

# Berghaus-News

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### "Intertraffic": the professional world in Amsterdam



On the every two years in Amsterdam taking place trade fair "Intertraffic" our enterprise with improved proven as well as with novelties presented itself. To the magnets for experts counts not only the new intersection control

device type EPB 48 multiprocessor and the video camera PB CAM to the production of virtual contact loops on the highway, but also the STGW Euro H /W6 in the extensive field of the steel barrier system.



The Euro of H1/W6 was developed for the highest requirements. Please, request the new leaflet.

#### Impressum

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By the portable traffic lights the LED technology asserts itself more and more, because it offers consider able advantages: lower service costs, brighter and steadier light, stream savings opposite the present technology, no electric light bulb failure, very fast mounting. The radio signal arrangements MPB 3003 and MPB 4000 can be switched to 16 different frequency. Inter ferences are almost excluded with

thus. With the transportable protection equipment we work constantly on advancements. Last year our new H1 wall with a construction width of 50 cm was tested with the L.I.E.R. in France successfully. The most important sign: containment level H 1 with working width W 6. A lot of home and foreign visitors could find out about the extensive pallet of our steel barrier system in Amsterdam also on the basis of special prospectus material.

### Steel prices strongly rise!

Unfortunately, negative news cannot be avoided. The custo mers run storm against high steel prices. They load the processing industry. " We go with full order books to the bankruptcy " says the managing director of the economic federation of steel and meta processing Andreas Möhlenkamp.

Now the enterprises try to transmit the price increases at least partly to their customers. The precipitous increase of the steel prices goes back primarily to the big inquiry of China which experiences an economic boom. In the 1st quarter of this year raises in China the investments equally about 43 percent opposite the year before.

The steel groups have already announced further price in creases. Because negotiations with the steel suppliers seem hopeless, we will anew also calculate our prices, unfortun ately and the circumstances must adapt to turn away vital harm of our enterprise. We hope for your understanding.

## New technology against this human failures

The World Health Organization (WHO) wants to save human life in the traffic. Every year 1,2 million people worldwide die in the traffic, about 20 to 50 millions are injured. For people at the age between 15 and 44 years the traffic is even the cause of death number one. Ian Roberts, professor in London School of Hygiene and Tropical Medicine: "Traffic accidents are as avoidable as cardiac infarctions, strokes or cancer".

Unsafe cars, bad streets, no pedestrian's protection: these conditions demand above all in the poorer countries of the earth the majority of the road casualties. If these states reached only to some extent European relations, millions of road casualties could still live unscathed. Really the total number of the road casualties shrinks in Germany for few years. In 2003 these were 6618 dead people and 462052 injured persons. More than three percent less than in the year before. Belt duty, crumple zone and air bag is thanks. Without these safety devices the victim's figures rise with two-wheel drivers against the trend on 38242 injured persons and 1693 dead people.

At least 85 percent of the traffic accidents are based in this country not on technical defects, but on human failure. If speed banked, too low distance and violations of the priority lead the list of the causes, resulted by alcohol, tiredness and lack of experience.

Only passive technologies no more stand in the center which reduce the results of an accident, but active intelligent systems which do not allow to get it at all to the bang. The purpose is ambitiously: up to 2010 the accident figures should be halved with sensors and traffic leading systems.

With warm cameras, radar and ultrasound modern sensors look exactly there what remains concealed to the eyes of the driver. Carriage steering wheels with built-in parking pilots already enjoy a

foretaste on this automobile future. In some superclass vehicles are already found radar systems with working frequency of 77 gigahertz which can look ahead up to 150 meters and recognize other vehicles. Coupled with a cruise control delays and accelerates this Adaptive Cruise Control (ACC) independently, so that always enough distance remains to the person in front.

However, these comfort systems let only know how the rolling traffic will look in future. In addition to ultrasound and radar video cameras will throw their look at street edge, pedestrian and street signs. The so won information processes a board computer which will point at first with warning signals to a too high speed. Nevertheless, besides, in the end actively and responsibly the driver remains.

However, driver assistance systems can more. If a vehicle rolls dangerously closely to the street edge near, it can correct actively the track. Even straighter interventions of the electronics in the driving behavior, like an emergency braking, can come to future. In parallel to the sensors programs are developed which recognize dangerous situations at intersections or on highways fastest than the person by data comparison and take over then the control of the vehicle. If a collision is still unavoidable, raised hoods and extendable addition bumpers can diminish the injury risk for the unprotected road users.

However, the look of the cameras also turns on the driver. Thus recognizes a system which was developed by Bosch, BMW and the university of Würzburg, the drowsiness of a driver among the rest in the raised Blinzel frequency. Just with truck drivers with long shifts timely sleep warnings could avoid deadly accidents. Nevertheless, most simply and completely without every technology defensive going the number of the victims could lower in the traffic.

## Truck-toll: Mallet breakthrough worked

Then only the negotiations breakthrough with Toll Collect could be announced when became clear that the election was lost in Hamburg for SPD. The syndicate has come to the government in the determining quarrel points (contract punishments and damages) against. However, obviously one had to swing only the wood bunting and pronounce the notice of the contracts, so that this became possible. It is already a pitiful picture which the "showpiece enterprises" have given off to Telecom and DaimlerChrysler. To the impression that they have failed at engineering level and have done unattainable assents comes that they have haggled without consideration, until it was nearly too late. They have placed the location of Germany on the game and have damaged lastingly. It would have been consistent to take away the order from Toll Collect. Particularly as there are alternatives with toll suppliers from Switzerland and from Austria. Nevertheless, against it however

speaks that it had been exceedingly embarrassing for the high technology land of Germany to have to import the know-how for the toll. To the other it would have lasted under circumstances even longer, until the toll income would have flowed. New tenders would have brought on the way, would have concluded new contracts and the infrastructure must be anew built up. Of face of that it was probably better to give another chance to Toll Collect.

The designate supervisory board chief of Toll Collect, Konrad Reiss, is persuaded that the toll system functions up to the 1st January, 2005: " We can go up to the end of the year to the start. The basic effectiveness of the technology stands except question. " Of rice a partial responsibility of the industry put away in the toll debacle. He will prescribe Toll Collect more transparency. The general public should be informed about the interstates, also about mistakes still to be expected.

## Strong increase of our foreign activities

In spite of or just because of the higher requirements for today's building site securities our activities are crowned in the export by success. We lay not least big value also on the safety of the workers in the building site area.



The trend with the transportable protection walls points unambiguously from concrete in the direction of steel. Several factors play, on this occasion, a role: by the high weight are too unwieldy the concrete barriers and too expensive in construction and dismantling. Negatively is also the fact that they claim too much space often because of their width. With heavy accidents are often flung also big concrete parts above the highway.

The big advantages of our transportable steel barrier system are:

- examined systems after European norm EN 1317
- Availability of different systems of containment level T1 to H1
- ingenious logistics
- enormously high mounting achievements
- systems extremely friendly to repair in order to save space by small construction spread

## Traffic offense: in 2004 more austere punishment

From spring, 2004 some traffic offense is punished more austere:

During the drive at the steering wheel of a car with mobile call up cost 40 € and a point.

The cyclists who call up while driving the mobile in the hand must pay 25 €.

If passengers follow in coaches which are fitted out accordingly, to use the safety belts not, 30 € threaten.

The drivers which park their vehicle at narrow places and thereby hinder rescue vehicles are present with 40 € and a point.

In certain cases a driving ban to maximum six months can be covered in future instead of denial of the driving permission. After the term the traffic offender gets back the driver's licence

automatically.

Anew for driving beginners: in some federal states youngsters can make the driver's licence at the age of 17 years within the scope of a model project, then must go, however, before the 18th birthday always with especially trained companions. Other federal states place on the two-stage driving education. With voluntary participation in active driving trainings the trial period is halved.

The so-called bread roll key is introduced to park-ticket-automates. With it short time users may parc the car in the first half an hour for free.

New erasure terms can lead under circumstances to the fact that points are extinguished later.

## Our Joke Corner



### Cannibals and the cleaning lady

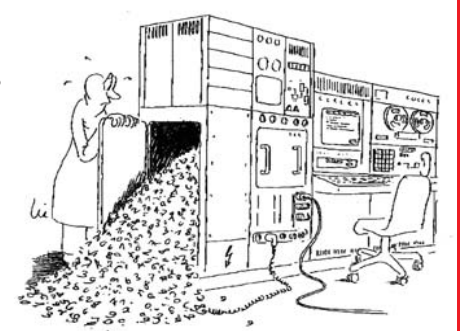


In the firm XYZ an exchange program is begun. Four employees are exchanged for four cannibals. With the greeting of the cannibals says the head " Now you can work here, good money earns and can go to food to our canteen. Thus leave other colleagues in rest. " The cannibals promise to bother no colleagues. After four weeks the head comes again and says: " You work very well. Only we lack a cleaning lady. Do you know what has become from her? "

The cannibals answer all with and swear to have to make nothing with the thing. When the head is away again, the boss of the cannibals asks: " Who of you monkeys has eaten the cleaning lady? " On it announces itself quite meekly: " I was it. " After it says the boss: " You idiot. We live for four weeks on team leaders, system administrators, quality representatives and personnel advisers, so that nobody notices something. And you idiot must eat a cleaning lady! "

**Being wrong is human.  
But if man wants to  
build properly dung  
man needs a computer.**

Dan Rather



## Video camera PB CAM for the area of traffic signals

The present luxurious technology of the fixing of contact loops to the vehicle detection is replaced with our new video camera PB CAM. This is a determining progress in the area of traffic lights

The functional way of the PB CAM:

An easy programming of the detection zones about PC program

For each detection zone switchable direction logic

Detection zones freely in size and shape

Four freely configureable switch exits (relay, contacts free of potential)

Adjustable or-logic of several zones to one switch exit

Preservation time till three minutes

RS-485-interface for the system configuration

Automatic balancing after transmission of the configuration

A still frame (Snapshot) is generated by the aimed camera. In this picture virtual

the fact that it does not rise in the horizon. After the correct adjustment the zones are furnished with the mouse. Shape and size are freely formable. Every zone can be shifted in the desired area. A change or deletion of the zones is possible any time.

There is likewise the possibility to select the data of the actual building project and to change if necessary at customer wish. The data must be transferred afterwards merely once more to the camera. This automatically carries out a new adjust. Then there occurs the operation with the changed data. The objects which are in the camera area are shown shadowy.

Our PB CAM has already proved itself repeatedly in the operation.

The advantages lie clearly on the hand:

No more loops must be milled in the asphalt

Nearly no impediment of the fluent traffic with the mounting



Our camera PB CAM puts aside luxurious attaching of contact loops in the highway cover

zones are drawn with the mouse of the PC. Every zone corresponds to a contact loop. The assigned exit is activated. At most eight zones can be constructed which are assigned on four exits arbitrarily. To each zone a direction recognition can be activated. The camera must be aimed so that the vehicles are in the field of vision of the camera (not crosswise to the highway mount!). By the adjustment is to be paid attention to

Low costs expenditure, because luxurious milling works and transfer of the loops are not needed

Quick adaptation by a necessary change or transfer of the loops

Over and over again usable

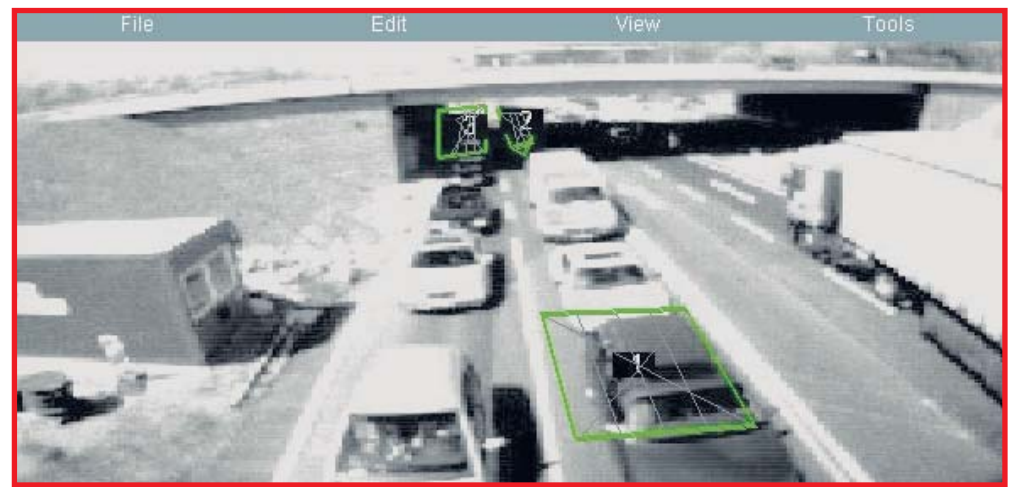
The PB CAM serves as an equivalent substitute with the present induction loops with the following functions:

Vehicle presents recognition

### New under-driving-protection for motorcyclist

NRW transport minister Axel Horstmann (SPD) presented for the protection of the motorcyclists close to Bad Münstereifel new planks. The steel profiles are appropriated under the normal guardrail and should prevent that motorcyclists get with falls in the gap between guardrail and banquet and suffer, besides, the heaviest injuries.

The under-driving-protection was developed by the land operation "Streets NRW" and the community of property protection planks and was tested by the BASt. It should be appropriated in curves in popular Biker-roads.



An simple and freely formable programming of the detektion zones about PC

Impulse issue with traffic flow for green time lengthening / stretch  
Traffic jam recognition

PB-CAM Technical data:

Wide-angle lens  
Focal length 104°, 2.5 mm  
Reach: 3 to 25 m  
Care tension 10 - 26 V DC  
Achievement admission: 1.5 W

4 switch exits: relay contacts free of potential (5 A)

Data interface: RS 485

Temperature area: - 34 ° to + 74 ° C

Weight: approx. 0.5 kg

Connection: 12-wire (0.25 mm<sup>2</sup>) screened premanufactured cable with plugs

Available cable lengths: 10, 30, 50 and 100 meters

### MPB 1/1-H now also with LED technology

Considerable energy conservation

Our portable traffic light the MPB 1/1-H which was conceived for the one-way traffic at road construction places or bottlenecks has developed to the export hit. Beyond it, the very inexpensive system which is available now also in LED technology distinguishes itself by the simplest service.

A considerable energy conservation is reached by the LED technology. The power consumption is lower opposite the traditional equipment about 70%. Thereby as well as by the smoother unloading of the accumulator an accumulator change only possibly all four weeks is necessary. There is the disagreeable phantom effect by strong stranger's light (above all at an angle occuring sunlight) with us no more.

With the new LED signal heads reflectors are superfluous. A reflection is thereby no more possible. The LED technology provides not only for constant brightness with unfavorable consideration corner, but also with dropping accumulator tension. In addition, our light signal arrangements are fitted out with standard day/night adaption and the luminosity of the signal heads is adjusted infinitely variable to the surroundings brightness.

Lower servicing problems

The lamp failures which led with traditional light signals to lacking signals or even to the failure of the whole system belong with this new technology of the past. The number of the servicing journeys to the building sites is reduced above all because light-emitting diodes work more reliably and essentially more long-lived than traditional electric light bulbs or halogen lamps.

High costs reduction

A considerable lowering of the service

costs is reached by the application of LED signal heads. Nevertheless, the new technology serves not only the costs reduction, but also the higher road safety.



Optimum illumination of the lens about prisms system (it no single LEDs are recognizable).

The lifespan of the LEDs is guaranteed at the age of eight to ten years by the manufacturers.

Very good being recognizable of the lights also from lateral corner areas.

# Informationen about transportable protection equipment

## The story: Our "Big Job" in Belgium

It is Friday, 27th February, 2004. A look at my watch: 7.00. It is cold, dank. The temperature announcement in the car stands on below -1° C. Everywhere lies a thin snow cover. I stand here on the highway E 17 in Belgium on the left barred track direction Kortrijk. On radio only chaos announcements: accidents on all streets. The snow came too unexpectedly. Nobody was also stopped



Beginning of the works: Cold, snow

on it - we not. Now here we should build up 13.500 meters of steel barrier system. The premark for the walls is not to be seen, covered by a white snow layer. We have well prepared everything and hope that we can avoid the chaos. Our vehicles stand all near the building site. A part of the material lies on temporary storage facilities in the close exits No. 4 and 6.

All are tightened a little. Many assemblers run around, form up, position their vehicles. For today it is planned to work in two teams, from the middle of half a building site length in each case in the opposite direction. The principal looks a little bit nervous.

The default is formulated clearly: „Boys to her have two-day time to build up 13,5

kilometers of steel barrier system, no hour more". It is shortly before half past seven. The first steel element, 16 ms long, hangs on the crane. Slowly the crane-leader leaves the heavy part to ground. 15 minutes later the second team places its first element on the highway.

From now there is to no more holds. Element for element is unloaded and is put up. A truck behind the other rolls up and brings supplies. Every carriage is loaded with up to 480 meters of steel barrier system. These are many vehicles in the operation.

Slowly both teams go away of each other. Soon they are out of sight. Everything runs like a clockwork: the weather becomes better, the mood is good, the principal becomes quieter, remains sceptical, however. The first day comes to an end. The last action during this day: all vehicles are loaded and are put down



13.500 meters: every slap sits

where they are unloaded early tomorrow again.

The next day, Saturday, begins exactly at 7 o'clock. Today it fastest goes.

Everybody knows his application place. The weather is essentially better. Today we have the mounting teams differently split. One begins at the end of the building



The second day, shortly before 18 o'clock: It is almost created, the last gap is closed

## HARRY'S COLUMN

### We have it already heavily!

Many regulations want to be considered. We must manage with faulty tender documents. I have spoken about latter already in the issue No. 15. But there is one more point to which I must speak to again.

Unfortunately, it happens over and over again, that in the tender documents

stands:... "transportable protection equipment are based in accordance with issue RPS in 1989..." Here once more the tip: transportable protection equipment is not defeated of the RPS. Sets of rules for our protection equipment is the ZTV-SA and the "TL - transportable protection equipment issue 97".

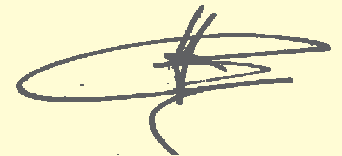
There are touch points with the RPS also, namely where we connect a temporary protection wall with a permanent protection equipment (guardrail). Here "both worlds" meet. Then in this connection the question always arises,

whether then the crossing is checked by the mobile wall to the permanent equipment to RPS. NO! No system crossing is checked. WHY NOT? Because there are no exam regulations for it. There are not (you yet. In the new DIN EN 1317 this test should be planned in the sections 3 and 4!)

Our crossing constructions are so laid out that these can transfer the appearing forces into the following system. That is the design corresponds always to both systems to be connected. It is manufactured according to the given requirements.

Every manufacturer is in the duty to adapt this construction after the best knowledge of his protection wall - the magic word is "strength-logical".

Pay attention once to these crossing constructions! What one can see there, is already interesting to alarmingly. But they can look also trust-waking, how at the firm AVS Mellingen GmbH.



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site and works backward, the second one closes there in where last night was stopped. Now we work on each other to. All are confident that we create it. In two storage places the vehicles will load. The at first very short journey ways become longer and longer. To drive a strict ban of the highway office, in the barred track or to leave this makes us go always from the front in the building site and only leave this at the end again. But also this will not be able to knock down our planning. 16.20 o'clock: the last vehicle is sent by the close resting place to the mounting team. It looks very good, the principal seems to be contented. At 17.30 o'clock the first mounting team can say goodbye.

Relieved the assemblers go in the direction of native country. Only one gap is to be closed. Then at 18 o'clock the last walls also stand. It is created.

13.500 meters of steel barrier system stand on the E 17 in Belgium. All are contented. A new record was put up. Fast there comes the tip of the colleagues not to take this please as a scale for new orders. Yes, it has cost a lot of strength and logistic action. But it goes. When do You test us?

Over and over again the new challenges which we had to to mastered have made us to what we are today. We are proud to have created this with our team. **Thanks to all which have helped in this success.**



# Peter Berghaus GmbH

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