Scharbergbrug Bridge

Track record 2016

**Applied system**
Interzone® 3507 @ 130μm  
Interzone 3507 @ 140μm  
Interthane® 990SG @ 50μm

**Location of application**
The Netherlands

**Project owner**
RWS

**Applicator**
vander Ende

**Surface preparation**
Full Blast Sa2.5

**Project size**
60,000m²

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Brug Bridge
Track record 2016

Applied system
Interzone® 3507 @ 130μm
Interzone 3507 @ 140μm
Interthane® 990SG/Interfine® 878 @ 50μm

Location of application
The Netherlands

Project owner
RWS

Applicator
van der Ende

Surface preparation
Full Blast Sa2.5

Project size
60,000m²
Shaldon Bridge

Track record 2016

Location of project
UK

Project owner
Devon County Council

Applicator
Maintenance Plus

Products/system used
Columns -
Interzone® 954 @ 2 x 350μm

Beams -
Interzone 954 @ 2 x 250μm
Interfine® 629HS @ 1 x 50μm

ISO12944 environment
C5M / Immersed

Project size
2,200m²

Primarily designed for use in offshore splashzone maintenance, where its continued cure under immersed conditions makes it ideal for coping with tidal movements and surges. May be applied to reoxidised and slightly damp surfaces.

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Westlakes Foot Bridges
Case history 2010

Area inspected 1:
Coating system remains in good condition.

Area inspected 2:
Colour retention and gloss still in good condition.

The customer wanted a product that could be applied by brush and roller and also have good Graffiti proof properties.

Focus products: 2 coats of Interfine® 878 @ 60μm (2 mils) dft per coat, Interplus® 358 @ 125μm (5 mils)

Year of project: 2006
Location: Adelaide, South Australia
Project owner: City of Charles Sturt
Project size: Approx 400 litres (106 gals)
## Mosinee Bridge repaint

### Track record 2010

<table>
<thead>
<tr>
<th><strong>Location of project</strong></th>
<th>Wisconsin, USA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Products/system used</strong></td>
<td>Structural steel</td>
</tr>
<tr>
<td>Interzinc® 52 @ 2.5-3μm</td>
<td></td>
</tr>
<tr>
<td>Intergard® 475HS @ 6-8μm</td>
<td></td>
</tr>
<tr>
<td>Interthane® 990HS @ 2-3μm</td>
<td></td>
</tr>
<tr>
<td><strong>Project owner</strong></td>
<td>Wisconsin Department of Transportation</td>
</tr>
<tr>
<td><strong>Engineer</strong></td>
<td>WDOT</td>
</tr>
<tr>
<td><strong>Applicator</strong></td>
<td>C&amp;L Contracting</td>
</tr>
<tr>
<td><strong>ISO12944 environment</strong></td>
<td>C4</td>
</tr>
<tr>
<td><strong>Surface preparation</strong></td>
<td>SP10 with 2.5 mill profile</td>
</tr>
<tr>
<td><strong>Total volume</strong></td>
<td>5,574 litres (1,500 gals)</td>
</tr>
<tr>
<td><strong>Total area</strong></td>
<td>9,800m² (60,000ft²)</td>
</tr>
</tbody>
</table>

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**Website:** www.international-pc.com  
**Contact:** pc.communication@akzonobel.com
Oshkosh Bridge repaint

Track record 2011

Location of project
Wisconsin, USA

Products/system used
- Structural steel
- Interzinc® 52 @ 2-3mils
- Intergard® 475HS @ 6-8mils
- Interthane® 870 @ 3-5mils

Project owner
Wisconsin Department of Transportation

Engineer
WDOT

Applicator
C&L Contracting

ISO12944 environment
C3

Surface preparation
SP 10

Total volume
1,893 litres (500 gals)

Total area
3,252m² (35,000ft²)
# Sydney Harbour Bridge Refurbishment

## Track record 2003

<table>
<thead>
<tr>
<th>Location of project</th>
<th>Project owner</th>
<th>ISO12944 environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney, Australia</td>
<td>NSW Department of Public Works</td>
<td>C4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Products/system used</th>
<th>Applicator/Contractor</th>
<th>Total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interzinc® 72, Intergard® 475HS, Interthane® 80HS</td>
<td>Sydney Harbour Bridge Maintenance</td>
<td>10,000m² (107,639ft²)</td>
</tr>
</tbody>
</table>

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Oresundbron Bridge

Track record 1999

Location of project
Sweden - Denmark

Products/system used
Interzinc® 72, Intercure® 420, Interthane® 799

Project owner
Øresundsbro Konsortiet

Applicator
Skanska International Civil Engineering AB & Alucrom AB (Midroc)

Architect
Georg Rotne

Contractor
Dragados SA

ISO12944 environment
C5-M

Total area
60,000 m² (High bridge)
500,000 m² (Crossing)

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Webb Bridge
Track record 2003

Location of project
Melbourne, Australia

Products/system used
Interzinc®, Intercure® 420, Interthane® 990 Metallic

Architect
Breitburn Energy

Structural engineers
Ove Arup & Partners

Fabricator
Geelong Fabrications

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Whittle Arch and Glass Bridge

Track record 2000

Location of project
Coventry, United Kingdom

Products/system used
Interzinc® 52HS, Interfine® 979

Project owner
Local Government

Applicator/Fabricator
Rowecord Engineering Ltd

Architect
Whitbybird

ISO12944 environment
C4

Total area
2,000m² (21,528ft²)

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Kurilpa Bridge
Track record 2009

Location of project
Australia

Products/system used
Interzinc® 52, Intergard® 475HS, Interfine® 878

Project owner
Queensland Government

Applicator
Tranzblast

Fabricator
Beenleigh Steel

ISO12944 environment
C3

Total area
12,500m² (134,548ft²)
Miri Bridge
Track record 2011

Location of project
Malaysia

Products/system used
Intergard® 269, Interseal® 670HS, Interthane® 990

Project owner
Jabatan Kerja Raya, Miri

Applicator
Perwira Spektra Sdn. Bhd. Miri

Fabricator
Pekerjaan Piasau Konkerit Sdn. Bhd. Miri

ISO12944 environment
C3
Samuel Beckett Bridge
Track record 2009

Location of project
Dublin, Ireland

Products/system used
Intercure® 200, Intergard® 475HS, Interthane® 870

Project owner
Dublin City Council

Applicator
Hollandia/Gelders-Staalstraal en Schilderbedrijf (GSB)

ISO12944 environment
C5-M

Total volume
5,000 litres (1,099 gals)

Total area
External and internal - both 7,000m² (75,347ft²)

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Neptune Way Foot and Cycle Bridge

Track record 2007

Location of project
Cambridge, UK

Products/system used
Structural steel
Interzinc® 52HS, Interfine® 979
Handrails
Interseal® 670HS, Interfine 979

Project owner
Cambridgeshire County Council

Fabricator
Watson Steel

ISO12944 environment
C3

Total volume
1,360 litres (359 gals)

Project size
160 tonnes

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Throgs Neck Bridge
Track record 2008

Location of project
New York, USA

Products/system used
Towers
Interzinc® 52, Intergard® 475HS, Interthane® 990HS

Suspended span
Interzinc 52, Intergard 475HS, Interthane 990HS

Project owner
Metropolitan Transportation Authority (MTA)

Applicator
Corcon Inc.

ISO12944 environment
C4

Total area
159,700m² (1,718,996ft²)

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AkzoNobel
Chartiers Creek Bridge
Track record 2006

Location of project
USA

Products/system used
Interzinc® 52, Intergard® 475HS, Interfine® 979

Project owner
Allegheny County

Applicator
John B. Conomos Painting

ISO12944 environment
C3

Total area
1,950m² (21,000ft²)
Wynyard Cycle Bridge

Track record 2001

Location of project
Sedgefield, UK

Products/system used
Interzinc® 52HS, Interfine® 979

Project owner
Highways Agency (UK)

Fabricator
Nusteel Structures

ISO12944 environment
C3

Total area
1,000m² (10,700ft²)
The Millennium Bridge
Track record 2000

Location of project
Gateshead, UK

Products/system used
Interzone® 505,
Interfine® 629HS,
Interthane® 990

Project owner
Local government

Fabricator
Watson Steel

ISO12944 environment
C3

Total area
12,000m² (129,100ft²)

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Location of project
Newcastle-upon-Tyne, UK

Products/system used
Interplus® 256, Interplus 770, Interthane® 990

Project owner
Nexus

Applicator
Pyeroy

Contractor
Fairhurst and Partners

ISO12944 environment
C4

Total area
32,500m² (349,827ft²)

Queen Elizabeth II Bridge
Track record 2007
Christchurch International Airport - 6 fixed link air bridges

Track record 2012

Location of project
New Zealand

Products/system used
Intergard® 251
Chartek® 1709
Interchar® 212
Interthane® 990

Architect
Warren & Mahoney
Hassell

Fire engineer
Brady Cosgrove

Project manager
Coffey Projects

Main contractor
Hawkins Construction Ltd

Steel fabricator
John Jones Steel

Applicator
H W Hendriks Ltd

ISO12944 environment
C2

Application method
Plural spray

Passive fire protection
Chartek® 1709 - 7,200kg
Interchar® 212 - 300kg

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Batu Kawa Bridge
Track record 2011

Location of project
Malaysia

Products/system used
Intergard® 251, Intergard® 475HS, Interthane® 990

Project owner
Sarawak Government

Applicator/Fabricator
KKB Engineering Berhad

ISO12944 environment
C3

Project size
5,000m² (53,820ft²)
Stock Bridge - Concrete Bridge Deck

Case study 2013

Background
The Stock Bridge was built in 1941 for the purpose of transporting purchased stock across from the Newmarket saleyards to Newell's Paddock, rather than along the public road. The materials for the bridge, a steel structure with a concrete deck, came from a footbridge that had spanned the Yarra River at Punt Road from 1899 to 1938. The bridge now connects the suburbs of Footscray with Kensington and spans 120m in length over the Maribyrnong river. Today, the historic bridge is a bustling 2-way pedestrian bridge frequented by local residents and cyclists.

Over the number of years, the original 500m² concrete deck of this historic bridge began to wear, revealing exposed aggregate and a wave of deep valleys along edges where concrete had been screed.

The solution
The deck needed a pedestrian trafficable and waterproof coating system. Approved applicators, Mattioli Bros, decided to grind the concrete substrate flat to provide a sound, laitance free surface. The substrate was then primed with Intercrete 4850 single component, acrylic bonding agent, with the deep voids filled with Intercrete 4801 high strength, shrinkage compensated, structural repair mortar. Intercrete 4852 self smoothing, epoxy/polymer flooring system was applied at a nominal thickness of 3mm, then kiln dried sand was broadcast to refusal for slip resistance. Once cured, the Intercrete 4852 has a compressive strength of 45MPa.

Construction joints were re-cut and caulked with a flexible polyurethane sealant. The remediation works covered half the lane section at any time, and the bridge remained in service. The bridge was back in full service in 2 weeks.

“The Intercrete 4852 system was chosen for its excellent abrasion resistance and fast return to service capabilities. The client required an aesthetically pleasing flooring system that could be applied and returned to service with minimal downtime so the public wasn’t inconvenienced. Intercrete 4852 has achieved this brief along with providing a repair system with outstanding long term durability, which has exceeded the client expectations”

David Johnstone - Concrete Specialist (AkzoNobel)

Focus product: Intercrete™ 4852
Location: Kensington, Victoria, Australia
Surface preparation: High pressure water wash and diamond grinding
Project owner: Melbourne City Council
Applicator: Mattioli Bros
Fabricator: Citywide Service Solutions
ISO12944 environment: C3
Project size: 500 m²
Bridgewater Canal
Track record 2013

Location of project
Manchester, UK

Products/system used
Network Rail M34 - Interzone® 954 @ 450μm (18 mils) followed by Interfine® 691 @ 50μm (2 mils)

Project owner
Network Rail

Applicator
Industrial Coating Services

Main contractor
Balfour Beatty

ISO12944 environment
C4

Project size
2,000m²

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White Horse Bridge, Wembley
Case study 2013

Summary: Reinstatement of concrete cover on recently cast abutments
Focus product: Intercrete™ 4840
Contractor: Edmund Nuttall Limited
Designer: Halcrow Group Limited

Background
The White Horse Bridge is a state-of-the-art £20 million footbridge that crosses Wembley Stadium Railway Station leading up to the new Wembley Stadium.

Constructed in 2006 and designed by London Eye architects Marks Barfield, the name of the bridge was decided via an online poll hosted by BBC Five Live in conjunction with the London Development Agency. The chosen name commemorates the first FA Cup final to be held at the old stadium in 1923 with the famous image of Billy, a white horse, clearing a pitch invasion after an estimated 250,000 people flooded the ground.

The bridge’s four arches mirror the now-famous arch of the new Wembley Stadium itself. On event days, as many as 8,000 people an hour cross the footbridge. During construction it was found that the abutments supporting the main arch had insufficient concrete cover to the reinforcement and a rapid method of reinstatement was required without resorting to costly recasting.

The solution
Intercrete 4840, a two component, waterborne, epoxy and cementitious modified polymer coating, was chosen for this project due to its ability to effectively reinstate cover. A 2mm coating of Intercrete 4840 affords in excess of an additional 100mm of effective cover, as well as providing a complete barrier to water under 10 bar pressure. Being cement based, it chemically reacts with the substrate to form an integral part and will have a design life equivalent to that of the concrete to which it is applied.

Intercrete 4840 can be applied to green concrete by brush or spray techniques, exhibits minimal hazard and is non-toxic when cured. Intercrete 4840 does not require specialist skills or equipment during application and rapidly cures to enable early backfilling - an important consideration to minimise disruption to construction schedules. It cures to produce an exceptionally hard, durable coating with excellent resistance to water, chloride ions, oxygen and aggressive chemicals.
## Westgate Bridge Strengthening Project

**Track record 2010**

<table>
<thead>
<tr>
<th>Location of project</th>
<th>Products/system used</th>
<th>Applicators</th>
<th>ISO12944 environment</th>
<th>Project size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Area 1 - Public safety barriers, props - external, gantries Interzinc® 52, Interfine® 979</td>
<td>JT Corrosion, Belkblast, Action Alliance, Allblast, A-AA Blastmasters, McElligotts</td>
<td>C3</td>
<td>4,000 tonnes</td>
</tr>
<tr>
<td></td>
<td>Area 2 - Enabling works Interzinc® 215, Interzinc® 315</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fabricators</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alfasi, KVE Engineering, Haywards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Project owner**
Vic Roads

**ISO12944 environment**
C3

**Project size**
4,000 tonnes

[Images of Westgate Bridge]

[Links]
- [www.international-pc.com](http://www.international-pc.com)
- pc.communication@akzonobel.com
M80 Ring Road Expressway Upgrade

Track record 2013

Location of project
Australia

Project owner
Thiess JV

Products/system used
Area 1 - Concrete noise walls
Interplus® 356, Interfine® 878
Area 2 - Sign gantries & bridges
Interzinc® 52, Interfine® 979

Applicator
Smart Distributions/
Haywards/Action Alliance/
Belkblast

Fabricator
Theiss JV

ISO12944 environment
C3

Project size
20,000m² (215,278ft²)

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Kaituna Bridge
Track record 2013

Location of project
Bay of Plenty, New Zealand

Products/system used
Interzinc® 125

Applicator
Napier Sandblasting

Main contractor
Eastbridge Engineering, Fulton Hogan

Project size
1000 tonnes of structural steel

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Ngaruawahia New Bypass Bridge
Track record 2013

Location of project
Waikato, New Zealand

Applicator
Napier Sandblasting

Fabricator
Eastbridge Engineering

Products/system used
Structural Steelwork:
- Interzinc® 125

Abutment Steelwork:
- Interzinc® 52, Interplus® 356,
- Interthane® 990

Project size
8,000m² (86,111ft²)

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All images courtesy of NZ Transport Agency
Jim Stynes Bridge

Track record 2012

Location of project
Australia

Products/system used
Visible steelwork
atmospheric areas
Interzinc® 52, Interfine® 979

Visible steelwork
splashzone areas
Interzone® 954, Interfine® 878

Project owner
City of Melbourne

Architects
Cox Architects

Main contractor
Fitzgeralds Constructions

Applicator
Focus Engineering

ISO12944 environment
C3

Project size
1,200m² (12,917ft²)

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Pennant Hill footbridge
Track record 2014

Location of project
Australia

Products/system used
Fire Rated Steework:
Interzinc® 52, Interchar® 2060,
Interthane® 870

Project owner
Transport NSW - Railcorp

Applicator
L&S Coatings

Fabricator
JK Butko

ISO12944 environment
C3

Project size
500m² (5,382ft²)

Total volume
100 litres (26 gals)

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Tampico Bridge
Track record 1988

Location of project
Mexico

Products/system used
Polidride® 705E @ 30mils (760μm)

Project owner
Secretaria de Comunicaciones y Transportes (SCT)

Applicator
Obras y Proyectos S.A. de C.V.

Total area coated
4,000m² (43,000ft²)
Bridges in New Zealand

Highlights from our track record

State Highway 4 Okura Realignment Bridge | Wanganui

Dilworth Footbridge | Auckland

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www.international-pc.com
pc-australasia@akzonobel.com
Jacobs Ladder Pedestrian Bridge | Auckland

Zinc Metallic Spray, Intercure® 200, Interthane 870 Metallic

Point Resolution Bridge | Auckland

Intergard 251, Interthane 870

Toll Free New Zealand: 0800 808 807
www.international-pc.com
pc-australasia@akzonobel.com
**Cobham Drive Bridge**

**Track record 2015**

- **Location of project**: Hamilton, New Zealand
- **Products/system used**: Interzinc® 52, Intercure® 420, Interplus® 1180, Devthane® 4379, Interthane® 990
- **Project owner**: Hamilton City Council
- **Applicator**: Napier Sandblasting
- **Engineer**: Bloxham, Burnett and Olliver Ltd
- **ISO12944 environment**: C3
- **Project size**: 3,000m² (32,292ft²)

[Image of Cobham Drive Bridge]

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AkzoNobel
Canada Street Bridge
Track record 2015

Location of project
Auckland, New Zealand

Products/system used
Zinc Metal Spray, Intergard® 251, Interfine® 878

Project owner
New Zealand Transport Agency

Applicator
Counties Industrial Coatings

Fabricator
PFS Engineering

ISO12944 environment
C3

Project size
6,500m² (69,965ft²)

Images courtesy of NZ Transport Agency