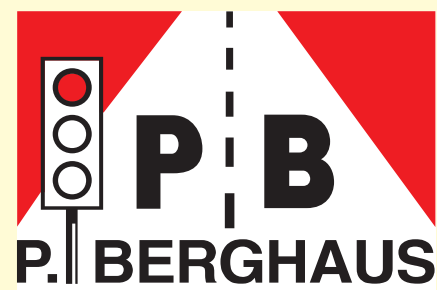


# Berghaus-News

Traffic Technology · Mobile Crash Barriers

Issue 49

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We are member of:



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## New readers: circulation increased to 66,000 copies

This new issue No. 49 of the Berghaus News comes with a considerable increase in circulation of the print version.

With immediate effect, our company newsletter is now distributed in a circulation of 66,000 copies. By the way, this includes 1,000 copies in English sent on request to our English-speaking customers abroad. It goes without saying that you can also download all issues of the Berghaus News since 2003 from our website.

For many years now, the Berghaus News has been featured as an insert in the 10,300 monthly issues of the trade journals Straße und Autobahn together with Straßenverkehrstechnik by Kirschbaum Verlag in Bonn.

Similarly, it is also featured as an insert in the trade journal Bauportal (formerly Tiefbau) by Erich-Schmidt-Verlag Berlin, which is now published with an increased circulation of 45,000 copies.

It is therefore our great pleasure to greet all new readers to our company newsletter Berghaus-News with this latest issue – welcome!

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## Mobile pre-warner with LED technology

Many satisfied customers have relied on the Berghaus mobile warning trailers for many years. And so it made sense to expand our portfolio as vehicle manufacturer last year with the mobile pre-warner MV-LED. Our proprietary LED pre-warner has been particularly popular with traffic safety companies.

Mounted on an unbraked, hot-dip galvanised 750 kg trailer fitted with a parking brake and lined with chequered aluminium plate, the MV-LED can be towed by both cars and trucks.

Our trailer is licensed for speeds of up to 100 km/h and is supplied ex works already with height-adjustable tow bar with replaceable DIN eye and ball-type towing device.

The two LED display signs that have gone through lighting tests as per EN 12966 have a modular structure. The upper LED sign, consisting preferably of round or triangular road signs, has 2304 red and white LEDs (48x48 px).

The lower sign has altogether 5120 white LEDs (64x80 px) and acts in its full height as traffic control board (VZ 501 et seq.) or information sign, also with moving symbols and, on request, with the possibility of separately superimposing additional texts and distance details in metres.

The luminous intensity of the LED



surface is automatically adjusted to the ambient brightness in the interests of optimum contrast. The top display sign is fitted ex works with double LED warning lights. For transportation, the sign is folded down with the display surface inside to protect it from the weather and is locked electrically in this position. The LED display is raised and lowered with an electric lifting spindle motor.

Operation is intuitive directly at the pre-



warning sign itself, or all functions can also be operated while the vehicle is moving, using the optional radio remote control device with illuminated LCD colour display and active feedback.

The traffic signs, symbols and fonts are saved in bitmap image

format and can be created by users as required on the PC. Editing software and USB leads are naturally part of the standard scope of supply from Berghaus.

## New AVS branch in Gladbeck



The new AVS branch in Gladbeck. Traffic safety warehouse and staff rooms for the service engineers on the left. The building on the right has offices on both floors, with the large vehicle hall to the rear. AVS Overath GmbH now has one site in Hessen and three in NRW.

A new site has been added to the service network operated in North Rhine-Westphalia by AVS Traffic Safety:

On 1 March, the two managing directors of AVS Overath GmbH, Andreas Schwingeler and Axel Keller, officially opened the new branch in Gladbeck; this is now the eleventh site throughout Germany for the AVS Traffic Safety Group.

Gladbeck was chosen to supplement the existing AVS sites in NRW on account of the great demand for road refurbishment, particularly on major roads in the Ruhr region.

The new AVS branch is conveniently situated in the northern Ruhr region between the A2, A31 and A52 motorways and the B224 federal highway, which the AVS service teams can reach

in just a few minutes' drive, resulting in extremely short travelling times to work assignments on the motorways in northern NRW and the Ruhr conurbations.

The AVS Gladbeck branch is well equipped right from the start, and not just in terms of its facilities, where employees will find a two-storey office building and two halls on premises covering approx. 10,000 m<sup>2</sup> with plenty of storage space for the extensive traffic safety material. The AVS service team is also expected to offer a great wealth of experience: branch manager Roland Monjau looks back on nearly 30 years of professional experience on the traffic safety sector. The experienced team is supplemented by site supervisor Thomas Giroto and several skilled service engineers as well as technical

staff with the necessary know-how for professional traffic safety.

This is an important aspect, with the first major traffic safety project for AVS Gladbeck already scheduled for the A2 motorway at Bergkamen at the end of March. Over the next two years, carriageway resurfacing and bridge refurbishment work will be carried out here on a section of motorway covering around 10 kilometres in length.

Together with AVS in Overath and Euskirchen, the new branch in Gladbeck now gives the company its third site in North Rhine-Westphalia so that is ideally equipped for professional traffic safety on NRW's road network with altogether 30 motorways covering around 2,200 motorway km and the 4,700 km of federal highways.



## Fit for the job with Berghaus courses



Participants of the Traffic Light Training Course II at the end of January 2015 in the Berghaus exhibition room in Kürten. This is where theory is put into practice - straight into the traffic lights - under the professional guidance of course leader Alfred Würth (2nd on the right) and technician Uwe Banischewski (on the right).

As in all other areas of technology, there is a constant need to actively address new developments in order to keep up with progress also with regard to traffic technology and particularly to traffic light controls. As manufacturer of mobile traffic light systems and developer of user software, we offer regular training courses on this important range of topics for staff working in road maintenance depots, council depots, construction firms, specialist traffic safety companies and stakeholders from other institutions. Together with many short courses held without charge for the affected employees on making the first delivery of a new traffic light system to a customer's depot, on request we also offer individual courses at separate dates in our training facility or "inhouse" on site. These individual courses can be tailored flexibly to the equipment pool, previous knowledge and special training requirements of our customers. At the start of each year, we extend invitations to the traditional traffic light

training courses that have been held for more than 20 years now in Kürten in the Rhineland and at AVS Mellingen in Thuringia. This year once again around 100 stakeholders took up our training offer and attended two consecutively structured two-day seminars that are ideally geared to participants on both the basic and advanced level. This year once more our "traffic light professionals" operations manager Alfred Würth and technician Uwe Banischewski led the participants through the various topics. Together they have accumulated nearly 75 years of professional experience at Berghaus and gladly imparted the necessary practical know-how acquired from working with mobile traffic light systems to the course participants. Our traffic light training courses also always offer plenty of scope to get to know each other personally and for seminar participants to share cross-institutional professional experience, for example at dinner with the instructors.

## Remake: traffic signs for your pocket

After being out of stock for a while, the 6th edition of our popular and often coveted Sign Scout is now available. And it's definitely worth taking a look at the contents, with 56 pages featuring more than 500 illustrations and descriptions of all currently valid German road signs, together with useful practical tips and instructions for simple, robust roadworks signage and for using mobile traffic lights. The Sign Scout makes it easy for example to find the necessary Berghaus sign stands for TL-tested stable installation according to the stipulations of the TL Mounting Devices, to go with the road signs specified in the traffic regulations or in the traffic regulation plan. The system is simple to understand with coloured dots for clear and correct allocation and selection of the right mounting device.

Finally, we offer a brief insight into our extensive production and delivery programme of mobile traffic light systems and mounting devices via mobile crash barriers, mobile warning trailers and LED pre-warners through to double LED warning lights, made in Germany. Innovative traffic technology from a single source. Safety by Berghaus! On request, we will gladly supply our customers with free individual copies of the 6th edition of the Sign Scout, although we do make a nominal charge for larger quantities of this practical pocket aid. Our Sign Scout can also be produced in an individual cover customised for your company while keeping the same contents. Minimum quantities in this case amount to 1,000 each. We look forward to your enquiry!



Sign Scout, the practical pocket aid measuring just 7.5 x 15 cm. The 6th edition is now available hot off the press from Berghaus - as long as stocks last.

## Berghaus products at the Suisse Public in Bern

SUISSE PUBLIC is Switzerland's trade-fair for public services and administration. It is being held for the 22nd time as the largest trend show and exhibition in the branch from 16 to 19 June 2015 on the exhibition grounds of BERNEXPO AG. Suisse Public is Switzerland's top procurement address for representatives from the municipal, cantonal and federal authorities. In 2015 once again, more than 600 exhibitors will be using over 80,000 m<sup>2</sup> of exhibition space to present current trends and developments in the municipal sector. Topics featured will include: municipal vehicles and machinery, winter road clearance, fire brigade and emergency services, road traffic, signalling systems, structural and civil engineering, transportation and much more besides. Experience shows that Bern can expect more than 20,000 trade visitors and procurement managers from public services and administration, construction, road and police departments together with advisors, specialist planners and project managers from consulting engineers.

It goes without saying that Berghaus products will again be on show in Bern. Our Swiss partner **Dähler Verkehrstechnik AG** will be presenting information among others about our narrow, easily handled **mobile crash barrier systems in the ProTec family** for professional separation of traffic in roadwork situations, and demonstrating our **mobile LED pre-warner MV-LED** with graphic radio remote control. Dähler's professional team looks forward to meeting you in Bern and will be available to answer your questions and discuss your suggestions at **exhibition stand 1.2/C03**.



ProTec mobile crash barrier system at the Dähler exhibition stand in Bern/Switzerland during the last Suisse Public in 2013.

## Five km ProTec 100 crash barriers for Norway



In recent weeks, we have supplied altogether 5,000 metres of frames for the ProTec 100 mobile crash barriers to our Norwegian customer and licence partner, Brodrene Dahl AS. As ProTec licensee, Brodrene Dahl proceeds to fill the frames with concrete in its own factory. Licensed production of the mobile ProTec crash barriers is an interesting alternative particularly for customers at greater distances from Germany, as this makes it possible to cut back considerably on transport costs. It took only six trucks to deliver the 5,000 m ProTec 100 frames, instead of the 26 trucks that would have been necessary to handle the crash barriers in completely concreted state. Production of ProTec crash barriers in the licensee's factory depends among others on signing a contract of compliance with the Berghaus production specifications to

warrant constant quality and safety. Berghaus conducts thorough inspections of the production facility on site, together with regular quality audits. The ProTec frames for professional, licensed production in the licensee's factory are delivered from Germany together with the screws and reflectors. The licensee then uses self-compacting concrete to finish the ProTec frames on site in accordance with our production specifications. Where long transportation distances are involved between Germany and the point of use, the savings made in terms of freight costs soon make it worthwhile to set up and maintain licensed ProTec production facilities on the spot in the particular country. At the moment, mobile crash barriers in the ProTec family are being produced under licence in Israel and Norway.





## Flat illuminated arrow as additional safety equipment

Vehicles used for the construction, maintenance and cleaning of roads and adjacent areas as well as winter road clearance for example, which use special rights as per § 35 (6) German Road Traffic Regulations (StVO) (e.g. driving and stopping on all parts of the road in any direction at any time), must be equipped with a red/white/red safety marking (warning marking) as per DIN 30710.

The German Guidelines for the Work Involved in Safeguarding Roadworks (RSA) standardised the warning equipment for working and safeguarding vehicles already back in 1995. In contrast to rotating beacons, the double warning lights or illuminated arrows fitted to the vehicles in addition to the warning marking are not part of the vehicle's lighting system, as so often incorrectly

presumed: instead, these are "additional safety equipment" as per RSA (Part A 7.1 [7e]). They can be used on all working and safeguarding vehicles marked according to § 35 StVO.

Illuminated arrows have long been an established part of our programme. They can be fitted for example in the rear tailgate board of a flatbed vehicle, behind the driver's cab or mounted on the vehicle roof with our lifting and lowering device. The space between the lamps is left free to minimise the wind load.

The BAST-tested LED lamps of the illuminated arrow are only 5 cm flat so that we have revised the structure of our lifting and lowering device. In lowered state, the illuminated arrow including lifting and lowering device is now only just 20 cm high (plus any possibly needed vehicle load carrier).

The illuminated arrow and the lifting and lowering device are available for 12 and 24 VDC operating voltage and equipped with practical electric reverse polarity and undervoltage protection.



Super-flat LED illuminated arrow L15 for safeguarding the working site on a new, compact lifting and lowering device. The LED illuminated arrow with its 15 lamps is raised automatically on switching on the illuminated cross, or the "pass-right" or "pass-left" arrow.

## Gentle demarking with AVS PeelJet



Without interrupting the flow of traffic, the AVS PeelJet removes hot- and cold-plastic road markings in Pforzheim town centre that are no longer needed after changing the road layout.

Professional demarking with the AVS PeelJet: successful not just on the motorways.

After changing part of the road layout in Pforzheim town centre into a boulevard, the AVS demarking professionals received an assignment from the town authorities for the AVS PeelJet.

One major part of the work had involved reducing the roadway for motorised traffic from four to two lanes and creating additional pedestrian areas.

This involved removing part of the carriageway and also resurfacing some of the road. After reducing the lanes and changing the road layout, the previous road surface was still kept so that a gentle method was needed to remove the previous and now superfluous road markings consisting of welded hot plastic and applied cold plastic.

This was a job for the AVS PeelJet with its special environmentally friendly peeling process using only water, without any chemicals. "Here again we had no problem with completely residue-free removal of the various marking materials without damaging the road surface", says Daniel Knoch, site supervisor at AVS Mellingen GmbH. "The special challenge in this job consisted in the limited space available, as the work had to be carried out without interrupting the

flow of traffic, in other words, demarking between the vehicles."

The AVS PeelJet also removed superfluous markings from footpaths, parking bays and also from concrete paving, without damaging the surfaces. Great skill was required, with traffic flowing in both directions on one and the same lane and with the constricting restraints of working in urban space. This was a rather different assignment, which the AVS demarking professionals once again mastered with flying colours



Removing the superfluous marking carefully but thoroughly, without damaging the road surface.

## Splashguard and security obstacle for ProTec



Ideal for urban use: splashguard and security obstacle mounted on the mobile crash barrier ProTec 120.

As a manufacturer of traffic technology products and mobile crash barriers, we are naturally in a position to offer our customers individual solutions, as for example in the case of construction work on the L3418 Westring road in Fulda.

Bickhardt Brücken- und Ingenieurbau GmbH in Kirchheim entrusted AVS with the traffic safety aspects of this project.

Together with the responsible authority "Hessen Mobil Fulda", several meetings were held to discuss how to create sufficient space for all road users in the confined roadworks, without endangering the safety of motorists and pedestrians alike.

Normally, a provisional footpath is separated off from the roadway using beacons as a longitudinal barrier, with plastic barriers on either side of the provisional footpath and yellow road markings throughout the construction site to guide motorists.

However, the confined space in this particular situation resulted in the installation of mobile crash barriers such as those used mostly on motorways to separate off lanes of oncoming traffic. The solution consisted in our ProTec 120 model with its compact design and narrow planning-relevant width of just 14 cm - ideal when there is little space available for a longitudinal barrier.

At the request of the responsible

authority, an additional splashguard and security obstacle for pedestrians was mounted on the mobile crash barriers for the provisional footpath.

Using ProTec 120 with its individual security obstacle created more space for all road users, as beacons were no longer needed as a longitudinal barrier. The reflectors integrated in the crash barrier also make yellow film road markings superfluous. Furthermore, the compact, robust design of the ProTec crash barriers certainly offer more protection for pedestrians if a vehicle should happen to touch the crash barriers in the roadworks.

If instead of the ProTec 120 with its width of just 14 cm, the dimensions of the beacon feet were to be added to the otherwise necessary longitudinal barrier together with the yellow marking line, this would result in a width of more than 50 cm. And the available space would be constricted even further by plastic barriers parallel to the footpath on both sides.

It's a good thing therefore that Berghaus as experienced manufacturer and AVS as traffic safety professionals work together hand-in-hand. This makes it easy to address requirements from the authorities and offer customers individual solutions.



Safe footpath through the roadworks: mobile crash barrier ProTec 120 with splashguard and security obstacle.



## AVS milling machine on the A7 motorway upgrade project

It's currently a marathon job for AVS's fine milling machine on the major PPP project to upgrade the A7 motorway over a length of 65 km between Hamburg and Bordesholm.

At the customer's request, the AVS demarking specialists are working at night with the milling machine to remove around 170 km of white road markings in the roadworks. This is to avoid confusing road users and make it quite clear which lanes are to be used throughout the roadworks.

To this end, the right edge marking (30 cm wide), the lane marking (15 cm wide) and also the left edge marking are being removed for setting up the 4+0 road layout, together with all blocks at the entrance and exit sections and a large barred area at Bordesholm intersection.

The AVS demarking professionals and their Wirtgen fine milling machine are also in demand for other jobs. For example, to assist marking contractors in

the preparations involved in applying new permanent road markings. The AVS milling machine works quickly and simply with only minimum removal of the road surface thanks to the optimum fine adjustment. As a result, demarking goes no more than a few millimetres deep!

There are many reasons for removing road markings. Perhaps the existing solid or film marking has worn away, or a new or different material is to be used that is incompatible with the previous solution (chemical deviations); or perhaps the road layout is to be changed completely or provisional roadworks markings have become superfluous.

The AVS fine milling machine is ideal for removing every kind of marking material from road surfaces where fine milling is allowed, for preparing surfaces to renew white markings, for pre-milling of yellow agglomerate marking on new road surfaces in roadworks without "cutting open" the road surface, or for further

increasing the speed for residue-free removal of agglomerate markings in combination with the AVS PeelJet.

Whatever the application, the specialists in the AVS team can adjust their Wirtgen fine milling machine to the road surface and to the specific material being removed. The working width can be adjusted up to 50 cm and the milling depth from 0 to 110 mm, in millimetre steps. Under ideal conditions, it is thus possible to completely remove up to 1,000 metres of marking materials every hour, with the 3.3 t milling machine moving constantly.

AVS - your traffic safety professionals offer complete service from a single source: professional traffic safety, mobile traffic light systems, mobile crash barriers and naturally also marking, demarking and much more besides - for you too!

[AVS-Verkehrssicherung.de](http://AVS-Verkehrssicherung.de)



The AVS milling machine works in the construction site at the customer's request.

Seeing that the road will be resurfaced after the construction work, the milling machine removes irritating white markings throughout the roadworks.

### AVS Wetzlar branch has moved



Helicopter view of the new company premises for the AVS Wetzlar branch in Leun an der Lahn, in the state of Hesse

New premises and plenty of storage space became available to the Wetzlar branch of AVS Overath GmbH at the end of 2014. The colleagues moved from their previous site in Solms to the neighbouring town of Leun an der Lahn. The new company building and outside area of about 8,500 square metres now offer plenty of space for the comprehensive road safety material, such as mobile crash barriers, TL safety beacons, safety barriers, road signs, TL mounting devices, mobile traffic light systems and much more besides.

The company's new premises are located directly on the B49 road in Hollergewann commercial estate, Leun-Biskirchen in the Lahn-Dill district, in quick and easy reach of the A3 motorway to the west and

the A45 motorway to the east.

Branch manager Tobias Schweitzer and his service team of around 30 colleagues have acquired a good name with their client base in next-to-no time, thanks to their reliable, professional traffic safety work. The constant growth of the Wetzlar branch of AVS Overath that was founded only in 2011 made this move an urgent necessity to expand the storage capacities.

In future, the colleagues in Wetzlar can meet the growing demand for professional traffic safety measures with the accustomed high standard of AVS quality. Right in line with the motto:

AVS – the traffic safety professionals!

### AVS also applies paint markings

As an alternative to road marking films for construction sites, AVS naturally also applies road markings made of paint.

One example is the resurfacing work on the B521 road between Niederdorfelden and Büdesheim, as shown in these pictures. The Wetzlar branch of AVS Overath was entrusted with this work by Heinz Schnorpfeil Bau GmbH.

The advantages of paint markings consist among others in the larger application window, as paint markings can be applied even with slight residual moisture. By contrast, the application instructions issued by the manufacturers of road marking films give no guarantee if any rain falls 24 hours before and after application. In this case, film marking would have to be postponed, and with it all the work involved in setting up the construction site.

As a rule, paint marking makes it possible to set up the construction site in one third of the time otherwise needed. With outside temperatures above 15°C, the paint marking is dry after about 20 minutes so that traffic can be allowed to use the road.

Nor is there any need to repair paint marking, in contrast to film marking which can become damaged or no longer adhere to the road while traffic is flowing. Even snow ploughs can be used without any problems in roadworks with paint marking.

Marking paints are environmentally friendly water-based products made without any solvents. They are applied without primer, in contrast to marking film. The demarking process generates no solid materials as the AVS PeelJet removes the marking paint without any residues.



The AVS specialist steers the marking machine along the measured line, accurately applying the yellow roadworks paint marking.



After applying the paint, glass beads are scattered in the fresh paint in the same process, ensuring good night visibility of the marking.



Perfect marking – with traffic flowing again after just 20 minutes!



# Peter Berghaus GmbH

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