cutting Discs

Front discs reduce soil movement and surface disturbance, particularly useful when drilling directly into grass leys.

Stocks TJ8 Slug Pellet/Avadex Applicator

Up to two Stocks TJ8 applicators can be added to a Mzuri Pro-Til for additional application of slug pellets, avadex or small seeds. These can be piped to deliver product to either the harrow bar via spreader plates, or directly behind the path of the coulter.

• Dual Hopper

All trailed Pro-Til models have the option to be dual tanks, allowing flexibility to apply fertiliser down the front leg and seed down the rear coulter, or equally allowing for two different seeds.

• Double Harrow Bar

For operators who prefer an even smoother field finish, the Pro-Til can be fitted with a double harrow bar, pictured above.

Paddle Harrow

As an alternative to a tine harrow bar, we offer a paddle harrow with reversible paddles.

• Seed Monitoring

Real time seed flow monitoring gives operators peace of mind with an in-cab insight into the performance of each coulter, designed to notify the operator of any blockages.

• Auto-Reset Front Legs

The Pro-Til is fitted with shear bar front leg protection as standard, but operators have the option to upgrade to hydraulic auto-reset depending on their requirements.

• Pre-Emergence Markers

Ideal for pre-emergence spraying, the pre-emergence markers clearly identify the tramlines prior to the crop emerging.

• Marker Arms Simple centre-point positioning aid for use with the absence of GPS.





#### **Coulter options:**

#### **1" Single Band Coulter**

Our lowest disturbance coulter, the 1" single band coulter places seed in a single strip and is best suited for larger seeds such as beans or peas.

#### **3" Dual Band Coulter**

Popular as a good low disturbance all-rounder, the 3" coulter places seed in two bands and is well suited to cereal crops.

#### **5" Dual Band Coulter**

Our standard coulter, the 5" dual band coulter is best suited to cereal crops whilst also useful for smaller seeds and cover crops.

#### 7" Dual Band Coulter

The 7" dual band coulter is our widest coulter and by widening the distance between the two seed bands, it reduces the spacing between the coulters, giving a more conventional crop finish.

## **Pro-Til Select**

A one-pass drill with a choice of row spacing settings







As well as all the benefits of a standard Mzuri Pro-Til drill, the Mzuri Pro-Til Select series can drill in a choice of narrower or wider row spacings. The wide row option makes the Select particularly suited for crops such as maize, oilseed rape and legumes. It is equally at home with drilling narrowly-spaced crops including wheat, barley and oats.

Not only does a bigger inter-row spacing allow the crops to meet their nutrient demand and produce a stronger root system, it also awards better light interception from the top of the canopy all the way down to the base of the stem. This, in return, results in a healthier, bushier and higher-yielding crop.

The free flow of air movement helps to reduce moisture and control the associated fungal diseases whereas the extra space between the leaves minimises the transfer of disease by contact. The additional width of the interrow, coupled with a high clearance of the tine legs, enable users to work with huge amounts of surface residue which allows to improve soil condition. The straw acts as a mulching layer to protect the soil from erosion and seals in the natural moisture, preventing the ground from drying out. It also harbours a range of beneficial fauna and helps to rapidly increase earthworm population, both of which are vital for improving soil fertility and structure.

Pro-Til Select offers a wide choice of coulter fittings which awards users the flexibility to carry out precision seeding, strip tilling and low disturbance direct drilling with just one piece of equipment, making it the ultimate one-pass drill for all combinable crops.

The Pro-Til Select is available in 3, 4 and 6 metre trailed models.

Specification	Pro-Til 3T Select	Pro-Til 4T Select	Pı S€
Working Width	3m	4m	6n
Transport Width	2.95m	2.8m	2.9
Dual Hopper Capacity	3400 ltrs	3400 ltrs	43
Row Spacing	33.3cm or 6.6cm	36.3cm or 2.6cm	35
No. of Coulters	9	11	17
Tractor Requirement	180hp +	240hp +	30
Working Speed	6-15km/hr	6-15km/hr	6-
Format	Trailed	Trailed	Tra

#### ro-Til 6T elect

m

95m

300 ltrs

5.3cm or 0.6cm

·

00hp +

-15km/hi

ailed







## **Pro-Til Xzact**

The innovative one-pass seed singulation direct seeder



Marking a huge advance in seeding technology, the innovative Mzuri Pro-Til Xzact combines a direct drill and a seed singulation seeder in just one piece of equipment, meaning that one drill can now seed all types of arable and precision crops - in a single pass.

#### Two drills in one

Topped up from the drill's main 2800 litre seed hopper, the Xzact precision metering system is an optional extra that can be fitted to most Pro-Til drills to provide non-stop seeding of precision crops including maize, sunflower and soya. The drill can just as easily be converted back into a standard Pro-Til drill for crops such as wheat, oilseed rape and beans.

Pro-Til Xzact delivers exceptional seeding accuracy, typically awarded by conventional precision seeding drills, in a form of a single pass drill, yet without any of the downsides. The innovative 'one-pass seed singulation' approach eliminates ploughing and power-harrowing operations, which are widely recognised as huge contributors to erosion and loss of moisture, meaning that the soil's natural structure can be preserved to the benefit of the crop and the environment.

#### Significantly better results at considerably lower inputs

Capable of drilling straight into previous crop residue, the Pro-Til Xzact precision striptill drill has been proven to retain moisture, reduce soil and water erosion and improve soil structure whilst cutting diesel requirement by up to 80% compared with conventional seeding - without penalty to the yields.

With soil deterioration and lack of moisture proving an increasing problem in some heavily cultivated areas, partial or severe crop losses caused by the weather extremes, water erosion or draught are fast becoming commonplace.

Extensive trials comparing conventional establishment and Pro-Til Xzact one-pass singulation seeding have shown that crops drilled with the Mzuri Xzact have consistently outperformed conventionally established maize right through to harvest. During

extremely dry conditions, some plough & press maize failed to germinate whereas the Xzact seed singulation direct method produced a viable, healthy crop thanks to the system offering the optimum environment for the seed to develop and reach its full potential.

#### Non-stop precision seeding with advanced Xzact metering system

Pro-Til's seeding arm moves up and down to follow the contours of the ground, as well as pivots side to side to ensure the seed is always placed centrally in the pre-tilled area.

The Xzact system features an electronic seed singulating seeding unit and coulter assembly to deliver single seed placement whilst the constant hydraulic pressure exerted onto each coulter arm ensures the seeding depth accuracy.

The system uses adjustable-pressure vacuum metering to accurately space crops, regardless of the seed size. Each unit contains a metering disc and a singulator to prevent skips or doubles and is driven by an electric motor which maintains the same seeding distance at variable speeds.



Unlike with conventional singulation seeders, the mini hoppers on the Pro-Til Xzact drill are automatically replenished by a bulk fill mechanism on each metering unit directly from the Pro-Til's main tank, thus extending the drilling time and reducing downtime.

Pro-Til Xzact features hydraulic pressure adjustment to each individual arm and a coulterfollowing semi-pneumatic wheel to remove air pockets whilst ensuring that the soil is not over-consolidated for compaction-intolerant precision crops.

#### Unique combination of features to preserve soil and improve bottom line

Precision crops, particularly maize, favour warm, moist, well-structured soil and the Pro-Til Xzact can create these optimum conditions in a single pass.

As well as the state-of-the-art Xzact singulation metering system, the Pro-Til offers a range of additional benefits awarded by the Mzuri onepass technology.

The Pro-Til only cultivates a narrow strip of soil, leaving the rest of the ground undisturbed, thus not only improving the soil's natural structure and helping beneficial organisms to flourish, but eliminating unnecessary passes and reducing labour and fuel requirement. Less farm traffic. in turn, means reduced compaction, better structured soil and a healthier root system.

Additionally, the drill boasts a unique combination of features which have been engineered to prepare the perfect 'nursery seedbed' and ensure even germination.

With the help of the front cutting discs, the Pro-Til Xzact can drill directly into previous year's stubble,





#### **Specification**

- ransport Width Vorking Speed
- thus preserving valuable soil structure and moisture, both of which are paramount for the successful establishment of precision crops. Independent leading discs are spring-

Next, the leading leg loosens the soil, preparing a strip of friable tilth, and places a band of fertiliser just below the seeding depth to ensure quick access of nutrients for fast root establishment. The band is then



	Pro-Til 3T Xzact	Pro-Til 4T Xzact
	3m	4m
	2.95m	2.8m
city	3400 ltrs	3400 ltrs
	33.3cm or 66.6cm	36.3cm or 72.6cm
	9 or 5	11 or 6
tering Units	5	6
nt	160hp +	240hp +
	6-15km/hr	6-15km/hr
	Trailed	Trailed

loaded and pivot side to side to ensure good trash flow.

gently reconsolidated by a following press wheel to remove pockets.

Seed is accurately placed at a consistent seeding depth by the Pro-Til pivoting seeding arm fitted with the Xzact singulation metering system. Once the soil has been gently reconsolidated by the coulterfollowing semi-pneumatic wheel, a hydraulically pressurised harrow bar smooths the surface if required, ready for the effective application of preemergence chemicals.







#### The iGen is an innovative mounted direct drill designed for high-output, low disturbance seeding without compromising on establishment.

The iGen has been engineered to offer an economically efficient direct drilling solution. Its unique design, coupled with its linkage-mounted configuration, presents a more affordable introduction into direct drilling, that doesn't sacrifice precision in seeding depth or establishment.

Designed to drill directly into stubbles, cover crops and grassland the iGen is a versatile tool for establishing a wide range of arable and cover crops.

Supporting the retention of previous crop residue on the surface, the iGen features staggered tines and generously spaced rows, allowing crop residue to flow easily through the drill. This design maintains its commitment to precise seed placement whilst supporting healthy soil, improved organic matter and a resilient soil structure.

Perfectly suited to microgranular or liquid fertiliser application, the iGen

can be fitted with a secondary hopper to deliver nutrients within the seeding zone, achieving targeted nutrition vital for quick, even establishment.

These nutrient-ready leading tines also act to clear residue from the seeding zone, before being reconsolidated via a full width steel packer to remove air pockets. Independent seeding coulters each with its own depth wheel deliver seed at a predetermined depth, with adjustment across the width of the drill straightforward and effective.

Seed metering is simple yet accurate with a variable speed electric motor and gearbox unit driving a specific seed roller. A range of seed rollers are available to accommodate various seed varieties. The calibration process is both uncomplicated and precise. Just press an electric button, measure the gathered seeds' weight, and input the quantity into the control panel.

The onboard drill management system offers real-time seed rate modification while also encompassing essential control and monitoring features for precise operation.









Specification	iGen 300	iGen 400	iGen 480	iGen 600
Working Width	3m	4m	4.8m	6m
Transport Width	3m	3m	3m	3m
Hopper Capacity	2,200ltrs	2,200ltrs	2,200ltrs	2,200ltrs
Fertiliser Hopper	Optional	Optional	Optional	Optional
Row Spacing	33.3cm	36.3cm	32.0cm	35.3cm
No. of Coulters	9	11	15	17
Tractor Requirement	180hp +	220hp +	260hp +	280hp +
Working Speed	6-16km/hr	6-16km/hr	6-16km/hr	6-16km/hr
Format	Linkage	Linkage	Linkage	Linkage

## **Seeding options**

The iGen is available with two coulter configurations, both suited to simple, yet precise seed delivery.



#### **Independent Depth Wheels**

Independent coulters fitted with V-shaped depth wheels give operators individual seed depth control across each coulter. Following the ground contours, the independent depth wheels ensure accurate seed placement across a range of soil types, and reconsolidate behind the seeding zone for the optimum germination environment.



#### **More options**

#### Secondary Hopper

Suited to micro-granular fertiliser or solid chemistry applications, the Pro-Til iGen can be configured with an additional hopper with its own independent metering system.

#### Seed Monitoring

Real time seed flow monitoring gives operators peace of mind with an incab insight into the performance of each coulter, designed to notify the operator of any blockages.

#### Auto-Reset Front Legs

The iGen is fitted with shear bar front leg protection as standard, but operators have the option to upgrade to hydraulic auto-reset depending on their requirements.

#### Pre-Emergence Markers

the pre-emergence markers clearly identify the tramlines prior to the crop emerging.



#### **Twin Spring Tine Coulters**

The simplest configuration, the Twin Tine system features two spring tines and seed delivery boots to deliver two rows of seed within each seeding zone. Seed depth is controlled across the width of the machine through adjustment of the entire toolbar, offering simple yet effective setup.



Ideal for pre-emergence spraying,

#### Marker Arms

Simple centre-point positioning aid for use with the absence of GPS.







The Mzuri iPass has been specifically designed to offer high output, efficient low disturbance seeding direct into stubble and cover crops, while retaining its ability to drill into cultivated ground.

Auto-Reset leading tines and front discs clear crop residue from the seeding zone to produce a clean till of moist friable soil whilst band placing fertiliser to promote good root development. Accurate seed depth is maintained across the width of the drill with independent, hydraulically pressurised coulter arms each free to self-steer behind the path of the leading tine. Suspended by a parallel linkage that ensures the coulter angle is unaffected by depth the unique seeding arms offer exceptional ground following for uniform emergence over undulating ground.

With a combined volume of 5000 litres, the 60/40 split hopper is pressurised for metering and conveying high application rates accurately at much higher speeds than can be achieved with traditional systems. Seed and fertiliser are delivered from the large capacity tank via four variable speed electric metering units designed for high output, efficient delivery. One to each side, two units control fertiliser and two control seed giving operators the option to shut off half of the width.

The iPass metering system can accommodate all fertiliser compounds and seed types typical of most arable operations including small OSR and grass seeds to large maize and winter beans.

The Mzuri iPass is fitted with a commercial 18 tonne rated axle with floatation tyres to accommodate the extra-large hopper for increased productivity and reduced downtime. Hydraulic brakes are supplied as standard with air brakes available as an optional upgrade.

The Mzuri iPass is available in widths of 4, 4.8, 6 and 8 metres with two row spacing options per model, excluding the 4.8m.

#### Zone A - Cut surface and clear residue

The leading serrated disc cuts through the surface straw allowing residue to flow freely through the machine.

#### Zone B - Fertiliser placement

The auto-reset tine clears crop residue from the till and band places fertiliser below the seeding zone to reduce the fertiliser requirement and ensures early nutrient accessibility, providing essential support for quick, strong and healthy establishment.

#### Zone C - Seeding

A unique ball joint system\* gives each hydraulically pressurised coulter arm exceptional ground following and selfsteering capabilities for uniform emergence over undulating ground. The coulter legs are suspended by a parallel linkage that ensures the coulter angle is unaffected by depth and offers control independent to the front fertiliser zone.

#### **Zone D - Reconsolidation**

Individually adjustable V-shaped press wheels offer excellent reconsolidation for seed to soil contact necessary for quick and even germination. Press wheel scrapers keep wheels clean in wet conditions.



## **iPass** High output, low disturbance direct drilling



Specification	iPass 412	iPass 416	iPass 4818	iPass 618	iPass 624	iPass 824	iPass 832
Working Width	4.0m	4.0m	4.8m	6.0m	6.0m	8.0m	8.0m
Transport Width	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m
Hopper Capacity	5000ltrs	5000ltrs	5000ltrs	5000ltrs	5000ltrs	5000ltrs	5000ltrs
Split Tank	60:40	60:40	60:40	60:40	60:40	60:40	60:40
Row Spacing	33.3cm	25cm	26.6cm	33.3cm	25cm	33.3cm	25cm
No. of Coulters	12	16	18	18	24	24	32
Tractor Requirement	170hp +	200hp +	220hp +	240hp +	260hp +	280hp +	300hp +
Working Speed	6-18km/hr	6-18km/hr	6-18km/hr	6-18km/hr	6-18km/hr	6-18km/hr	6-18km/hr
Format	Trailed	Trailed	Trailed	Trailed	Trailed	Trailed	Trailed

## **iPass options**



## Choise of Coulter spacing

Whether you prefer a more traditional, closer rowed finish to your crops, or a wider spacing that allows for more light interception, the iPass range offers several row spacings.

Model	
iPass 412	
iPass 416	
iPass 4818	
iPass 618	
iPass 624	
iPass 824	
iPass 832	

Drill Width	Number of Coulters	Row Spacing
4.0m	12	33.3cm
4.0m	16	25cm
4.8m	18	26.6cm
6.0m	18	33.3cm
6.0m	24	25cm
8.0m	24	33.3cm
8.0m	32	25cm

## **Rezult** A straw rake for efficient seedbed management





The Rezult straw rake marks a major advance in straw and stale seedbed management, and is the ideal tool to control black-grass, cut slug activity and accelerate straw decomposition.

The Rezult features a five-row tine harrow, with the option to fit a set of leading discs in front of them. These discs chop straw and trash, and mix it with the surface tilth; the tines are then able to spread the mix over the full working width.

The Mzuri heavy duty, virtually unbreakable, extra long 28" tines are much stiffer than regular tines, and offer high frequency vibration to enhance the shatter action.

The leading discs generate sufficient amounts of tilth making the Rezult an ideal tool for seed and chemical incorporation.

#### Key feaures of the Rezult

- Independent spring loaded front discs
- Hydraulically adjusted rake angle
- Hydraulic folding coupled with automatic locking for safe and legal transport
- Wrap around tines, proven to be virtually unbreakable
- Five banks of tines offer huge clearance



#### Specification

Working Width	7.
Transport Width	2
Transport Locks	S
Road Lighting Kit	S
Tine Spacing	6
Disc Spacing	3
Optimum Working Speed	1( (1
Tractor Requirement	12

"I am continually impressed by the outstanding customer service from the Mzuri team, an aspect that sets them apart from other companies I have dealt with. The sales and service team go above and beyond." Adam Lewis, Herefordshire





- 5m
- .8m
- tandard
- tandard
- cm
- 1cm
- D-20km/hr typically 8ha/hr)
- 20-200hp



## Rehab

The low surface disturbance subsoiler



The Rehab is a specially designed low surface disturbance subsoiler - it increases available oxygen and nutrients to promote quick root development and a healthy plant. The changeable winged points provide maximum soil shatter combined with a spring-loaded cutting disc to ensure minimum surface disturbance and better moisture retention.

By loosening lower down the soil profile, water infiltration is improved, and vigorous growth is encouraged by deep rooting of the following crop. The soil is better aerated and warms rapidly in the spring.

The Rehab encourages a friable surface with the entire previous crop residue remaining on the surface to avoid locking up large amounts of valuable nitrogen. Available in 3, 4 and 6 metres, the Rehab features a generous leg spacing of 500mm and a stagger of 750mm to ensure free movement of residue for continuous flow.

The model is linkage mounted and comes complete with spring-loaded pivoting discs to provide clean cutting action through crop residue and topsoil whilst being able to avoid stones. Individually mounted, the disc arms self-adjust to follow the contours of the ground to ensure accurate engagement across the width of the machine. Following the disc, a 15mm hardened steel leg features a replaceable tungsten carbide tipped point to pierce and lift the soil profile whilst creating minimal surface disturbance. Operators can determine the level of fracture through the profile by a choice of three wing widths including 55mm, 115mm and 135mm. 'Hammer-thru' shear pins minimise downtime whilst ensuring maximum draft control and maintaining the correct draft angle of the wing.

Behind the legs, follows a substantial packer roller with V profile rings, strategically spaced to reconsolidate either side of the leg to create a weatherproof finish.



Specification

Working Width

Number of Legs

\_eg Spacing

.eg Stagger

Typical Working Depth

Leg Protection

Working Speed

Press Roller

Optimum

Tractor Requiremen

System

**Cutting.** Pivoting serrated discs mounted on spring-loaded arms slice through the surface residue, ensuring a lower disturbance to the topsoil. Consistent contact with the ground is achieved across field contours.

Shattering. Shear bar protected legs maintain an accurate draft angle of the ground engaging parts for better control of shatter action. Each leg is fitted with a two sectioned replaceable point and wing, with a choice of wing width depending on the level of fracture required.

**Consolidating.** A steel V-shaped packer directly consolidates either side of the cultivated area and closes the opening behind the leg, leaving a weatherproof soil structure without the risk of drying out.

3

Rehab 3	Rehab 4	Rehab 6
3m	4m	6m
6	8	12
50cm	50cm	50cm
75cm	75cm	75cm
15cm-40cm	15cm-40cm	15cm-40cm
'Hammer thru' Shear Bar	'Hammer thru' Shear Bar	'Hammer thru' Shear Bar
60cm V-Profile	60cm V-Profile	60cm V-Profile
8-12km/hr	8-12km/hr	8-12km/hr
120—220hp	160-400hp	300-500hp





#### RAZOR SHARP INNOVATION



# **The Razorback Way**

Backed by decades of expertise, the Razorback range is a display of pioneering design with the high guality expected of an established British manufacturer.

#### **Our evolution**

Headed by Martin Lole, a farmer and engineer who has enjoyed a successful career as the driving force behind several leading UK vegetation and conservation agriculture brands, Razorback draws on over 100 years of combined industry knowledge shared by its experienced engineering, sales and service teams.

The innovative range includes state-of-the-art rotary hedge cutting and mowing solutions which are synonymous with quality, durability and ease of use.

By challenging the status quo Razorback continuously pushes the envelope in terms of innovation and offer high-end, user-friendly specification as standard across the whole range.

#### Tried and tested solutions

Extensive testing during the development process gives Razorback operators peace of mind knowing they have invested in tried and tested solutions that will deliver on their promise.

The high benchmark of Razorback's quality is mirrored by exceptional after-sales service and field support to ensure users get the most out of their machinery when it counts.





The RT Series boasts solid construction and an efficient rotary blade action that make light work of demanding agricultural and amenity operations.

## **Residue Harrow**





## **Auto-Level**

Self-Levelling Reach Mower

Incorporating Revolutionary technology, the Razorback Auto-Level is a next generation series of reach mowers with a smart self-levelling device.

## **RT Series**

#### Rotary Wing Mower

Stubble and Grassland Management

Designed to compliment the RT Series mower, the razorback Residue Harrow proves itself as an indispensable tool in the management of vegetation.





3



## Auto-Level Self-Levelling Reach Mower



## A cutting-edge system with decades of heritage

Incorporating revolutionary technology, the Razorback Auto-Level is a next generation series of reach mowers with a smart self-levelling Co-Pilot device that delivers increased productivity, a superior finish and significant cost savings.

Highly versatile with a range of head and reach options, the Auto-Level is at home with all types of verge mowing and hedge cutting tasks.

With robust construction the Auto-Level series combines efficiency, power and usability making it appealing to farmers and contractors alike.

## Smart self-levelling Co-Pilot\* system

The Auto-Level Series features revolutionary self levelling Co-Pilot\* technology which ensures that the main frame of the machine remains level at all times, irrespective of the tractor angle in relation to undulating ground.

This unique feature awards an exceptionally smooth finish regardless of the terrain, making for a more comfortable and effortless experience.

Operation is simple and precise thanks to the advanced electronic proportional controls which incorporate a 3-axis joystick. The main control box features rotor on/off, level sensitivity and Auto-Level Co-Pilot on/off functions.



- Auto-Level Co-Pilot technology\* keep the machine level at all times
- Advanced electronic proportional controls as standard
- Oil cooler and angle float kit as standard
- 5.5m and 6.8m Telescopic models available

#### Features & head options

High specification comes as standard with the Auto-Level Series, however there's still multiple opportunities to customise the machine specific to the individual operators requirements, including two head options, a quick attach kit and an optional lift float.



#### **Flail Head Series**

- SoftStart rotor available in 1.2m and 1.5m widths, fitted with heavy duty forged hammer flails
- Unique hood design allows for better trash flow and efficient cutting action
- Adjustable front hood and rear roller suits both hedge and verge mowing operations

#### Auto-Level Serie

#### Advanced Controls

Advanced Electror Proportional Contr

Auto-Level Co-Pile

#### Mounting

Rear 3-Point Linka Rear 3-Point to 4-F Stabiliser Kit

## Armset

Parallel Arm Geon Hydraulics

> System Type Pump Type Oil Tank Capacity

Oil Cooler Independent Hydr

#### Safety Equipment

LED Road Lightin Safety Breakaway

ower Slew

Tractor Requiremen Minimum Tractor W

Minimum Tractor

#### Specification

Weight (including the Rota and 220 ltr of oil)

Options

Lift Float Kit

Quick Attach Kit Angle Float Kit

Head Options

Flail Head 120

Flail Head 150

es	550	680	
5			
ic ols	Standard	Standard	
t*	Standard	Standard	
ge	Standard	Standard	
Point Hitch	Standard	Standard	
etry	Standard	Standard	
	68HP	68HP	
	Gear	Gear	
	Cast	Cast	
	220ltrs	220ltrs	
	Standard	Standard	
aulic System	Standard	Standard	
Kit	Standard	Standard	
	Standard	Standard	
	Standard	Standard	
nts			
/eight	3,500kg	4,500kg	
lorsepower	85HP	95HP	
	5.5m	6.8m	
ary Head	1,880kg	2,050kg	
	Optional	Optional	
	Optional	Optional	
	Optional	Optional	
	1.2m cutting width with belt driven SoftStart rotor. 18 heavy duty forged hammer flails.		
	1.5m cutting width with belt driven SoftStart rotor. 22 heavy duty forged hammer flails.		

## RT Series Rotary Wing Mower



## The highest standard of British engineering

The RT Series boasts solid construction and an efficient rotary blade action that make light work of demanding agricultural and amenity operations.

Designed and built in the UK, the RT Series is the result of decades of heritage and as a result, culminates a multitude of clever features to improve performance and operator satisfaction.



With features like an easy-clean double skin deck and fulllength removable skid shoes the machine is built with strength and durability in mind.

In addition, the RT Series is fitted with high specification gearboxes and driveshafts complete with easy lubrication system. Housed by top of the range guards, the 250 HP driveline assembly provides ample power to the mower's triple-blade rotors.





#### **Exceptional finish**

The combination of the deck's unique shape and the triple blade configuration produces unparalleled updraft to award users a superior cut, across all lengths of swath finishes.

Incorporating a generous overlap the free-swinging blades have been made out of Swedish boron steel to deliver an exceptionally clean cut. Chopped residue is distributed across the entire working width of the machine and debris is contained by the front and rear chain guards.

Four individually pressurised wheel arms fitted with heavy duty wheels on twin axles award superior stability thanks to better cutting height control, contributing towards a smoother finish.

Allowing the machine to closely follow the contours of the ground the RT's wings offer a wide range of movement and an innovative yet simple, wing free float helps to protect rams from excessive wear.

## Built with durability and ease of use in mind

As well as the fine quality of cut, the attention to detail extends to other useful features such as a tight turning circle, MOD approved hydraulic hoses, a PTO driveline rest, full width LED lighting bar and a compact transportation width of just 2.4m.

The high-end specification and exceptional performance in all conditions make the Razorback RT Series a sound choice for farms, airports, racecourses and council and amenity contractors.



#### RT Series Dimensions

Working Width Overall Width Overall Length Transport Width Minimum Transpo Weight Cutting Capacity Cutting Width Cutting Height

**Cutting Capacity** 

Driveline Splitter Gearbox Rati Rotor Gearbox Rati Slip Clutch Protecti Tractor Requiremen PTO Speed Minimum Tractor HI Blade Configuration Number of Rotors Number of Blades

Blade Design Blade Overlap

Swedish Boron St Front Hitch

Parallel Levelling F Main Driveshaft Joi Hydraulic Hose Rad & PTO Holder Rear Implement Hi Clevis Hitch Rear LED Lighting Deck Configuration

Deck Construction Hydraulic Wing Operating Range

## Front/Rear Guards Wheel Assembly

Heavy Duty Low Pr Implement Wheels Wheel Mounting &

Options Rear Hydraulic Se



	RT 500	RT 750
	5m	7.5m
	5.27m	7.77m
	5.58m	5.9m
	2.4m	2.4m
t Height	2.15m	3.4m
	2,960kg	4,000kg
	5.0m	7.5m
	0mm - 400mm	0mm - 400mm
	6ha/hr	9ha/hr
ating	250 HP	250 HP
ing	100 HP	100 HP
ion	Standard	Standard
nts		
	1,000rpm	1,000rpm
P	100hp +	120hp +
n	_	
	3	5
	9 (3 per rotor) Hardened Updraft	15 (3 per rotor) Hardened Updraft
	Swinging Blades	Swinging Blades
	100mm	100mm
el Blades	Standard	Standard
ront Hitch	Standard	Standard
int	80° CV Joint	80° CV Joint
:k	Standard	Standard
tch		
	Standard	Standard
Kit	Standard	Standard
ı		
	Double Skin	Double Skin
	120°	120°
	Heavy Duty Close	Heavy Duty Close
	Link Chain	Link Chain
ofilo		
ofile	Standard	Standard
Assembly	8 Twin Axle Wheels	8 Twin Axle Wheels
	(2 per Axle)	(2 per Axle)
vices	Optional	Optional

## **Residue Harrow**

Stubble and Grassland Management



## Versatility for grassland and stubble

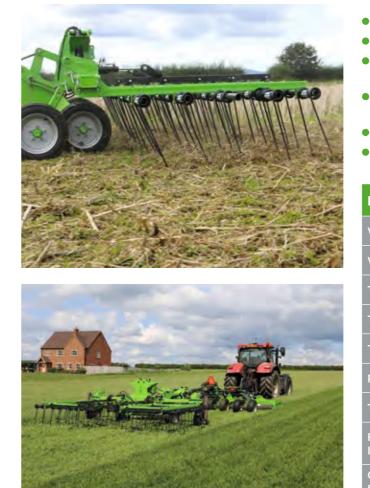
Designed to compliment the RT Series Mower, the Razorback Residue Harrow proves itself as an indispensable tool in the management of vegetation.

With a uniquely designed parallel linkage, the tines maintain constant contact with the ground independently of the drawbar, whether affixed behind the RT Series or directly to the tractor.

When used together, the duo provide even greater versatility over a range of applications including creating stale seedbeds pre drilling and improving grassland.







## Taking control of weed and slug pressures

The harrow features five rows of extra stiff 28" tines, that offer higher frequency vibration which enhance the shatter action making it ideal for accelerating straw decomposition and stimulating weed chit in stubble.

When following the RT Series, stubble can be topped, debris distributed and the surface stimulated to promote a flush of weeds and volunteers ahead of Autumn drilling in one-pass.

By consolidating two passes into a single operation, the combination can save users time and diesel helping to bring down establishment costs and can mean growers are able to make best use of their available chemistry to achieve an effective weed kill. The harrow also provides cultural control for slug pressure, particularly in Oilseed Rape stubble where cutting and smashing residue significantly reduces slug habitats, reducing reliance on molluscicide's.

#### Invigorate swards for healthier growth

With adjustable tines, the harrow can be set at different angles, making it the ideal tool for invigorating grassland directly behind the RT Series wing mowers.

Over time, cut residue can often settle at the base of the canopy and form a thatch which can have a detrimental impact on the quality of the regrowth,

- Suited to both grass and stubble applications
- Five rows of 28" heavy duty, virtually unbreakable tines
  5m and 7.5m working width designed to fit behind the RT Series providing a dual action pass
- Floating parallel linkage maintains equal frame depth to ensure the rake carries evenly
- Hydraulic folding to a narrow transport width
- Adjustable rake angle

Residue Harrow	RH 500	RH 750
Weight	1,450kg	1,700kg
Working Width	5m	7.5m
Transport Width	2.4m	2.4m
Transport Length	4.6m	4.6m
Transport Locks	Standard	Standard
Road Lighting Kit	Standard	Standard
Tine Spacing	6cm	6cm
Heavy Duty Low Profile Implement Wheels	Standard	Standard
Optimum Working Speed	15 - 20km/hr	15 - 20km/hr

leaving pastures feeling tired and unproductive.

By disturbing residue in the lower levels of the sward, the wrap around tines promote better aeration, and can reinvigorate grassland, resulting in healthier growth.

The Razorback Residue Harrow's flexibility makes it suitable for farmers, airports, racecourses and amenity operators.









We are passionate about well-engineered, user friendly solutions with aftersales support that gives you total peace of mind



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E & OE. Mzuri's policy is one of continuous improvement. The right to change specification or equipment at any time is reserved. Orders are accepted subject to our standard conditions of sale; a full copy is available on request. A twelve month warranty is available to customers, directly from your Mzuri dealer. Further details and copies of these documents are available on request. All weights, measurements and horse power requirements shown in the literature are approximate.

