



Approved
Partner



Highway Maintenance Cost Saving Revolution

Alastair Smith- Customer Relationship Manager
Gavin Blogg – Head of Business Development

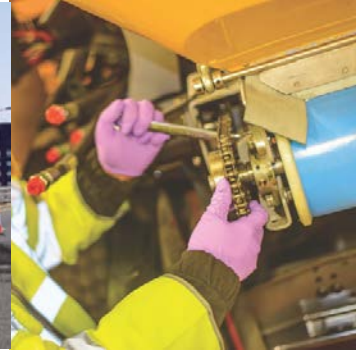
Welcome and Introduction



- What is Velocity?
- Capacity / Capability
- Repairs
- British Standard - Spray Injection Patching
- Carbon reduction solution
- Velocity in Action – Case Studies
- Summary



What is Velocity?



Road Repair Service

Core Business
Delivering Velocity
Patching to clients
throughout the UK

Recruitment

Temp & perm
recruitment
Provides drivers to RRS
Transport Solutions
Truck + Driver Hire

Preservation

Working in
collaboration with ASI
to project manage and
deliver asphalt
preservation treatments

New Machine Build

Velocity machine
manufacture and
development in
Sunderland
Maintains UK fleet,
aftersales support

Overseas JVs

Contracting
partnerships overseas
Velocity provides
machines & expertise.
Manufacturing JV in
India

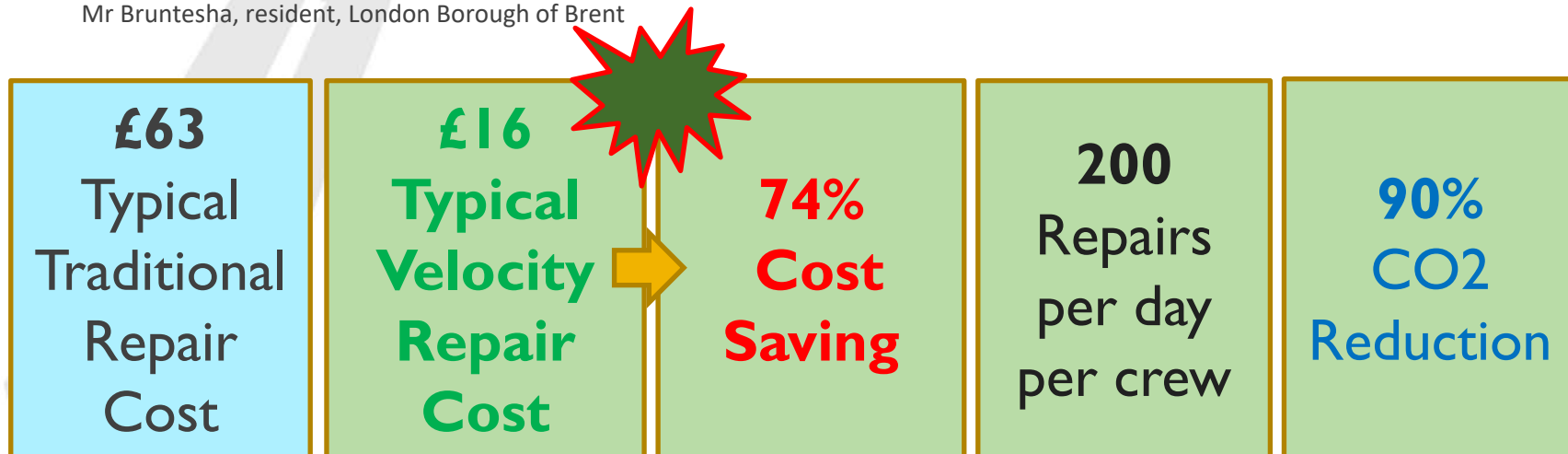
Are traditional methods working effectively?



Velocity – Effective method of working – Fact.

- *“Good to see common sense being used at last on these bloody potholes and fast repairs too”*

Mr Bruntesha, resident, London Borough of Brent



- How many defects are you fixing per day/month/year for an extra £47.00 per fix?
- Public satisfaction and Council credibility all rolled into one package 😊.
- Link to Council sustainability policy/ Carbon reduction strategy.



Capacity and Capability

The perfect repair

- **Machine**
Technically advanced, fully self-contained road repair machine
- **Operatives**
Highly skilled, fully trained Machine Operators – importance of checking compliance
- **Materials**
Quality local aggregates and emulsions tested to our performance and British standard specifications



Capacity – Range of Machines to suit different networks



Fully self contained, high-capacity machines

Velocity



- Capacity of enough cold material to repair approximately 200 potholes!

Capacity - Velocity Training & CPD



- All operators certified NVQ for Spray Injection Patching
- LANTRA Traffic Management
- Customer service/public interface training
- In-house CPC HGV training
- Annual refresher training
- Industry Leading – Sector Scheme 13 Fully Compliant
 - ❑ Management Team RSTA Silver Certificate
 - ❑ Supervisors – NVQ Level 3 – Gold Card
 - ❑ Managers – NVQ Level 6 – Black Card



Process Limitations



Process limitations



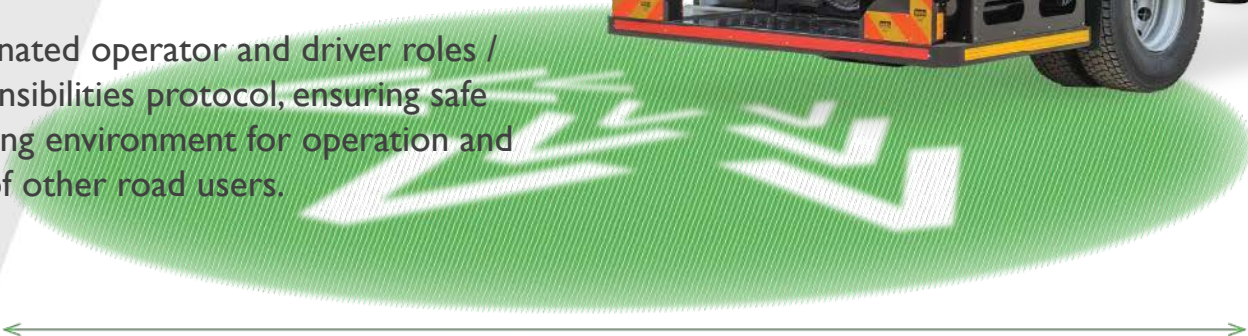
Types of Repairs



Repairing the defects other techniques can't reach



- Operators safely work in an unrestricted, wide area.
- Ability to carry out repairs on any area of the carriageway, as well as working around obstructions such as parked vehicles.
- Designated operator and driver roles / responsibilities protocol, ensuring safe working environment for operation and that of other road users.



3m reach
310° range

velocitypatching.com

Longevity of repairs

CUMBRIA – 24 MONTH OLD REPAIRS - Robertlands Ln Penrith CA10 – Repair Date 10/04/2016

Robertlands Ln Penrith CA10

First Audit 28/07/2017

Robertlands Ln Penrith CA10

18/04/2019



NORFOLK – 36 MONTH OLD REPAIRS - Outwell Road – Kings Lynn – Repair Date 23/03/2016

Outwell Road – Kings Lynn

First Audit 18/05/2016

Outwell Road – Kings Lynn

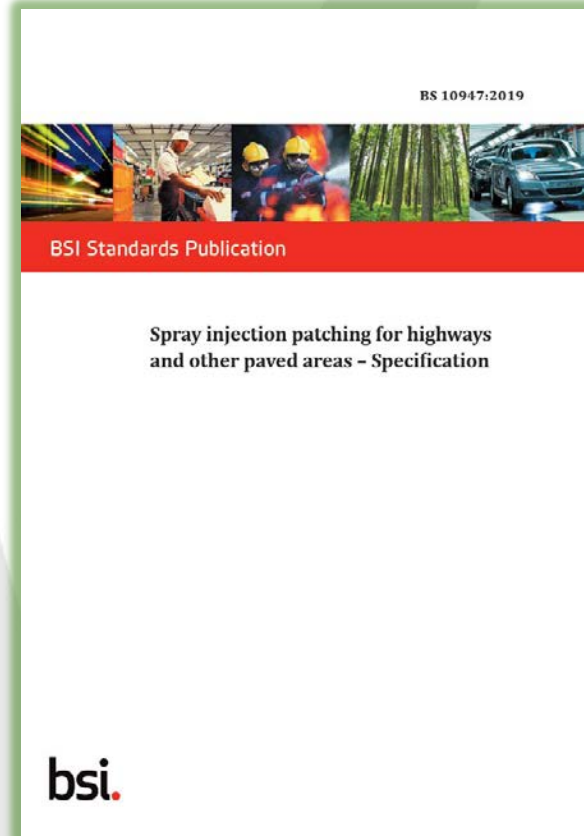
01/05/2019





BS 10947 – Spray Injection Patching

British Standard BS 10947



bsi.

The British standard specifies performance requirements and gives control procedures for spray injection patching.

This British Standard is intended to be used by producers and specifiers in the public and private sectors

Spray Injection Patching – The Journey



RSTA Code of Practice for Undertaking Velocity Patching

BS 434-2:2006



National Highways Sector Schemes
for Quality Management in Highway
Works

13
For the supply and application of surface treatments
to road surfaces

Published by the Sector Scheme Advisory Committee for
Surface Treatments (SSACST)

April 2011 ■ Issue 1

Page 1 of 50

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ADEPT

CODE OF PRACTICE FOR UNDERTAKING
VELOCITY PATCHING



November 2011

1

BRITISH STANDARD

Bitumen road emulsions –

Part 2: Code of practice for the use of
cationic bitumen emulsions on roads
and other paved areas

BS 434-2:2006



British Standards

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Constituent Materials – Emulsion Binders

- Generally Cationic rapid setting bitumen emulsions (CRS 2)
- Conforming to BS EN 13808
- 60-70% bitumen emulsion (applied hot or cold)
- Polymer Modified Bitumen emulsions used in high stress areas
- Summer and winter grades available
- Traffic volume, road type, skid resistance requirements, weather, and future resurfacing plans may all affect the choice of binder

Constituent Materials – Product Cohesion Test



Performance

- Initial Performance:
 - Treated Area (up to 1m² and confined on all sides to maximum depth of 60mm) shall be completed such that there is:
 - No depression
 - No crowning
 - No undulation in the surface exceeding +/- 10mm
 - Edge tolerance shall not exceed +/- 6mm
 - Temporary Repairs = Meet performance criteria after 3mths
 - Permanent Repair = Meet performance criteria after 12mths

Type Approval Installation Test (TAIT)



LOCATION RECORD					
ROAD NAME:	NEW ROAD		PARISH / TOWN:		HINGHAM
LONGITUDE:	N/A		LATITUDE:		N/A
URBAN:	NO		RURAL:		YES
ROAD WIDTH:	SINGLE TRACK		SPEED LIMIT:		60
DEFECT DEPTH	50MM				
SHADED:	Y / N	PART SHADED:	Y / N	UN-SHADED:	Y / N
INLINES:	Y / N	BENDS:	Y / N	JUNCTIONS:	Y / N
ROAD – BINDER RICH:	Y / N	ROAD – NORMAL:	Y / N	ROAD – BINDER LEAN:	Y / N

PLANT RECORD									
VEHICLE REGISTRATION:	V27 VPL	ROAD PRE SWEEP:		Y / N	REPAIR START & FINISH TIME:	11.00AM	11.05AM		
TYPE OF COMPACTION:		NONE:	Y / N	ROLLER:	Y / N	VIBRATION PLATE:	Y / N	TRAFFIC:	Y / N

WEATHER CONDITIONS						
WEATHER CONDITIONS:	DRY AND SUNNY	ROAD TEMPERATURES:		12 DEGREES	AIR TEMPERATURES:	14 DEGREES

MATERIAL RECORD					
AGGREGATE SUPPLIER:	BARDON	APPROVAL NUMBER:	43	AGGREGATE SIZE:	6MM SPLIT MIX
BULK DENSITY:	1.41	PSV:	160	REACTIVITY GRADING:	INTERMEDIATE
EMULSION SUPPLIER:	COLAS	EMULSION BATCH NUMBER:	W3421	EMULSION TYPE:	100 - 200 - 300
ACTUAL APPLICATION RATE:	233	RECOMENDID APPLICATION RATE:	201	RAR - 5% BELOW 10% ABOVE	191 - 221

Type Approval Installation Test (TAIT)

3 MONTH CHECK:		REPORT:	AUDITOR:	NH	DATE:	25/07/18
		<p>A good solid repair</p>				
						

6 MONTH CHECK:		REPORT:	AUDITOR:	C.LAWRIE	DATE:	16.11.18
		<p>Repair Good</p>				
						

Low Carbon Footprint

Velocity Patching is exceptionally low on carbon emissions

- Zero Waste
- Cold Materials
- Single self-contained vehicle
- Minimal Congestion



The Calculator (Developed by RSTA and Nottingham University)

- 1.904 kgCO₂_e/m²
- 47.6 kgCO₂_e/m²

25 times less carbon than traditional repair methods

Case Studies



[Latest news | \(velocitypatching.com\)](http://velocitypatching.com)

Summary

- **Permanent** repairs quickly blending into the existing road surface
- **Fast** repairs **immediately** open to traffic
- Defects fully sealed to **prevent** water ingress and **further** damage
- **Improved** public satisfaction / Council credibility
- **90% Carbon savings** as all materials are cold applied
- Mobile works = **reduced** costs and congestion
- **No waste** produced, eliminating costly landfill charges
- **Reduced** insurance claims
- **Better budget control – More for your money.**
- **Contact us to arrange a trial in your area.**

Thank You

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