



(1) The 'orange cart' (also available in other colours) pulling an I & J ground drive rake.

(2) Kurt Ohrndorf with his pair of Rheinisch-Deutsch geldings in American side backer harness, on the HSKO hitch cart with the new ground driven hydraulic PTO, making easy work of running the four-rotor tedder.

(3) Close-up of the detachable drive for the hydraulic pump, the connection between the wheel and the drive being a standard tractor PTO coupling.

(www.pferdegeschirre.de). This can be used with either shafts or a pole, adjustable for height, and the hitch point can also be raised or lowered to optimise the angle of draught. The platform is low which allows easy access, and both this and the steps on either side have a non-slip surface. In addition, there are foot operated disc brakes and a hand brake, electric lights and sprung seats, either as a single seater or a bench seat. Another example is Norbert Moeller's three-wheeled hitch cart (illustrated in **HHW** Winter 2007) designed for a single



William Castle describes new horse-drawn implements at Europe's largest working horse event

Pferdestark 2013

About 20 miles west of the German town of Hamelin (of rats and Pied Piper fame) is the little village of Wendlinghausen. At its edge is the 17th century Schloss, which for the first time this year was the venue for **Pferdestark**. This biennial festival and show devoted to the draught horse is the biggest such gathering in Europe, and from Saturday morning to Sunday afternoon there was much to see.

Those who came to be entertained were offered a non-stop show programme in the main ring, including dressage in the widest interpretation of the word, driving and pulling competitions, heavy horse football and horseback gymnastics. On the edge of the woods the European logging championship was being contested, whilst past the stands of harness makers, breed societies and implement manufacturers there was an almost continuous progression of horses involved in the agricultural demonstrations. With children having rides on donkeys or forging their own mini horse shoes, rope making demonstrations (out of hemp, I am pleased to say), and good food to be had, the atmosphere of excitement and interest all help to make this a special event.

The main point of **Pferdestark** is the demonstration and celebration of the working horse and what it can do. If the show programme showed the versatility of the horse at play, the ploughing and logging competitions underlined its working credentials. However it is the agricultural and forestry demonstrations which are the heart of **Pferdestark**,

simultaneously allowing working horsemen to demonstrate their skills whilst showcasing the wide range of new implements, vehicles and other equipment which are being produced today.

For some years it was the lack of equipment which held back those wanting to work their horses, but over the last 18 years **Pferdestark** has played a significant role in improving the situation. Not only does it bring in potential customers, but the interaction between innovators, manufacturers and horsemen generates new ideas and provides motivation. In addition **Pferdestark** awards prizes for innovation, both to recognise achievement in horse-drawn technology and to encourage further development. The value of these awards is well illustrated by the continued production of equipment which has received an award in previous years, perhaps when it was still in development.

One such implement is the 'orange' cart, a basic two-wheeled hitch cart designed in Germany and built in Poland

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horse or a light pair, which is available as a basic hitch cart, but also has the option of adding an engine-powered power take off and/or battery-powered hydraulic arms for mounted implements (www.pztn.de).

Kurt Ohrndorf's well-designed hitch cart system, by contrast, gained yet another award this time for his add-on hydraulic ground-drive unit to run the PTO, which fits on the outside of each wheel and can be quickly removed when not required (www.hof-heckseifen.de).

On the hitch cart front, the new kid on the block this year was Christoph Schmidt, who took the first prize for his ground-drive machine, which was not only well put together but also designed for easy draught and the comfort of the horses. In the demonstrations pulling a four-rotor tedder, two horses were well within their comfort zone, something which has not always been the case with some ground-drive hitch carts, and later with three horses this hitch cart successfully powered a baler. On the stand there was also a prototype mounted mower using a double reciprocating sickle bar, and a 2.5 metre combination crumbler/seed drill. With a trailed cart for mounted implements in the pipeline, there is more to look forward to from this inventor and part time horse farmer (www.pferdezugtechnik.de).

Another multi-purpose hitch cart which managed to cram battery powered hydraulics and ground-drive power take off into a vehicle only four feet wide, was a new machine by the Polish company G-W Boguslawski (www.GW-Stablesforhorses.com). They also brought a two-wheeled rear discharge muck spreader for use behind a hitch cart, and according to their catalogue, also produce basic hitch carts, arena graders and logging arches.

Amongst the equipment designed to work independently of tractor tools, another Polish company, Handmet (www.handmet.com.pl), who make a large variety of carriages, exhibited their vehicle for collecting rubbish/recycling. This has a covered seat for three people and a mesh cage ideal for light materials such as paper or plastic bottles, and when full the body can be tipped backwards or to either side with the battery-powered hydraulic tipping gear.

From Italy, a traditional-style side delivery rake made by the Reposs company made its first appearance at Pferdestark, their continued production relying on the requirements of farmers in



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the mountains who use two-wheeled tractors on steep slopes. These machines are therefore light and easy to pull, in part because of the large diameter pneumatic tyres. Also from Italy, Albano Moscardo of Equi Idea (www.noieilcavallo.org) brought a well-made spring tine cultivator for a single horse, and the most recent version of his plough for working right up to and in between grape vines. This is an elegant piece of engineering, being light and easily adjustable, and has been well received by wine growers, who are increasingly turning to the horse. On

(4) Kay Stolenberg and his Boulonnais pair pulling Christoph Schmidt's ground-drive hitch cart running a four-rotor tedder. The extra pair of wheels on the hitch cart were not necessary for this job (see below).

(5) The same horses and hitch cart with the crumbler/seed drill, the tyres on crumbler and hitchcart consolidating the soil to the full width of the drill.

(6) Detail of the gearing for the PTO drive.

(7) The small hitch cart made by G-W Boguslawski.

(8) The refuse vehicle from Handmet. The tipped body shows the light but rigid construction of the under-frame. Vehicles such as this are in use in over a hundred French towns.



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the smallholder's version of this plough there is the option of using a plastic mouldboard, and because of its ease of scouring, on some soils it gives a 13% reduction in draught, making it potentially one of the most exciting prospects for horse-drawn technology.

Besides the European implements, a selection of American tools were on display, concessionary rates having been offered to prospective purchasers if they agreed that their new implement be first displayed at Pferdestark. Making its debut on this side of the Atlantic was I & J Manufacturing's heavy duty ground-drive hitch cart, demonstrated both with their trailed mower featuring the ESM double reciprocating knives with staggered knife sections, and later with a baler pulled by four horses. Also new to Europe was I & J's traditional style mower incorporating the same cutter bar (see page 18 for a full report). One American machine that did not go anywhere but excited considerable interest was the Athens Enterprises 2-horse treadmill which simultaneously ran a band saw and a log splitter. Although the use of horses to drive stationary machinery has been neglected for many years, rather than having your horses standing around on wet days, it does offer a way to keep them fit whilst saving on electricity and doing a useful job.

At the inception of Pferdestark in 1995, one important objective was that the participants should enjoy the event, and over the years they have obviously succeeded in that aim. But they have also done something more, they have created an occasion with an atmosphere that people want to be part of. And it is not just for working horse people and enthusiasts that Pferdestark is a must-see event; there were also thousands of other visitors, so much so that it was difficult to find a good spot to watch the logging competition, and even the ploughing matches had people lining both headlands. Part of the reason why these relatively unexciting events were so well received was the high quality of the commentaries – not only were the competitors and their horses introduced, with information on their origins, age, breed and what they usually do at home, but the commentators, with roving microphones and from obvious personal experience, explained what the competitors were aiming to achieve and why this was relevant to a working situation. By involving the spectators in this way, each part of the event became not just a spectacle but also an education, and by working together with openness and good humour, drew everyone into the world of the working horse.



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(9) The side delivery rake from Repossi.

(10) The Equi Idea vineyard plough of Albano Moscardo, showing how the plough body is set to the side for getting near the vines, while the handles are angled away from the vines.

(11) Detail of the adjustment of the plough. The screw at the back pivots the body in relation to the beam, so with the wheel at a fixed height from the beam, the angle of the plough body to the beam, and therefore the depth of the plough, can be adjusted. The screw at the top allows the handles to be quickly adjusted both up and down and from side to side. The plough body is of a plastic called Robalon, noted for its ease of scouring. Behind is a set of cultivator tines which are interchangeable with the plough body.

(12) Götz Döring's Shires with rope and pulley evensers with the heavy duty ground-drive hitch cart from I & J Manufacturing running a baler.

(13) Sybille and Matthias Ahrens' pair of Fjords yoked to the mower made by I & J Manufacturing.

(14) Two-horse treadmill providing power to a log splitter and band saw.



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