

The wire rope safety fence

BRIFEN NEWS

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Toward Zero Deaths: A National Strategy on Highway Safety

Brifen USA, Inc

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The Wire Rope safety fence

EN1317 Systems

Under EN1317 we have systems to suit N2 and H1.

Containment / Working Width	System Ref.	Post Spacing	No. of Ropes
N2 W4	CEWR2015	1200mm	4
N2 W4	CEWR4005	3200mm	4
N2 W5	CEWR2005	3200mm	4
N2 W5	CEWR4020	3200mm	3
N2 W6	CEWR2020	3200mm	3
H1 W7	CEWR2035	3200mm	4

To allow connection to other barrier systems we have developed a transition (Britranz) which is fully tested to EN1317 and ensures it contains and safely redirects impacting vehicles.

There is also a simple arrangement to allow a transition between N2 and H1 systems.

We also offer terminals tested to P1 and P4 under EN1317 - these are available for both the 3 rope and 4 rope systems.



NCHRP350 Systems

Brifen is available in several designs, all approved by the Federal Highway Administration (FHWA) as fully complying with NCHRP 350 TL-3 & TL-4 crash testing requirements. There are several types of end treatments also available, all of which meet FHWA compliance. These choices allow you to choose the system that best meets your specific needs.



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HIGHLIGHTED STORY

Brifen USA, Inc.

It is just a little over ten years ago that Brifen USA, Inc. brought the patented Brifen Wire Rope Safety Fence to America from Hill and Smith Ltd. , UK.

In those ten years since the introduction of high tension cable barriers to the US, thousands of miles have been installed and are now commonly used in the vast majority of States. Brifen USA, Inc is credited with changing the landscape of the American Interstate system with their cost effective cable barrier and have several other “firsts” to their credit.

In addition to the first high tension system approved to NCHRP 350 TL3 standards ,the Brifen system is the first 4 rope system , the first crash worthy end anchor, the first system to be tested and approved by US Federal Highway for use on slopes up to 4H: V1 and the first NCHRP 350 TL4 system to be installed on US roads.

Designers looking for solutions to cross median (central reserve) crashes look first to high tension cable barriers as the solution because of the success Brifen WRSF has had in preventing fatalities often the case with those type terrible accidents. Designers are now looking to high tension cable barriers for outside shoulder applications as an alternative to the common W Beam guardrails that have been utilized for decades on American and world roads.



Brifen USA , Inc is proud to have played a part in saving lives on American roads and strongly supports the FHWA’s **Toward Zero Deaths: A National Strategy on Highway Safety.** Reducing the number of fatalities on American roads , now in excess of 35,000 per year is everyone’s goal and certainly fits with the motto of Brifen USA, Inc which is “Brifen because our families drive where you do”. We look forward to the future and many new “Firsts”.



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New wire rope safety barrier near Vilholi prevents accidents

Santosh Sonawane, TNN

Nashik: Several accidents have been prevented in the past four months by the Brifen wire rope, a safety barrier; put up on the median between Vilholi and Gonde on the Mumbai-Agra national highways.

The Brifen wire rope safety barrier is used on dual carriageways, medians and verges. The system comprises wire ropes and steel posts deployed in an arrangement that enables impacting vehicles to smoothly decelerate and be redirected with minimal damage.

Source from PNG Tollways, which has widened the highway from Pimpalgaon to Gonde, said that over the past few months, several accidents were prevented due to the safety fence. The technology has been used only on this stretch in the state, PNG sources said.

In a bid to reduce accidents caused by dissimilarity in the level of two carriageways, there are chances that a vehicle from one carriageway may accidentally cross over to another carriageway. The company has fixed

the Brifen wire rope system at five locations where there are chances of such accidents.

Company sources said due to the swinging action of the Brifen wire rope, vehicles hit these ropes and get

back on their track, damaging only the vertical posts of the system.

A few days ago, a container moving towards Mumbai from Nashik deviated from its track and hit the Brifen wire rope on the median side at Wadiware to VTC Phata junction. However, the container was back on its track. The only damage was to the vertical posts of the wire rope system.

This system protects vehicles from crossing one carriageway to other (where vehicles ply from the opposite side) when their drivers veer off track and control of the vehicle, either due to rash driving or dozing.

Company officials said the system was put in place after observing a pattern in some accidents.

On whether there were plans to put up the wire system all along the 60-km stretch, sources said the five points were chosen after studying the pattern of accidents at these places, adding that there was no need to put up the system in other areas of the widened road between Pimpalgaon to Gonde as of now.

PRASHANT KHODASKAR

Project director of National Highway Authority of India (NHAI)

“This seems to be the best technology at present. We had started it in Nashik on an experimental basis and it has given us results. It can be used in other new project too. In Monday’s incident, the 40-tonne container was back on its carriageway after hitting the wires. Has it not been for the new rope safety fences, the accident would have been disastrous. Even a crash barrier would not have helped. In this case, only three wire posts toppled over and they could be put into place immediately. The entire impact of the collision was absorbed by the three wire ropes.”



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“In Monday’s incident, the 40-tonne container was back on its carriageway after hitting the wires.”

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PRESS REPORT

Installation of Brifen Wire Rope Barrier on Mumbai-Pune Expressway

Government approves crash barriers on E-way

By Suyash Padate, Saturday 23 February 2013

Under fire from all sides over the rising number of accidents on the Mumbai-Pune Expressway, the state government has finally swung into action and decided to install brifen wire ropes as a crash barrier on the accident prone Pawana police chowki-Ozerde stretch.

Temptation to speed continues to see several vehicles jump over the divider and hit vehicles coming down the opposite direction. As a result, ten people have died in precarious accidents in the past six months. In wake of the accidents the government finally incorporated the expensive safety device. The Maharashtra State Road Development Corporation (MSRDC) and Ideal Road Builders (IRB) have taken up this work of installing brifen wire ropes as crash barriers at the accident-prone stretch, which will be completed in a month.

According to an MSRDC official, the crash barriers absorb the impact of the collision. Consequently, it will ensure that the vehicles won't bounce back on the road after an accident. The MSRDC has also taken the help of a foreign company for the installation of the wire rope crash barriers at an estimated cost of Rs. 6 crore. The barriers will first be installed on parts where there are no road dividers. The road contractor and the corporation have been asked to install rumblers near the Kamshet Tunnel, where the motorists tend to increase speed. When contacted, PWD (Projects) Minister Jaidatt Kshirsagar said, "The government has taken serious cognizance of the growing accidents on the expressway and decided to install these advanced anti-crash barriers. In addition to it the government is also planning to set up new cameras to ensure the speed limit of vehicles."

Pimpalgaon-Nasik-Gondhe Section NH-3 – 5 KM
Client: Ashoka Buildcon Ltd

DID YOU KNOW?

The Brifen Wire Rope Safety Fences (WRSF) was introduced in India in 2011. Brifen Wire Rope has been accredited by Indian Roads Congress (IRC) for use in India. With the introduction of Brifen Wire Rope Safety Barrier in India, the contractors and engineers are now started specifying Brifen Wire Rope Barriers in their projects as they see Brifen a very cost effective solution in improving road safety in India.

Recently, Brifen has had quite a few successes in India and won some major orders. Hill & Smith Infrastructure Products India Pvt Ltd (HSIPI) has recently won orders for over 20 KM of Brifen in the last couple of months.

Some select installations include:

- Gorakhpur Bypass Project, NH-28 – 5 KM (Gammon India Ltd)
- Pimpalgaon-Nasik-Gondhe Section, NH-3 – 5 KM (Ashoka Buildcon Ltd)
- Gwalior-Morena Section, NH-3 – 1 KM (National Highway Authority of India (NHAI))

Recent Brifen orders in 2013:

- Moradabad-Bareilly Expressway Project, NH- 24 – 2 KM (IL&FS Ltd)
- Belgaum-Dharward Project, NH-4 – 5 KM (Ashoka Buildcon Ltd)
- Bargarh-Sambalpur Project, NH-7 – 10KM (Ashoka Buildcon Ltd)
- Mumbai-Pune Expressway, NH – 2.5 KM (MSRDC)



Gorakhpur Bypass Project NH-28 – 5 KM
Client: Gammon India Ltd

BRIFENWORLDWIDE

THE TOTAL SOLUTION IN BARRIER SYSTEMS

Brifen VRS

The Brifen VRS is globally recognised and is increasingly specified by highway authorities including Britain, Australasia, the Middle East, Scandinavia, USA and South America.

A proven product, Brifen is making an important contribution to road safety with installations in more than 30 countries throughout the world.

Brifen has been tested to the two main approval standards – EN1317 and NCHRP350.

The speed of installation and lower lifecycle costs make Brifen VRS the preferred choice of many engineers.

Brifen has also gained CE marked approval for its EN1317 tested systems.



BRIFEN on the Causeway

Cape Breton Island sits on the northern tip of Nova Scotia. Highway 104, which runs up the spine of Nova Scotia, is the only road to this picturesque and historic area. Before drivers reach Cape Breton, they must cross over Canso Causeway on which lie the 2 lane highway and the islands only railway link.

This 1.4 kilometer causeway has had various barrier types over the years, but in 2010 Brifen was commissioned to install a short Wire Rope Safety Fence next to the historic swing bridge as a test. After a successful year long test in which BRIFEN sustained a number of impacts, the Nova Scotia Department of Transportation and Infrastructure Renewal (TIR) went forward with installing Brifen on both sides of the entire causeway.

The Nova Scotia TIR specified that the barrier must not deflect more than 1.3 meters during an impact. Brifen Canada commissioned computer simulations to ensure that this specification was met. Local contractor Maritime Fence Ltd. of Goffs, Nova Scotia, won the tender to pave the shoulder and to install Brifen.

To complete this project Maritime Fence needed to develop a method of paving over pre dug holes for the line post foundations. This innovation ensured that the post anchors were completely surrounded by asphalt and that wayward vehicles had a chance to recover before hitting Brifen. Maritime Fence installed 2 separate BRIFEN barriers, 1.3 kilometers on the East side and 1.8 kilometers on the West side. To date the barrier has had several impacts, including a semi-truck which took down 40 posts.

The project was completed on time and on budget and was greeted with great fanfare by the Provincial Government and the local community.

TO VIEW THE VIDEO OF THE COMPLETED PROJECT PLEASE FIND BRIFEN CANADA ON YOUTUBE AT WWW.YOUTUBE.COM/BRIFENCANADA

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HS Roads / Brifen News – Asia-Pacific

HS Roads is in process of opening up the Asia-Pacific market with a new office & warehouse in Brisbane, Australia and an Asia-Pacific regional base in Singapore.

Our Asia-Pacific efforts are being led by Russell Hood, General Manager – Asia-Pacific, based in Singapore. With our Australian team consisting of David Round, General Manager – Australia, David Moule, Business & Product Manager and Casey Lee, Design Engineer. The entire team is active across the region, with David Moule and Casey Lee active in supporting projects outside of Australia as well as the local Australian business needs.

The regional HS Roads setup includes products from several group companies, including Hill & Smith Ltd, Varley & Gulliver Ltd., Berry Systems, TopDeck Parking, Hill & Smith Inc and Asset International Ltd. Our mission in the regional structure is to offer the complete HS Roads package through a single channel to market.

One of our key products in these market expansions is the Brifen Wire Rope Safety Barrier system.

Over the course of the past 12 months we have won several projects in Australia, and new projects in New Zealand, Indonesia, Thailand and Taiwan. We have also set up new distribution partners in Taiwan, Vietnam, Thailand, Philippines, Malaysia, Brunei and Singapore.



Hill & Smith's Innovative Solutions website

The total solution in barrier systems in one place – www.hill-smith.co.uk



Hill & Smith are driving safety forward with a total solution, be it our FLEXBEAM VRS family of systems for use on highways, to BRIFEN the wire rope VRS used in over 30 countries worldwide or our OFFROAD industrial barriers protecting your property.

Hill & Smith, part of the HSROADS group of Hill & Smith Holdings PLC., which has vast experience in manufacturing vehicle restraint systems including Steel Barriers – FLEXBEAM, Wire Rope Barriers – BRIFEN, Hybrid Impact Protection – BRIFLEX and Industrial Barriers.

With a policy to supply quality of service, tested and approved products, the company has developed a strong reputation in the field of road safety.

 FOR MORE INFORMATION VISIT HILL-SMITH.CO.UK

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of our products please call:
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