

# Meet the new Menzi Muck

November 1, 2022



To celebrate the addition of a purpose-built Menzi Muck to their mechanised vegetation management fleet, RBD caught up with Craig Sanders, senior manager of the **Ground Control** mechanisation division to understand more about why this machine is taking the world of arboriculture by storm, its environmental benefits and how they are using it at Ground Control.

## Tell us a bit about “mechanised arboriculture”

Mechanised arboriculture or mech arb, as we call it, is the method of tree-felling operations and site clearances using machinery that replaces the need for humans to climb trees with chainsaws.

Mech arb machinery embodies a fleet of specialist vehicles operated by man to fell trees and vegetation in a cabin from ground level.

The machines not only enable our teams to work more safely and efficiently when working around the canopy of a tree, but also reduce the fatigue and strain on the human body.

The speed and safety benefits of mech arb, enable us to cover more ground in less time, minimising disruption, and maximising cost savings for the client.

Typically, a fleet will include an Excavator with tree shear, grapple saw and grab, Kubota 8-tonne excavator, and a Bandit whole tree chipper.

We currently have seven different machines in our fleet, plus key attachments including spider excavators, tracked excavators, tree shears, grapple saws, and whole-tree chippers to enable us to mechanically remove large areas of infected trees as safely and efficiently as possible.

Our mech arb machinery can shear/grapple saw large trees and even the most stubborn vegetation on steep terrains and in hard-to-reach areas.

The power and capabilities of our mech arb fleet and operators enable us to offer value-added services such as tracking through dense woodlands on steep slopes, drainage, ditching, damming, silt removal, flailing, habitat relocation, and culvert CCTV operations.

## And the Menzi Muck. What is it, and what can it do?

The Menzi Muck is a 360-degree excavator for felling, mulching, and vegetation clearance.

Our Menzi is extremely fast, powerful, and efficient and can maneuver up to nine tonnes of materials with the Intermercato Grab attachment. It is the most versatile machine of our fleet when it comes to managing the hardest-to-reach, most hazardous vegetation that borders our country's critical infrastructure, powerlines, and utility sites.





A great example of this was a recent river clearance for Severn Trent. To minimise disturbance to spawning trout and safely clear a build-up of debris around a sewer pipe, the Menzi Muck was deployed to travel through the stream, to clear the blockage. This was successfully achieved in just one day.

Equipped with the Westtech tree shear and Vosch grapple saw, the Menzi can reach areas that other 360 excavators cannot. It has a cutting capability of 350mm, huge amounts of power, and is fitted with Steel wrist and X watch systems, which work in many positions, making it safer and easier to shear and dismantle the largest of trees.

With the Fae Mulcher attachment, it has the capacity to take 190L of oil per min at 350bar which provides enough power to mulch up to 20 trees per hour, on even the most extreme of sites.

## **The Menzi Muck has been a popular piece of mech arb kit for many years. What are the most exciting new upgrades?**

The most recent upgrades include our VOSCH RSG1600-7T-HD grapple saw. We chose to purchase this as some of our clients require trees to be either pollarded, coppiced, or left as a monolith. The grapple saw leaves a nice clean, tidy cut to the tree that a normal tree shear would not. The grapple saw also generates 0% chain shot risk to the operator or banksman (meaning if the chain broke it couldn't strike anyone on site).

We have also added wider tyres to reduce the impact on any ground we travel over, making sure any 3<sup>rd</sup> party land we work on, is left as if we were never there.

We have added extra guarding to the cab including a Lexan 20.4mm upgraded windscreen meeting BS ISO 21876 standards allowing our operators to be as safe as possible when dealing with dead and dangerous trees. Making sure our operators have the most optimum protection is one of our key priorities.

Our new machine is also a slightly larger machine than our original Menzi, giving us a greater lifting capacity and allowing us to deal with larger trees than before.

This Menzi is equipped with our steel wrist SQ60 tilt rotator and quick oil system which allows us to change attachments in seconds. This minimises downtime and allows a completely different operation to take place with minimal effort. It also lessens the need for other machinery on-site, making it a cost-effective solution.

Also included is the X watch XW5 RCI with slew and height restrictor, so when working in environments that may be near live rail or roads, we can set restrictors so there is no potential risk for the Menzi to encroach in live traffic. It also has a lifting system so we know the weight of the material we are dismantling and shows the operator what weight of tree can be cut in its operating position, avoiding risk overload.

We have added industry-leading safety features that will not only make the mechanised operation safer, but will also improve outputs and production.

The slope capability of this machine is phenomenal, it can negotiate rocky terrain.

## **This machine has been purpose-built to support vegetation operations and continually works to reduce risk when clearing infected or hazardous vegetation such as ash dieback. How does this new piece of kit help to achieve this?**

Felling dying ash is a dangerous operation but a crucial one as there is no natural defense against it. If left untreated, the disease will spread and infect other trees, creating environmental damage and making more trees unstable and hazardous to the surrounding infrastructure.

Mechanical felling allows our trained operatives to remove the tree in one whole piece or dismantle it from the safety of their cab removing the need for dangerous chainsaw operations.

As the Menzi is such a versatile excavator it allows us to access areas that a normal excavator would not reach therefore the risk of being completed manually is fully reduced when working on DDD (diseased, dangerous, or dead) trees.

Our new Menzi is perfect for this job as this all-terrain machine can literally reach the highest and most sensitive parts of the tree, from just about any angle. It is fitted with a full Steel wrist and X watch systems

which give the Menzi incredible maneuverability. It is also incredibly powerful, with a mulching head supplied alongside tree shears and a grapple saw that will cut up to 350mm. It can lift nine tonnes, enabling the job to be done much quicker as well as safely.

Excavators with 18m reach, equipped with grapple saws allow us to safely dismantle the biggest of infected ash trees in the safest and most controlled manner.

It is also incredibly quick, as demonstrated on one of its first expeditions this August when it cleared a row of infected ash dieback trees in hours – a job that would traditionally take days.

## **Where might we see the new Menzi Muck in action with Ground Control?**

Anywhere nationwide as Ground Control has frameworks with Network Rail, local councils, WPD, SSE, National Highways, Environment Agency, Babcocks, Severn Trent, Canals, and River Trust to name a few.

We try to facilitate all of our clients by offering the safest and most efficient method for any project.

We pride ourselves on finding solutions to problem sites and always deliver a world-class service.

## **An onlooker could mistake the Menzi for a real-life transformer, tearing down trees. How does the positive environmental impact outweigh the negative?**

We rarely remove trees altogether unless this is absolutely necessary for safety and environmental reasons. For example, using our Menzi to deal with ash dieback disease, is actually more beneficial to the environment than harmful. This is due to its precision, and ability to tackle the exact issue without disrupting surrounding vegetation and wildlife. The speed at which the Menzi can operate, also significantly reduces hours of human activity on greenbelt land.

All our machinery runs on environmentally friendly hydraulic oil to minimise ecological disruption, particularly when we are working near water.

Our sites are assessed by ecologists prior to works taking place to check for wildlife and take action to protect any we find, such as marking out exclusion zones, or rehousing habitats where possible.

Our teams are demonstrable in their consideration of wildlife and will go the extra mile to save and protect any animals they come across. Some recent examples of this include, when an **owl was spotted on a lineside and saved**, when **badger setts were identified and surrounded by exclusion zones**, when **reptiles found on the Cumbrian Rail line were cared for and provided and protected in the habitat they had made their home**, and when our plant operator, Andrew Sullivan, **rescued 10 ducklings from the A470 in Wales**.

We are fully compliant with the current CP009 Standards.

## How do you give something back to the local community?

We re-use the chippings for footpaths, playgrounds, renewable energy biofuels for heating schools and public buildings, firewood to heat homes, timber for the building trade, and for biodiversity projects such as bug hotels.

We recently donated chippings from a [project along the Northumberland Rail line to local schools as part of a local and national social value initiative](#).

On the rare occasions when we must remove a whole tree, due to disease or danger, will always recycle whatever we can save from the tree. An example of this is the [Chowns Mills community chairs, recycled from the timber from a tree removed from the National Highways Chowns Mill Roundabout redevelopment works](#).

Another example of how materials from felled trees are reused can be found in the case study at [Monksmoor Park, Daventry](#).

[For more information on the Menzi Muck, visit Ground Control here.](#)