

A Step Ahead

'Where others stop, we start.'

Extreme conditions give rise to unusual solutions, and if you live in Switzerland, you are likely to find yourself working on steep hillsides much of the time. Whatever the task, you need a machine that will reduce the risk of your tumbling down the mountain.

So it was that Ernst Menzi's first excavator saw the light of day in 1966. The machine was designed to work on steep gradients, and is named after the fictional character Muck, 'the little man who could do it all'.

The factory in Widnau now assembles 120 machines a year. 10% of these are fitted with a harvester head and go into forestry. They have a number of advantages over conventional harvesters – they can work on gradients of up to 100% (45°) if secured via a winch, they are able to surmount all man-

ner of obstacles, and they cause much less ground damage.

The model of choice for forestry is the 11-tonne Menzi Muck 91 4x4, although the larger 111 will also fit the bill. Both are fitted with a 140hp John Deere 4045HF285 4-cylinder common rail diesel engine, and both have an 8.5-metre crane (including a 2-metre telescopic extension). As on most excavators, this swings with the cab, so the operator is always facing the action.

The big difference between the machines is the undercarriage: the 111 has pivot steering, but the fact that the 91 can steer with all four wheels gives it exceptional manoeuvrability without it.

The ability of the Menzi to surmount obstacles has to be seen to be believed. The 91 can not only be transported inside a High Cube container, but it can also clam-



The Menzi Muck, which is normally supplied with the Woody 50 head.

ber straight over the top of the container once let out! A YouTube video of this is accessible via Artcom Tradebridge's website, and it is also available on the Menzi site. The video is taken from a German television programme called 'Wetten, dass', which means 'I bet you! The

bet was that the Menzi could climb right over the container, which is 4.5 metres high, within five minutes. The viewer will be amazed at the skill of the operator as well as the capability of the machine – definitely a case of 'don't try this at home, children'!



(Top left) The Menzi at work in windblow. (Right) The Woody can also be used as a grapple. (Bottom) Extraction methods for use on steep ground – (left) the Pully, a 'skyline' that runs along the ground, made by Konrad Forsttechnik, who make the Woody head, and (right) the Iron Horse from Artcom Tradebridge.



(Left) Steep terrain is the norm in the Menzi's homeland. (Right) Alan Dawson of Artcom Tradebridge, who are the UK dealers for the Menzi.

All this is very interesting, but why would one buy one of these machines when it costs about the same as a purpose-built harvester? Well, as Jürg Iff, Export Sales Manager of Menzi Muck, put it, "We start where others stop." So, if your harvester is working at the limit of its operating range, it may make sense to consider an option that can, literally, take everything in its stride.

Once you have seen the video, you will be aware of just what the Menzi is capable of, but for the time being simply consider that this machine can not merely stretch out its legs to a width of over 5.5 metres, but it can use the leg on the boom as a support to allow it to take two wheels off the ground and place them where it wants to go. It is also equipped with claws that it can dig into the ground when operating on steep slopes.

One benefit of this flexibility is that the Menzi causes far less ground damage than a machine that needs to keep its wheels on the ground

all the time. The Menzi can simply 'walk away from trouble'.

When working in confined spaces, the 91 can shrink to a width of just 2.38 metres. Its crab steering enables it to manoeuvre sideways if necessary and gives it a very small turning circle – under 10 metres. However, it can also simply sit down on the skid plate beneath the cab, and spin on the spot! (This is the method used to turn through 180° on top of the container in the video.)

Of course, excavators that are intended for use on building sites need a little modification before they are ready to venture into the forest. A forestry kit is available for the Menzi which includes Lexan 12mm glass on the cab, additional lights and the necessary hydraulic and electrical preparations for the harvester head. Unlike most excavators, there is no need for a belly plate – the machine is designed to use the ground as a support. Nokian 600x50x22.5 forestry tyres are usually fitted.

The head normally supplied for use in Switzerland and neighbouring countries is the Woody 50, made by Konrad Forsttechnik of Austria, although other, more familiar heads can also be fitted. The Woody head has a felling diameter of 65cm and a delimiting diameter of 50cm.

One advantage of the Woody is that its feed wheels can be retracted, enabling the head to be used as a grapple, with an opening of 95cm, for timber handling.

Naturally, having felled all the timber across an otherwise inaccessible hillside using the Menzi, the problem remains as to how to extract it. If your conventional harvester was unable to traverse the terrain, then the same applies to your forwarder.

But there are many other extraction methods. The skyline is the first and most obvious choice. Also, Menzi dealers Artcom Tradebridge supply the Iron Horse. Then there is the good old timber chute.

A recent innovation from Konrad

Forsttechnik is the Pully. This works like a skyline, but the rope and the carriage run along the ground, making the whole thing cheaper, and easier to set up and move.

Returning to the subject of the Menzi, it should be remembered that, as well as its ability on difficult terrain, it also possesses a number of other advantages over a conventional harvester. Above all it is versatile: it can prepare forest roads, carry a mulcher, do ground preparation, planting, mowing, hedging and ditching... all in all it is about as versatile as that other iconic product from its homeland, the Swiss Army knife.

So, if you are faced with the prospect of harvesting timber across steep hillsides, maybe a Menzi Muck could be a step in the right direction. With a buy-back guarantee from the manufacturer, it's less of a risk than you might think.

Artcom Tradebridge 01764 663000
www.artcom-tradebridge.com
 Menzi: www.menzimuck.com
 Konrad: www.forsttechnik.at



A versatile tool – mulching, or safely removing the tops of trees in town; as well as harvesting, the Menzi can do everything you would expect of an excavator.