

Prismatic VMS.



► Projects



The VMS that never sleeps

In safety-critical highway environments such as workzones, the need for signs to be constantly visible, even during a power cut, should come before everything else

Words | **Hans-Ivar Olsson, Triplesign, Sweden**

Swedish company Triplesign has, with the British distributor Signsol, developed a new solution for traffic-management vehicles for road safety company Highway Care. The product was launched in the spring of 2017, following a successful development process between the three parties. First orders have already been delivered and the reception has been very positive.

In a bid to reduce risks in highway workzones, safety regulations have become more stringent in recent years, particularly in the UK. An important new safety solution is the use of traffic management vehicles. They are quick and easy to deploy and are often equipped with VMS, enabling them to provide flexible traffic information.

An efficient VMS solution

Triplesign is a manufacturer of prismatic, three-sided VMS, which are bidirectionally operated, allowing closest-path operation for message changes. Triplesign is certified in accordance with EN 12966-1: 2005+A1: 2009 and in a recent development, putting it ahead of the competition, the company is tested and approved for the new 12966 standard. Triplesign has produced signs for vehicles for almost 20 years and for traffic management vehicles for five years. This experience helped it gain certification for its traffic management signs to TOPAS 2517A – Performance Specification for Electromechanical Variable Message Signs. Additional testing, as part of the 2517A approval, meant the prism sign was subjected to environmental testing, which includes vibration and chock testing. But the benefits don't end there...

Power independent

Prismatic VMS enhance safety by guaranteeing that a message will be



displayed, regardless of conditions. If the power to an LED VMS is cut, no message will be displayed. On a prismatic VMS, the same message as before the power cut will be shown. Furthermore, as the Triplesign prismatic can also be manually operated with a 6mm Allen key, it is still a variable message sign even if there is no power.

Proven long lifetime

Another important aspect of the Triplesign prismatic VMS compared with the LED VMS is its reliability. The lifetime of prismatic VMS is substantially longer, at more than 10 years.

Cost-efficient

There is also maintenance cost to consider. Instead of needing specially trained



maintenance staff, prismatic VMS can be serviced by a certified electrician. Meanwhile components are not only cheaper but also last longer than in the case of a typical LED VMS. Triplesign VMSs are also deployed with a patented smart exchange system of active components. Instead of expensive ad hoc maintenance, a program can be run to exchange all active components every 10 years. Passive components such as the aluminum frame remain, to minimize the cost and secure safe operation. Furthermore, the initial investment cost is low, at around only 20-25% of that of a comparable LED VMS.

Low power consumption

The power needed for a Triplesign prismatic VMS is the lowest of any VMS. This means that the vehicle-mounted sign can be combined with portable roadside prismatic VMS, which are solar or UPS (uninterruptible power supply) operated.

Deployment on UK roads

Highway Care selected Triplesign's Prism Sign as part of its 'Red X' warning system on its rental fleet of highway maintenance vehicles. "We selected the Prism Sign over alternative methods when it

received a Highways Agency approval to be TOPAS registered 2517A," says Selina Carter of Highway Care. "Another factor that led to us adopting the system was the enhanced performance: the Prism mechanism is reversible, allowing any of the three signs to be selected without the unit rotating through an unwanted sign face.

"The Prism Sign provides quick and reliable operation, offering the best possible speed when changing and displaying vital information, in time-critical circumstances in traffic management. Ultimately it provides value and optimal performance for our customers."

Safety first

Despite the large cost savings delivered by Triplesign prismatic VMS when compared to LED VMS, this is not the most important benefit of the technology. Security of operation is its biggest selling point. To be able to guarantee a message at all times means customers can always depend on having a dynamic information wall as a 'goal keeper' – while other solutions run the risk of having no goal keeper at all. In highway workzones this can be a matter of life and death – no further discussion is needed. ■

Opposite and below: **Triplesign prismatic VMS are an integral part of Highway Care's Red X light warning system, which is mounted on its traffic management vehicles**

triplesign ▶ com

Innovation and ECO Technology

Exchangeable default message at power failure

Lowest power consumption

Highest MTBF on the market without maintenance.

Certified VMS production in Sweden

Certified VMS in accordance with EN 12966-1: 2005+A1: 2009

www.triplesign.com - info@triplesign.com - +46 8 626 73 50

Visit us at Intertraffic Amsterdam 20-23 March Stand 11.525

Three is the magic number

VMS don't have to be the preserve of major highway operators with big budgets. Reliable and easy-to-install prismatic systems can help save money and keep traffic flowing freely

Words | **Hans-Ivar Olsson, Triplesign, Sweden**

The town of Ramsgate in Kent, UK, has been using prismatic VMS (variable message signs) from a supplier of old VMS technology. But the signs have not been operating satisfactorily for some time, resulting in so many intensive, costly maintenance efforts that a repair and refurbishment budget has been established.

The designated subcontractor for the job, Alastair Brooks, met Triplesign at Intertraffic in Amsterdam and made enquiries about renovating existing signs and upgrading them with new and reliable technology. After reviewing the project and discussing it with Triplesign, Brooks recommended that Ramsgate exchange its existing signs for new prismatic VMS units.

He reached this conclusion for several reasons. First, the investment in new Triplesign prismatic VMS's with the latest prismatic sign technology was much lower than the cost of repairing the existing signs. Second, the increase in reliability, functionality and general performance was huge when the new system was compared with the old. Finally, the installation time on site and duration of any road closure would be shorter when exchanging new signs for old compared with the time it would take to renovate the existing signs.

After comparing the alternatives, Brooks decided that investment in new Triplesign prismatic VMS was the best option and Ramsgate went ahead with the project.

Meeting the deadlines

The lead time for manufacturing the new signs had to match the original deadline for acquiring spare parts for the existing signs. Production was prioritized with this in mind, and the time from confirmed order to dispatch was trimmed to two weeks.

The dispatched signs were set up according to the information available from



the original installation of the old signs. The new signs were delivered on site as soon as the work to disconnect the old VMS commenced, but after further investigation, it was discovered that the connection points for the old system did not correspond with the project documentation.

This wasn't a problem for the Triplesign prismatic VMS. They are controlled by industry standard PLC systems that can be adjusted with customized software on-site to fit existing and/or non-standard communication methods. During installation and commissioning in Ramsgate the Triplesign VMS controllers were revised to

work with the existing SCADA system's distributed I/Os, instead of the ordered RS-485 protocol, without any adjustments in firmware or hardware.

Competitive solution

The reason for the competitiveness of the Triplesign prismatic VMS, compared not only with an LED VMS where the investment is naturally much higher, but also with traditional and older prismatic VMS systems on the market, is that over time the cost of keeping a Triplesign VMS running and up-to-date is far lower, due to its upgraded and reliable technology.

Triplesign technology is based on a low-friction, smooth and effective mechanism that consists of fewer components, less material and smaller motors working in combination with a patented modular system and lightweight aluminum extrusions.

The Triplesign factory is in a traditional manufacturing region in the south of Sweden, within short driving distances of all its suppliers. This makes the Triplesign system far quicker to produce than other prismatic systems, and the close cooperation with the suppliers gives the company an edge in reliability and durability. Production costs are even fully comparable with products from much lower-cost regions.

Maintenance

The Triplesign system has, like other, similar products, an electronically monitored safety function. It also houses a unique 'passive' safety system. If it is fitted according to the installation instructions, the mechanics of the sign mean it is theoretically impossible for the power from the perfectly adapted motors ever to break it.



(Left and opposite) **Triplesign prismatic VMS provide a reliable, low-maintenance traffic information system**

If other factors lead to an unfortunate breakage, the modular construction of the VMS makes on-site replacement simple with a plug-and-play kit. All components can easily be slid out of the installed frame and replaced from one single access-point on the sign. All hardware components are manufactured from sustainable or recyclable materials to comply with Triplesign's environmental strategy, which commits the company to the lowest-possible energy consumption and the use of recyclable material whenever possible.

The maintenance and service needed has proved to be incredibly low. In 2013/2014, 40 Triplesign prismatic VMS units were installed at Heathrow Airport, London. "The scheme has been installed for the past two and a half years and during this period has performed without any maintenance calls," says Jonalan Vaughan, MD and owner of the service contract holder SignSol. "This is due to the robust and reliable Triplesign design." ■

▶ Safer Traffic Information

Exchangeable default message at power failure

Even if there is no power supply the prismatic VMS expose the picture. The LED VMS will have no message at all without power. A Triplesign can even be manually operated at power failure.

triplesign.com
EN12966 certified



Smart signs

Intelligently designed prismatic signs offer optimized cost effectiveness and reliability for traffic management, as well as contributing to environmental sustainability

Words | Hans-Ivar Olsson, TripleSign System, Sweden

In Jerusalem, Israel, a major extension and renovation project has been in progress on Highway 50 – also known as Begin Boulevard – since 2010. The highway is of huge importance to the area as it runs into the very busy urban areas of western Jerusalem and connects all junctions from the south to the north of the city. The project includes new traffic lanes, tunnels and completely new junctions. As the highway is subject to intensive traffic flow, an effective and reliable traffic management system was needed. Local ITS firm RS Industries is working together with Sweden-based TripleSign System on this huge project.

The Triplesign (rotating prism) VMS (variable message sign) is being used for tunnel roads and service roads. The solution enables the central control center to divert all traffic, or selected traffic such as buses, to alternative routes in cases of maintenance, traffic accidents or heavy traffic flow. The highway is managed by the underground central traffic control center in Jerusalem. Operators use the Siemens SCADA system, which communicates with each of the Triple VMS via RS485-Multidrop.

The project is not finalized, but two batches of units were delivered during 2014 and 2015. These were mostly larger

gantry units, measuring from 20m² to 30m², but also smaller units that are situated next to the highway. All units that have been delivered are now fully operational.

"With Triplesign VMS we received a reliable system that can be adapted to different communication systems, such as the Siemens SCADA," says Ezra Levy, managing director of RS Industries. "The technology is also more cost efficient than older systems because it is based on new prismatic sign technology developed by Triplesign. Its very low power consumption also makes it environmentally friendly.



New developments

The Triplesign VMS is essentially a three-sided rotating prism. As the technology has low investment, energy and installation costs compared with LED VMS, it is the optimum solution if a maximum of three messages are required. However, if more messages needed, the only choice in the past has been to invest in an LED VMS.

The new Triplesign Prismatic VMS system is not limited to three messages, as different parts of the unit can be operated independently. For instance, one part of the unit can display the speed limit, one part can display traffic instructions, and the third part can show traffic warning information. The system can be configured for 6, 9 or 12 messages.

The benefits of the multiple prismatic VMS are numerous. Not only is there a drastic difference in investment cost between the LED-based VMS and prismatic signs, there are operational benefits to the latter too. Prismatic VMS display traffic information at all times while LED VMS require a constant power supply in order to work. In the event of a power cut the LED VMS unit will go out. To mitigate the effects of this, a static sign can be installed nearby. Otherwise, an uninterruptible power supply system is needed. This not only makes the LED VMS more costly, but also more complicated. Also, when comparing power consumption, the difference is dramatic. When in standby mode, the Triplesign Prismatic requires very little power compared with the LED VMS. In fact, the power requirement for the Prismatic VMS is so low that the technology can be solar powered as standard, even in Northern Europe. This avoids expensive power installations and promotes a green environment.

Triplesign believes that the multiple prismatic VMS will open up new possibilities as a result of its low investment cost and low power consumption. In complicated traffic junctions, a cluster of units can alter the traffic flow throughout the day depending on the direction of the traffic. On some roads, an extra lane can be created or one lane can be used to alternate traffic flow. In remote areas, the signs can be used to display information about the weather before bridges or mountain areas, or to advise about alternative routes, border controls, weight control stations and accidents ahead. ■



(Opposite main) Signs are quickly and easily assembled on site (Opposite below) Triplesign nine-message sign at Heathrow Airport (Above left) Triplesign nine-message lane closure sign (Above) Triplesign Prismatic VMS installed on a gantry on Highway 50 in Jerusalem





Critical sign

A remotely controlled, three-sided VMS ensures the safety of weigh station staff on UK highways

Words | **Hans-Ivar Olsson, Triplesign System, Sweden**



(Top) The 'get in lane' sign instructs goods vehicles to move into lane one (Above) The message can be changed by remote control

The UK currently has a directive in place to eliminate all foot traffic from its motorways and major 'A' roads. As a result, roadway signs that used to have their messages changed or flipped by hand now have to be remotely controlled.

Before all roadway weigh stations, there is a sign that instructs all heavy goods vehicles to travel in lane one. This makes it easier for authorities to instruct selected vehicles to enter the weigh station ahead. These signs are currently manually operated, so staff have to attend the site by foot. However, the UK's Driver and Vehicle Standards Agency (DVSA) has decided to develop and evaluate a new remotely controlled sign system for the country's weigh systems.

In the evaluation process for the new system, the initial investment cost was not considered to be the most important factor. The DVSA felt it was more important to find the best possible VMS solution with regard to reliability and stability, to ensure optimum total lifetime cost.

Based on the requirements from DVSA, Triplesign developed a remote VMS solution together with its UK partners Signsol and Signways. The system was provided to the UK construction company Carillion, which was responsible for implementing it.

Signal success

The first station to be equipped with the Triplesign VMS is situated on the A23 from London to Brighton. The scheme included a new vehicle weigh station, from which the DVSA wanted to operate a lane-control sign, one mile away.

In early 2014, Triplesign installed a three-face prism VMS one mile before the weigh station. Communication between the station and the VMS is achieved via a Communications fiber network link. Inside the station office, the fiber is connected to the TAC (Triplesign Advanced Control) unit, which is equipped with a touchscreen tablet for the operation and verification of commands to the VMS. The TAC is also connected to an LCD screen, which displays

the same image as the VMS. This makes it easy for operators to see which face is currently in operation.

To secure the operation of the VMS, the unit is equipped with several back-up options. Uninterruptible power supply (UPS) ensures continued operation in the event of a loss of power. The Triplesign VMS is ideal for UPS solutions as it has a very low power consumption. A manual electronic switch enables the sign to be switched if the network is lost but power still available. If all supplies fail, there is hand-crank operation available.

Simple operation

The system is designed to enable operators at the DVSA weigh station to display the message 'Goods vehicles lane restriction' on the VMS when they want to instruct heavy goods vehicles to travel in lane one. This is achievable by remote, local and manual operation. When the weigh station is not open, the VMS can be positioned to show a blank face with no message. When operators press the button to alter the display, the VMS changes to the selected face within three seconds. At the moment the new face is exposed, a confirmation is displayed on the touchscreen within two seconds.

The new system also has a fault identification status, including an automatic report and an

automatic reverse/restart program in the case of a jam. In case of power loss, the system will identify which face is on display to drivers and will prepare to receive an update from the control unit to identify which face should be showing. If the data/control connection to the VMS is lost, the VMS will remain stable until it is reconnected and a new command is received. The VMS can also be locally or manually controlled. There is also an optional rotation self-testing system.

Better by design

The most important benefit of the new system is that staff are safe, as they do not need to manually control the sign. This is in accordance with the UK directive to stop all foot traffic on its highways.

The new DVSA system using the Triplesign VMS is also much more flexible and cost-effective than the old system. This is because, in order to have staff on a highway, there are a lot of security regulations. Although these regulations are indeed necessary, it makes all work involving people on highways complicated, expensive and planning intensive.

Furthermore, the increased flexibility of the VMS display increases the effectiveness of the weigh station operation and minimizes disruption of traffic flow. ■



(Above) Staff in the weigh station office are alerted if the sign loses power

▶ Lowest power consumption on the market

0-4 W consumption in stand-by mode. With solar a flexible, remote and autonomous VMS to be placed everywhere without concern for power supply.

triplesign.com
EN12966 certified

Signs of the times

The new – and very different – applications that are showcasing how variable message signs and variable speed zone signs are an integral and greatly important part of our traffic management infrastructure

Words | Hans-Ivar Olsson, Triplesign, Sweden



Heathrow is one of the largest airports in the world. 2012 brought almost 28 million visitors through its grounds, with visitors arriving by all modes of transport.

The road network around the airport takes the highest percentage of visitors, so managing the traffic around the terminals is a high priority. Heathrow requires efficient, flexible forms of traffic management tools. The airport already had a 15-year-old variable message sign (VMS) structure that was operated by its own traffic management system, but it lacked reliability and required extensive and expensive maintenance.

The decision was taken to upgrade the existing system to a modern, efficient, reliable and future-proof solution. The procurement process produced a wide variety of potential international VMS solutions, but Triplesign was chosen as the airport's new partner.

This decision was based on the company's future-readiness, configuration flexibility and low total life costs.

Cost efficiency

The Triplesign VMS system is a cost-effective solution, featuring a low start-up cost, low maintenance costs, low power consumption and flexibility to adopt an existing control system.

The project had a short lead time from order to installation. It included 40 VMS units that each have multifaced control built in. Each sign has up to nine face control options. Each unit was designed around the airport's requirements and the highway specification. One key element was that the signs needed to be equipped with the right messages to conduct the control of HGVs and manage traffic congestion.

The Heathrow scheme was brought to market through Triplesign's UK distributor, SignSol and installed by Signway.

School zone/adjustable speed zone

In a completely different UK application, Balfour Beatty Mott MacDonald used Triplesign technology to replace some

ageing and failing signs on the A21 road in Hurst Green, East Sussex.

The scheme covered a section of road with temporary speed limits in place. To maintain awareness and respect for a reduced speed, it's critical to signal the temporary speed limit in a way that attracts the driver's attention. It is also critical to allow a higher speed when the speed reduction is not necessary. An LED sign would consume energy 24 hours a day to display the speed limit, whereas a rotating prism VMS only consumes power when it's changing the posted speed limit. The actual power consumption during rotation is less than 20 watts (excluding any additional illumination or 'wig wag' flashers). The total consumption for this project is less than 2Wh/24 hours (12 rotation/24hours) making this technology a perfect fit for the use of an uninterruptable power supply (UPS) and/or solar power.

The project involved the supply of UK Highways Agency-approved signs for the



Part of the Heathrow application is to use signs to direct HGVs

legally enforceable temporary reduction of speed from 30mph to 20mph. From initial meetings and an order being placed, the units were completed and installed within four weeks.

Variable speed zone sign

In a third application that showcases Triplesign solutions, the company's variable speed zone (VSZ) sign, with or without LED wig-wags, is being used outside a number of schools. To maintain awareness of the temporary reduced speed, the wig-wags are

set to flash during times when the temporary limit is being deployed.

The school zone sign can be pre-programmed with school opening and closing hours and can reduce the speed according to a pre-set schedule on a five-year plan. The plan can be locally updated with a memory stick.

The Triplesign VSZ standard settings are to reduce speed during morning rush hours, lunch hours and afternoon school hours, and have the regular speed limit in place between the reduced periods – and at



The school signs use wig wags to alert drivers to the temporary limit

weekends, evenings and other times when schools are closed (such as Bank Holidays).

The sign can be fitted with up to four wig wags that can be controlled individually or in pairs (left/right, up/down or in a cross pattern).

Communication options include the Triplesign internet management (TIM) system (accessible from a PC, Mac or smartphone) and/or the common gateway interface (CGI), Modbus/RS485, Serial RS232. The communication can also be adapted to fit existing systems. ■

▶ Significant lower investment compared to LED VMS

Highest MTBF, meantime between failure, on the market without maintenance ensures lowest possible cost.

triplesign.com
EN12966 certified

The many and varied uses of the latest in prismatic sign technology

London Heathrow is one of the largest airports in the world. In 2012, almost 28 million visitors passed through its grounds, arriving by all modes of transport.

The road network around the airport takes the highest percentage of visitors, so managing the traffic around the terminals is a high priority. The airport already had a 15-year-old variable message sign (VMS) system in place, but it was unreliable and required maintenance. The decision was made to upgrade to a modern, efficient and reliable solution. Triplesign was chosen as the airport's new supplier together with its British partners SignSol and Signway Supplies.



(Above) A critical part of the Heathrow project involved providing accurate info for truck drivers (Left) Variable speed zone signs are proving popular outside schools, where they can reduce speeds during term time



The Triplesign VMS system is a cost-effective solution with a low power consumption and flexibility to adopt an existing control system.

The Heathrow project included 40 VMS units that each have multifaced control built in. Each sign can have up to nine face control options.

In another UK application of this technology, Balfour Beatty Mott MacDonald used Triplesign VMS to replace some aging signs on the A21 road in Hurst Green, East Sussex.

The scheme covered a section of road with temporary speed limits in place. To maintain

awareness of a reduced speed, it's critical to signal the temporary limit in a way that attracts the driver's attention. It is also critical to allow a higher speed when the reduction is not necessary. An LED sign would consume energy 24 hours a day to display the speed limit, whereas a rotating prism VMS only consumes power when it's changing the posted limit. The power consumption during rotation is less than 20W/H (excluding any additional illumination or 'wig wags').

The project involved the supply of UK Highways Agency-approved signs for the

Need to know?

From airports to schools to remote locations, prismatic VMS are bringing intelligence to the signs sector

- Applications of prismatic VMS span everything from airports to school zones, lane closures and incident management
- Compared with LED-based VMS, prismatic signs offer many benefits in both cost and operation
- Future deployments of prismatic VMS include using them on toll roads and at customs stations

legally enforceable temporary reduction of speed from 30mph to 20mph.

Variable speed zone sign
In a third application that showcases Triplesign solutions,

the company's variable speed zone (VSZ) sign is being used outside a number of schools. To maintain awareness of the temporary reduced speed, the wig wags are set to flash during times when the temporary limit is being deployed.

The VSZ sign can be pre-programmed with school opening and closing hours and can reduce the speed according to a preset schedule on a five-year plan. The plan can be locally updated with a memory stick. The standard settings are to reduce speed during morning rush hours, lunch hours and afternoon school hours, and have the regular speed limit in place between the reduced periods – and at weekends, evenings and other times when schools are closed (such as bank holidays).

The sign can be fitted with up to four wig wags that can be controlled individually or in pairs (left/right, up/down or in a cross pattern). Communication options include the Triplesign internet management (TIM)



system (accessible from a PC, Mac or smartphone) and/or the common gateway interface (CGI), Modbus/RS485, Serial RS232. The communication can also be adapted to fit existing systems.

New developments

Looking ahead to the future, Triplesign predicts that the increased demand for flexible ITS tools will develop both the technology that goes into VMS and the applications the signs are used for.

One future application is to use prismatic VMS as lane closure signs. In this type of setup, VMS would be deployed on each traffic lane to deliver the closure information effectively. Traditional lane closure signs are primarily used in urban areas with traffic flows that regularly exceed the capacity of the network. Deploying a VMS-based lane closure sign system – rather than traditional, non-dynamic signage – has a number of benefits. Firstly, as well as closing lanes, it can also open

up new ones. A VMS can deliver a message to say that a hard shoulder is open to low-speed traffic during a traffic jam, for instance. Another benefit is that a lane on the opposite side of the road can be opened up to traffic during an incident via information delivered by the VMS. Temporarily separate lanes for HGVs or public transport can also be created. Certain lanes can even be redirected to other roads.

To meet the demand in this area, Triplesign has developed a new range of prismatic VMS for lane closure operations. Visually, the signs look like regular static traffic signs. But appearances can be deceptive; there are actually several signs built into each unit. The idea is that there is one sign for each lane of traffic on a multiple-lane road. Each lane can be independently operated by the traffic management system.

When comparing prismatic VMS with LED VMS, a number of benefits associated with the former approach are apparent. Obviously there is a drastic difference in investment costs between LED-based VMS and prismatic signs. But there are operational benefits too. Prismatic VMS display the traffic information at all times, while LED VMS require a constant power supply to be able to expose the information. If there is a power cut, the LED VMS units will go out, unless they have an expensive uninterruptible power supply (UPS) system. In some scenarios, a static 'reserve' sign is placed next to the VMS so that some information can still be displayed during a power cut. Prismatic signs do not require any of these additional solutions and their associated costs.



(Far left) Variable speed zone signs feature 'wig wags' that flash to alert drivers to a reduced speed (Left) Prismatic signs are easy to install and they have very low power requirements

management solution it's being used for. The power needed is so small that Triplesign prismatic VMS can be solar operated as standard, which avoids expensive power supply installations and promotes a greener environment.

Remote installation

The ability to have prismatic VMS installed in remote locations that do not have access to mains power is opening up further applications for the technology. For instance, signs could be installed before charging stations on a toll road or they could be used ahead of customs stations to prepare the driver for what lies ahead.

Road weather stations could also be connected to the VMS to provide warnings for heavy rain, snow or ice. And truck control stations could be efficiently operated by using a prismatic VMS to instruct the truck driver to drive off the highway and into the control station in good time. Finally, prismatic VMS can be used to re-direct traffic, for example due to accidents or traffic jams.

Triplesign is looking forward to embracing the needs of a dynamic market that is seeking cost-efficient and innovative ITS solutions. ○

Contact

Triplesign
+46 8 626 73 50
sales@triplesign.com
www.triplesign.com

Han skyltar om Heathrow

Smålänningen Hans-Ivar Olsson leder bilisterna till flygplatsen



Dagens Industri is the largest business paper in Sweden.

De senaste åren har Vrigstad Skyltfabrik i Småland inte skyltat med några lysande resultat.

Men sedan storflygplatsen Heathrow i London bestämt sig för att styra bilisterna småländskt hörs det gladare toner från Vrigstad.

Hans-Ivar Olsson fortsatte i fotspåren av sin småländske far Lennart Olsson som drev en småländsk skyltfabrik som sedan såldes 1998.

Med en del innovationer kvar för inomhusskyltar bildades det nya bolaget Triple Sign med far och son som partner.

Inriktningen var skyltsystem inomhus till butiker och till exempel bensinstationer. Men från 2008 kärvade marknaden för de sju anställda i Vrigstad.

"Det är så klart inte så kul och det har varit några tunga år", säger Hans-Ivar Olsson, som sparade bland annat genom att flytta säljkontoret till Vrigstad även om han själv stannade kvar i Stockholm.

Rörlig nisch

I jakten på nya marknader valde han att styra företaget in på rörliga trafikskyltar. Och efter en mäsas 2012 blev det napp från bland annat distributör i England.

Så när Heathrow nu byter ut styrsystemet för biltra-



ANPASSAT INNEHÅLL. Skylten varnar för till exempel bilköer, starka vindar och andra risker för trafikanterna.

hjälpa bilisterna att visa alternativa vägar när tunneln till M6 är stängd, varna för kraftiga vindar eller för köer och annat elände.

Lockar fler kunder

Första leveransen går i början på april av ordern som sammanlagt är värd cirka 100 000 pund. Inom 1 Mj

holm byggs om ska trafiken styras med rörliga småländska skyltar.

"Förut hade vi inte riktigt råd att ha kaffepauser och nu har vi inte riktigt tid. Det är lite skillnad", säger Hans-Ivar Olsson.

Utanför skolor

Och redan är en uppföljning på gång i England. Byn Hen Green i grevskapet Kent i sydöstra England skyltar rörligt utanför skolor för att få bilisterna att följa hastighetsbegränsningarna och minska olyckorna.

Den småländska skyltstyrs av skolornas sker och börjar blinka och vid den högsta tillåtna hastigheten i realtid.

Hans-Ivar Olsson har särskilt den nyanställda elektronikmagikern Pär-Ar Claveroth att tacka för att hela fungerar.

Fler länder i sikte

Och nu siktar han på både Europa, USA och Asien. trafikskyltarna som slår med småländsk dialekt och både pris och funktionalitet.

Ordern från Heathrow ett genombrott.

Det lär bli en och annan flygresare ut i världen via London.

"Jag får vara ute i litet ex tid så att jag kan ta en sväng och kolla att skyltarna fungerar", säger Hans-Ivar Olsson.

LARS TU



Triplesign Factory, Vrigstad, Sweden



Triple Sign System AB is a Swedish-based producer of three message signs founded in 1998 by former owners of World Sign International. — With my family for over 20 years in the forefront of the prismatic sign business, I am proud to announce that Triplesign is leading the development in the Prismatic VMS market.

Hans-Ivar Olsson, Managing Director

- ▶ Triplesign VMS certified in accordance with EN 12966-1 2005+A1:2009.
- ▶ Already tested and approved for new coming 12966 standard.
- ▶ TR2130C tested approved.
- ▶ Great Britain Highway approval.

triplesign ▶ **com**
EN12966 certified

www.triplesign.com
info@triplesign.com
Phone: +46 (0)8 626 7350

