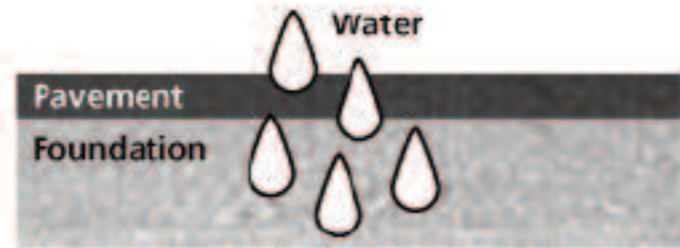


# What causes potholes?

Potholes in roads are generally caused by a combination of two problems – water penetrating the road pavement surface and traffic load.

As a road pavement ages, it becomes more porous and rainwater begins to penetrate through cracks and other flaws. In colder weather conditions, the water which has drained through to the road base or foundation layer freezes. As basic physical science tells us, when water freezes it expands. This expansion begins to displace the road pavement layer, leaving a void when the ground subsequently thaws. A succession of freeze-thaw cycles gradually increases the size of the void and weakens the road pavement layer. Traffic loads over the unsupported pavement cause collapse and the formation of a pothole.



Water penetrates the foundation.



Freezing water expands causing displacement of the pavement and/or foundation.



The ground thaws and leaves a void in the foundation.



Unsupported pavement fails under the traffic load.

## And finally.....

In business, we shouldn't always take ourselves too seriously.

Here's a typical road maintenance crew out for another day's hard toil. It really seems unfair that only one man has work left to do whilst all the others are already able to enjoy a well-earned mug of tea.

If only he too had used Emcol IRR .....



# NEWS

the newsletter of Emcol International

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## Emcol appoints a new licensee in Nigeria

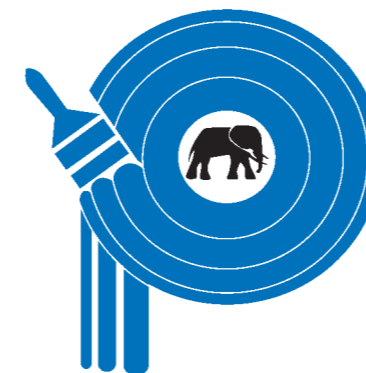
Emcol International has extended its network in Africa with the appointment of Portland Renovations and Construction as its manufacturing licensee in Nigeria.

Headed by its Managing Director, Bayo Osibo, the company is a subsidiary of Portland Paints and Products Nigeria Ltd. A well-known and respected business leader within Nigeria, Bayo Osibo joined Portland Paints in 1984, quickly becoming the company's National Sales Manager and subsequently its General Manager in 1991. Then in

2003, Bayo led a management buy-out of Portland Paints from its owners, the Lafarge Group.

Now producing Emcol IRR, Portland Renovations is supplying national, local and municipal agencies responsible for road maintenance and repair in Nigeria. The durability of the repairs which is achieved with Emcol IRR is a key benefit and gives Portland Renovations a significant commercial advantage.

As Portland Renovations begins to develop the market for Emcol IRR in Nigeria, we welcome them to the Emcol licensee network and wish Bayo Osibo and his skilled team even greater success in the future.



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## Insta Service, Italy – one year on

Insta Service s.r.l. began manufacture of Emcol IRR under license in Italy in 2005.

Marketing the product in Italy as Black Top, Insta Service offers its customers three grades of repair compound – 3mm, 5mm, and 8mm. Black Top is supplied in re-sealable 25 kilo buckets and coloured lids are used to distinguish between the three alternative grades.



Insta Service is developing its market by working with Italy's local town councils and municipal authorities. With a combination of trade press advertising and editorial coverage, Insta Service has targeted all 8,000 of Italy's Public Administrations.



The marketing campaigns have raised awareness of Black Top in Italy's road maintenance sector and have generated many leads and new business.

A notable success for Black Top during this year has been in winning a contract for the maintenance of the A4 Turin to Venice motorway, the main east-west transport artery in northern Italy. Pleasingly, this contract award displaced a competitive product. Insta Service was able to supply from local manufacture and offered the benefits of longer shelf-life and cost effectiveness.

## Tarmac introduces new packaging for RoadMaster

Emcol's licensee in the United Kingdom, Tarmac has introduced new packaging for its road repair range.

RoadMaster SMA, based on Emcol Mixing Liquid as its binder system, is now available from Tarmac in convenient 25 kilo re-sealable plastic tubs. The new pack makes for easier transportation to site and part-packs can be simply re-sealed for use on other repair jobs.

RoadMaster SMA has been approved by the British Board of Agreement (BBA) under the Highways Authority Product Approval Scheme (HAPAS). Certification under HAPAS is a significant benefit, for the approval process and performance standards required are detailed, rigorous and demanding. Based upon Emcol Mixing Liquid, RoadMaster has been approved under HAPAS as a cold-lay material for the permanent reinstatement of openings in Type 2, 3 and 4 carriageways, footpaths and cycletracks.



## Shinreki produces the best road repair product in Japan

Shinreki Industry Co Ltd became Emcol's manufacturing licensee for Japan in 1989. During the following seventeen years, Shinreki has achieved a very high level of success in developing the road repair market and now has a total of six Emcol IRR manufacturing plants strategically located around the islands of Japan.

One of Shinreki's most important customers is Japan's Ministry of Land Infrastructure and Transport which has eight regional districts. This Ministry is responsible for promoting a systematic approach to the use and development of resources for Japan's transport infrastructure. Technical Officers at the Kinki Regional Development Bureau have recently conducted an extensive study comparing a number of cold-laid instant road repair products. In practical trials at sites in the region, several factors were assessed including ease of use, durability and cost-effectiveness.



From these trials, Shinreki's Emcol IRR came out as the best product, receiving an overall "Excellent" rating.

The Kinki region, also known as the Kansai region, lies in the southern-central area of Japan's main island Honshu. The cities of Kyoto, Osaka, Nara and Kobe are all within this culturally-rich region.

With two coastlines – to the Sea of Japan in the north and the Pacific Ocean in the south – the Kinki region has a wide variation in climatic conditions. During winter, there are heavy snowfalls and rain in the coastal area along the Sea of Japan, while in the south, the coastal area facing the Pacific Ocean is characterised by heavy rains at the start of summer followed by typhoons in autumn.

	Product A	Product B	Product C	Product D	Emcol IRR
Price	Medium	Medium	Low	Medium	Medium
Ease of use	Good	Poor	Good	Poor	Excellent
Durability (dry weather)	Excellent	Excellent	Good	Excellent	Excellent
Durability (wet weather)	Satisfactory	Satisfactory	Poor	Satisfactory	Excellent
Shelf life	Medium	Medium	Medium	Medium	Excellent
Overall Rating	Good	Poor	Poor	Poor	Excellent

Such a wide spectrum of climatic conditions places significantly increased stresses on road repairs. Shinreki's Emcol IRR has been shown to provide road repairs which have excellent performance under these conditions and are superior in every way.

