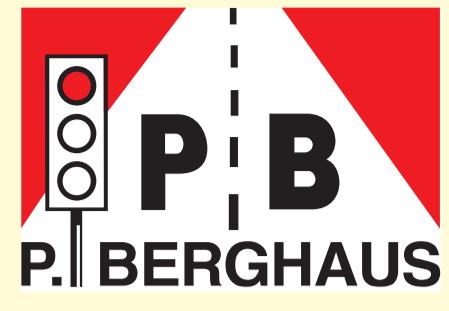


Berghaus-News

Traffic Technology • Mobile Crash Barriers

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D'r Zoch kütt...



With kids and traffic lights: the Berghaus traffic light brothers before setting off with the procession.

... is a typical Rhineland carnival saying while people wait for the approaching carnival procession and in anticipation of the sweets, flowers and chocolates that will be thrown into the waiting crowds. Carnival is even more fun when the princes and princesses are Berghaus colleagues, as with Andreas I. and Elke I. And so this year we joined the procession on Shrove Monday with our own pedestrian group sporting our own self-designed traffic light costumes. And although the weather was not so good, we still had heaps of fun dispensing a few hundred kilos of sweets among the cheering spectators.

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Red, yellow and green – and much more besides!

If you think a construction site traffic signal consists of no more than mobile traffic lights that just alternate between red, yellow and green, you are way out of date. Special construction projects, various application requirements, different user groups and a wide range of possible applications all demand individual solutions, together with situations where priority is given to local public transport and the fire brigades. Which is why in recent years, Berghaus has clearly expanded the range of services and accessories for mobile traffic light systems. The basic procedure for handling our traffic lights is practically self-explanatory so that even the inexperienced user can quickly make the necessary adjustments, for example for simple alternating one-way traffic. But if you want to refresh your basic traffic light know-how, learn about the latest signal technology and work-saving software and find out about practical tips and tricks for interesting applications, you should visit one of our two-day traffic light training courses held every spring in Kürten and Mellingen.

The seminars are in great demand: in recent years, around 1,300 employees from road maintenance depots, authorities, construction companies and those responsible for traffic safety have followed our invitation and undergone successful training as 'traffic light experts'.

So this year once again it was no great surprise that all courses were practically fully booked not long after the invitations went out. 80 participants from nine federal states attended our seminars.

Every year, participants can choose between two courses, depending on their previous qualifications. Course I is ideal for beginners or users of mobile traffic light systems for alternating one-way, T-junction or crossroads traffic situations. For those with more advanced knowledge, course II works on the basis of the know-how acquired in course I and consists of a user seminar for crossroads system controllers. With reference to the statutory regulations, such as the RiLSA, the ZTV-SA and the TL-LSA 97, first of all we provided necessary basic know-how about traffic light systems. This was followed by practical examples for drawing up signal timetables and how to implement these phase plans in the traffic light controllers, followed by in-depth exercises.

It goes without saying that participants also like to use the two-day courses to share technical information and experience with each other.

Maybe next year you'll join us in response to our next invitation to the traffic-light courses.



Mid February in Kürten: concentrated learning during traffic light course II.



Jan Schopphofen (left) and Andreas Aigner, traffic light experts from VSS Verkehrs-Sicherungs-Service GmbH, St. Wolfgang

New price list 2009/2010: ask for yours now!

Available right now: the new Traffic Systems Product Catalogue "Price List 2009/2010" is hot off the press. The clearly structured A4 format presents an overview of our comprehensive range of products on 64 coloured pages. More than 200 pictures and detailed explanations provide detailed information about our products. By the way, more than 90% of our product range is produced by our own company. This applies both to electronic developments and to metal or concrete processing.

Products made for use in Germany are produced according to the corresponding regulations applying to these products contained in the RSA, ZTV-SA, RiLSA, VDE and corresponding Technical Delivery Conditions.

Clearly organised according to product groups, the new price list includes for example:

Flash and advance warning lights with electronic detection of 12 and 24 V in halogen or LED technology; temporary running light systems that need neither separate controller nor differing lengths of lead cable; mobile illuminated arrows with or without electric lifting and lowering device; double and triple warning light systems; flash cones for personal protection; self-

For purchase / rent / leasing

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Verein für Verkehrstechnik
und Verkehrssicherung e.V.

Price list 09/10
Innovative traffic technology from one single source

With safety from Berghaus!
www.berghaus-verkehrstechnik.de mail@berghaus-verkehrstechnik.de

synchronising running flash light systems; rotating beacon indicator lamps and LED flash lights on battery housings.

We also offer different versions of mobile warning trailers for national and regional roads and for use on the

motorways – with and without drive-on loading area, all made by Berghaus. We also make mobile pre-warners and small flashing arrows for a wide range of different uses. Our traffic light systems and crossroads controllers naturally constitute a focal aspect of activities at Berghaus, as over the last 40 years we have established a global reputation for mobile traffic light technology.

Then again, our product range with TL-erection devices and many statics-tested overhead road cabling units also account for a major part of our production activities, together with the modular erection systems for signs and signal systems.

Our mobile, BASt-tested crash carrier systems make motorway road works safer for all concerned and are featured in a separate chapter in our catalogue.

Many other traffic system products round off our product range and make your road works safer places to be.

The new price list 2009 / 2010 once again demonstrates the strength and versatility of Peter Berghaus GmbH. Innovative traffic systems from a single source – and of course, straight from the manufacturer!

Vocational training at Berghaus Verkehrstechnik + AVS Verkehrssicherung

"Vocational training is the future, and vocational training is worthwhile! The importance of offering young people vocation training to start them off in their working lives should not be underestimated, either for the youngsters involved or for the company training them. After all, vocational training safeguards the company's need for future skilled workers and creates motivated employees who have already gained experience with the company."

For many years, this has been the creed of Alfred Wurth, Training Coordinator and Master Electrician. His own career at Berghaus shows the truth in his statement. It was way back in 1976 at the age of 15 years that he joined the company as an apprentice electrician. Who would have thought, all those 30 years ago, that the teenager's chosen trade would become a true "vocation" for Wurth who is today an authorised signatory with Peter Berghaus GmbH?

And so Alfred Wurth wrote history as Berghaus's first apprentice. By the way, his former apprentice colleague Walter Krupp also remained true to the company, working today for AVS Overath GmbH.

"We train young people for their working lives while at the same time creating our own resources of highly qualified young employees, with specialised skills in all the various parts of our company", agrees Managing Director Dipl. Ing. Ralf Gressler. And it soon becomes clear what he means, particularly in view of the fact that there is no recognised apprenticeship for example for the job of "traffic light manufacturer". The full name of the corresponding apprenticeship offered by the company is called "electronic technician for energy and building systems". But to make traffic lights, further special expertise is required in traffic light systems and traffic technology, which Berghaus naturally provides with a very thorough approach. "And so it is always in our particular interest to take on our apprentices once they have passed their final exams and offer them permanent employment with the company", adds Alfred Wurth.

At the moment, Kürten currently has two apprentice electronic technicians for energy and building systems, together with a trainee office clerk. This summer we hope to take on a further apprentice electronic technician: the apprenticeship vacancy is now being offered.

Unfortunately, it is not always easy to find suitable candidates for apprenticeships or training. The manual skills required are increasingly hard to come by in our computerised world. In many cases, candidates also often fail to offer suitable school qualifications in subjects that are important for an electrician, such as maths and physics. But Training Coordinator Wurth bases his selection on more than just the school report: most apprenticeships at Berghaus go to candidates who have completed a work placement in the company to become familiar with the requirements they will be facing here. This is a fair approach for both sides. It gives the candidates an opportunity to find out in advance whether they are going to like this kind of work, and Master Electrician Wurth can see whether they are going to be able to cope with the demands made of them by the apprenticeship so that they won't find



Already a 3rd year apprentice electronic technician for energy and building systems, Philip Henze is 18 years old. After obtaining his basic secondary school leaving certificate, he started his training with Peter Berghaus GmbH. At the moment he is working in the controller design department where traffic light controllers for crossroads are developed and made. Philip enjoys sports of all kinds and spends his leisure time with his friends.



After obtaining his basic secondary school leaving certificate, Michael Meissner (17) joined the company in August 2008 to start his 3½ year apprenticeship as an electronic technician for energy and building systems with Peter Berghaus GmbH. He is currently in the middle of a training unit in our electrical workshop. This is where warning and flash lights are made, together with quartz-controlled traffic light systems for alternating one-way traffic.



Jacqueline Pfeiffer will be 20 in March. After obtaining her advanced secondary school leaving certificate with qualification, she began her 3-year training as an office clerk, and has been working in the administration at Peter Berghaus GmbH since August 2008. In her leisure time, Jacqueline likes to read or improve her English. To compensate for her sedentary office work, she does kick boxing to keep fit.



Following her secondary school education, Sabrina Hemp (18) is now undergoing 3 years of training with AVS Mellingen GmbH to become an office clerk. Born in Apolda, since September 2007 she has been working her way through the various areas of the company's administration to prepare as best as possible for her final examinations.

Sabrina loves sport and plays volleyball and football after work.



Michael Döhring (20) is already in his 3rd year as an apprentice steel and metal construction mechanic. After obtaining his secondary school leaving certificate, he started his apprenticeship in 2007 with the steel construction department at AVS Mellingen GmbH. He was particularly interested in working with aluminium, where he acquired good welding knowledge. Listening to music and swimming are Michael's favourite leisure pastimes.



Christopher Kollruß will be 21 in April. After finishing secondary school, in 2007 he started his apprenticeship as a steel and metal construction mechanic in the steel construction department at AVS Mellingen GmbH. Born in Weimar, he particularly enjoyed MAG welding and plasma cutting. Christopher is a passionate sportsman, once the working day is over. Depending on the weather and the prevailing mood, he likes wind surfing, cycle racing, skiing or snowboarding.



After obtaining the secondary school leaving certificate I, Juliane-Sophie Meier (19) started to train as an office clerk. She is now in the 3rd year of her training with AVS Lehrte GmbH and will be taking her final exams in summer 2009.

In her leisure time, Juliane-Sophie likes to go dancing and partying with her friends.



Vanessa Salling (19) is a 3rd year trainee office clerk in the Hamburg branch of AVS Lehrte GmbH. Like Juliane-Sophie from Lehrte, she started her training after obtaining her secondary school leaving certificate I. She joined the company in 2005 and will be taking her final exams in summer 2009.

Re-design: red countdown display for traffic-lights

Particularly at road works with alternating one-way traffic systems implemented over long distances, it is important to keep road users informed about what's happening. Under certain circumstances, it may even be necessary to take traffic at low speed through road works covering a distance of several hundred metres or more. The results are long red phases, particularly with regard to the necessary clearance times. But this must not result in fading acceptance of mobile traffic lights on the part of road users just because of the long red phases. If road users ignore the red light on the presumption that the traffic lights are defect and set off through the road works, they endanger themselves and others!

And so decades ago we already developed the red countdown display as a

meaningful accessory for our mobile traffic light systems. This gives all road users the important information as to how long they will have to wait for a green light. At the moment there is increasing



The display is easy to read even in poor weather, as shown here in the rain

demand for our red countdown displays from Austria. Here the Upper Austrian state government has stipulated the mandatory use of the "Waiting time display", to quote the tender documents, for construction site traffic light systems in the state of Upper Austria.

In view of the renewed demand for this product, we have now redesigned and completely revised our red countdown display for fixed phase traffic light systems.

The power supply for the large LED display is rated for operation with 12 VDC, which can be supplied by the batteries in the mobile traffic light system. Automatic brightness adjustment ensures that the display is clearly seen without dazzling road users. Light-dependent sensors always warrant a sufficient contrast to the surroundings. With the three-digit red LED display, the user is free to decide whether the waiting time is shown in minutes and seconds (max. 9 minutes and 59 seconds) or just in seconds (max. 999 seconds, i.e. more than 16 minutes). The red countdown display is in a weatherproof housing (IP65). In addition, white reflective lettering saying "Waiting time" against a black background further enhances visual perception. With our red countdown display, you can keep road users always up-to-date about how long they will have to wait. This makes a considerable contribution to the necessary acceptance of mobile traffic light systems!



Waiting time: one minute and 37 seconds before light turns green. Mobile traffic light system MPB 1400 with red countdown display.

Berghaus traffic-light technology in the United Arab Emirates

Berghaus traffic-light technology attended the Roadex-RailEx, the "No. 1 trade-fair for traffic engineering, transport and



Managing Director Ralf Gressler teaches service technicians how to operate the mobile traffic light MPB 4400 on site in Abu Dhabi

infrastructure in the Middle East" held in Abu Dhabi National Exhibition Centre, where we demonstrated our mobile traffic light system MPB 4400 to interested trade visitors from all over the world. At the moment, altogether 50 Berghaus traffic light systems are in operation in the United Arab Emirates to control the ever increasing quantity of road works traffic. Following the trade-fair, Ralf Gressler held a two-day traffic light training course with our partners in Abu Dhabi. Here service technicians and users learnt the principles of mobile traffic-light technology and how to program the

Operating logbook for crossroads controllers

A convenient operating logbook is now available for our mobile traffic light crossroads controllers EPB 12 and EPB 48. This considerably expands the scope of documentation for the controllers over and beyond the stipulations of the Technical Delivery Conditions for Traffic Signal Systems. Instead of just the last event, it is now possible to keep detailed records of all incidents over a period of about two years.

The operating logbook can show in plain text who (user)

programmed the system and

when, it shows the time when the signal system was started up, any reprogramming that was carried out, possible faults/disturbances, use of the emergency-stop button and much more information besides. These comprehensive records make troubleshooting much easier for the service technician on site and may even be used in court to help clarify traffic accidents that happen in the

Auswertung Betriebstagebuch - Demo									
No.	Datum	Uhrzeit	Eintrag	IP/Port	Tu/Gepl.	Information (T)			Historie (D)
1	01.02.2009	08:07:16	Programmierung	00 000 000	00 000 000	Neuer Programmcode X2900			Nach Angaben Version 3.20
2	01.02.2009	08:07:56	Programmierung	00 000 000	00 000 000	Neuer Programmcode X2900			Nach Angaben Version 3.20
3	01.02.2009	08:07:56	Anlagen Anlegen	00 000 000	00 000 000				
4	01.02.2009	08:07:56	Initialisierung	00 000 000	00 000 000				
5	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
6	01.02.2009	08:07:56	Wieder Programmierung	00 000 000	00 000 000				
7	01.02.2009	08:07:56	Wieder Programmierung	00 000 000	00 000 000				
8	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
9	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
10	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
11	01.02.2009	08:07:56	Anlagen Anlegen	00 000 000	00 000 000				
12	01.02.2009	08:07:56	Anlagen Anlegen	00 000 000	00 000 000				
13	01.02.2009	08:07:56	Anlagen Anlegen	00 000 000	00 000 000				
14	01.02.2009	08:07:56	Initialisierung	00 000 000	00 000 000				
15	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
16	01.02.2009	08:07:56	Wieder Programmierung	00 000 000	00 000 000				
17	01.02.2009	08:07:56	Wieder Programmierung	00 000 000	00 000 000				
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31	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
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57	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
58	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
59	01.02.2009	08:07:56	Gesetztes	00 000 000	00 000 000				
60	01.02.2009	08:07:56	Gesetztes	00 000 00					

Mobile warning trailers with new functions



The new warning trailer for motorways: AM 3 TL with electronic erecting function and radio remote control



The warning trailer for country roads and city streets: SM 40 with or without drive-on loading area

We have revised our product range "mobile warning trailers" and added a few new models. And even the "extras" that can be supplied to go with the warning trailer have undergone further development.

Our new complete catalogue, Price List 2009/2010, now offers two new mobile warning trailers type "AM" for use on motorways. It goes without saying that the design of all warning trailers fulfils with the Technical Delivery Conditions of "TL Warning Trailer 97". It corresponds to road sign 616.

Our tried and tested AM 3 TL is now available with the option of an electrical lifting and lowering device for the upper part of the mobile trailer. The standard cable remote control for erecting the warning sign from the cab of the towing vehicle can now be supplemented on request by a convenient radio remote control.

The new warning trailer AM 4 TL has a large drive-on loading area with a high payload. Here an optional winch can be used for direct accommodation of a mobile pre-warner. As a standard feature,

the AM 4 TL already has an electro-mechanical device for erecting the upper part of the warning sign; as an option, this can be operated with a radio remote control. All mobile warning trailers in the "AM" design are equipped with type 2 retro-reflecting foil as a standard feature. The scope of supply of all trailers includes a drawbar which is adjustable in height with replaceable DIN eyelet and ball-type towing device.

For work on roads other than the federal highways, we offer the mobile warning trailers in our "SM" series. Type "SM 40-2" has been revised; this is practically a smaller version of road sign 616 as featured in the warning trailer for the motorways. The trailer part of SM 40-2 can be loaded via the drive-on ramp and is equipped with a parking brake as a standard feature. It goes without saying that the design of the "SM" model series complies with the stipulations in the Guidelines for the Work Involved in Safeguarding Road Works (RSA).

The next issue of the Berghaus News will contain a detailed presentation of our mobile warning trailers.

ProTec 120 naturally also in curves

When concrete is mentioned in the context of crash barriers, we automatically think of heavy, rigid structures – but this does not apply at all to our mobile crash barrier ProTec 120.

Time and again, our customers are amazed at the flexibility of the ProTec 120. This crash barrier can be used in curved or exit zones without any problems. But this isn't the only reason why ProTec 120 has acquired such a good reputation for road safety: the extremely narrow, compact crash barrier combines all the positive properties of mobile steel and concrete road restraint systems in just one system: high containment level with lowest impact force level "A" while taking up only a minimum of space; furthermore, easy transport and low dead weight permit high daily erection rates. ProTec 120, the ideal crash barrier for many applications.



ProTec 120 in the curve, as here on the motorway A6 Nürnberg-Amberg

A31: ProTec 120 leaves space for HGVs

With just one construction gang, the colleagues of AVS traffic safety group erected altogether 8,400 m mobile crash barrier ProTec 120 on the motorway A31 in just five working days.

60 AVS articulated lorries supplied the barriers just-in-time to the constantly progressing construction site. During unloading, the handling gripper positioned the crash barriers in exactly the right place and lowered them to the ground where they were screwed in position immediately. This flowing work pattern permits high daily output rates with low personnel costs. Of course it is important for the logistics to be well coordinated so that the construction gang is kept well supplied just-in-time with the next load of crash barriers for erection. By order of Lower Saxony State Authority for Road Construction and Transport, the motorway A31 is being resurfaced. Between motorway junctions Emden-Wolthusen and Riepe, traffic towards Oberhausen is led through a so-called 2+0 contraflow road layout using

part of the carriageway towards Emden. Given the consolidated lane width of only 8.50 m, the mobile crash barriers were not to be any wider than 30 cm. In addition, the motorway carries large volumes of heavy goods traffic towards Oberhausen, so that the lanes were set up with differing widths of 3.40 m and 4.80 m. Thanks to our narrow ProTec 120 with its concrete width of only 12 cm and system width of 30 cm, this left sufficient space for large trucks.



Thanks to the special ProTec 120 handling gripper, the crash barrier elements are unloaded, positioned and fixed straight from the articulated lorry in a flowing work pattern

LED technology also at mobile crossroads

Signal heads with light emitting diodes (LED) are increasingly becoming a standard feature in stationary traffic lights. Road users have meanwhile become accustomed to the initially unusual brightness and full illumination of the signals. LED technology continues to make inroads.

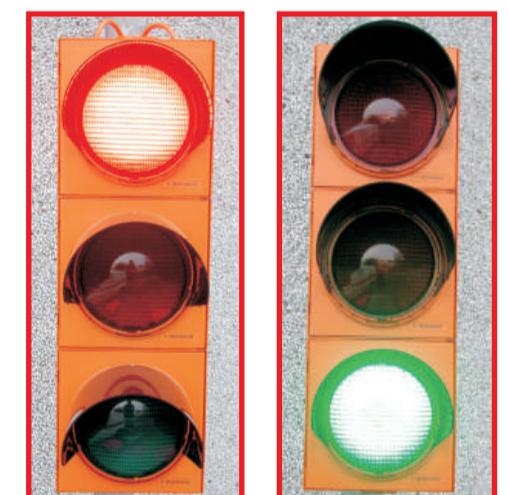
And so for some time now we have also offered LED signal heads for our mobile traffic light systems. It goes without saying that the features available for years in our mobile 12V traffic light systems on a mobile base and which are well appreciated by our customers are also technically feasible in our large 230V systems. On request, the mobile crossroads controllers EPB 12 and EPB 48 can naturally also be equipped with our 40V light emitting diodes (LED).

Many tender specifications meanwhile include the phrase "equipped with LED technology" for mobile traffic light systems as a standard text. This is understandable, as road users have become accustomed to stationary LED signals so why revert to halogen technology for mobile traffic lights?

LED traffic lights at road works are much easier for road users to see.

Compared to conventional light systems, LED modules tested in photometric terms by the Federal Highway Research Institute (BAST test number V4-104-2004) offer many advantages: There is practically no phantom effect as there is no reflector to reflect incident sunlight and irritate road users. In addition, a special prism system takes care of uniform illumination of the whole lens. As a result, it is not possible to make out

the individual LEDs behind the lens of Berghaus LED traffic lights. Even when seen from an otherwise unfavourable angle, the traffic light signal head is always clearly visible. Compared to the previously used lamps usually with 40 or 60 watt, LED systems also make clear



Green light for LED technology, naturally also for mobile crossroads controllers EPB 12 and EPB 48

cutbacks in energy. The power consumption of LED modules is only 5 to 7 watt, depending on the colour. The long service life of LED modules also generates lower main-tenance costs as there is no longer any need to change the LEDs in the signal heads on site.

Surely everyone will be convinced by the many advantages of LED technology! Ask for an individual quotation for mobile LED technology from Peter Berghaus.