

Walney Wind Farm

Track record 2016

Applied system

Topside

Intershield® 300 @ 175µm

Intershield 300 @ 175µm

Interthane® 870 @ 60µm

Jacket

Interzone® 954 @ 300µm

Interzone 954 @ 300µm

Interthane 990 @ 80µm

Location

England

Project owner

Dong Energy

Applicator

Smulders

Surface

Carbon steel



Blyth Gravity Based Foundations

Track record 2017

Products/system used

1st coat - Interzone® 954 Red Brown @ 250µm

2nd coat - Interzone 954 Ral 7035 @ 250µm

3rd coat - Interzone 954 Buff @ 250µm

4th coat - Interthane® 990 Ral 1023 @ 80µm

Owner

EDF Energy Renewables

Applicator

Smulders Hoboken

Location of application

Hoboken

Surface

Blasted Sa 2½



Racebank Substation

Track record 2016

Applied system

Intershield® 300 @ 175µm
Intershield 300 @ 175µm
Interthane® 870 @ 60µm

Location of application

Arendonk/Hoboken

Project owner

Dong

Applicator

Iemants Steelconstruction nv

Surface preparation

Blasted Sa 2½

Project size

100,000 liters



Luchterduinen Topside, Jacket and 43 Transition Pieces

Track record 2016

Location of application

Arendonk/Hoboken

Applicator

Iemants Steelconstruction nv

Surface preparation

Blasted Sa 2½

Project owner

Van Oord b.v.

Utility

Eneco

**Applied system**

Interzinc® 52 @ 75µm
Intergard® 475 HS @ 200µm
Interthane® 990 @ 60µm

Project size

50,000 liters

**Applied system**

Interzone® 954 @ 300µm
Interzone 954 @ 300µm
Interthane 990 @ 80µm

Project size

60,000 liters

Gemini Topside, Jacket and 150 Transition Pieces

Track record 2016

Location of application

Arendonk/Hoboken

Applicator

Iemants Steelconstruction nv

Main contractor

Van Oord b.v.

Surface preparation

Blasted Sa 2½

**Applied system****Jacket -**

Interzone® 954 @ 300µm

Interzone 954 @ 300µm

Topside -

Interzinc® 52 @ 75µm

Intergard® 475 HS @ 200µm

Interthane® 990 @ 60µm

Project size

100,000 liters

**Applied system****Transition pieces -**

Interzone 954 @ 300µm

Interzone 954 @ 300µm

Interthane 990 @ 80µm

Project size

>250,000 liters

Dudgeon 67 transition pieces

Track record 2016

Applied system

Interzone® 954 @ 300µm

Interzone 954 @ 300µm

Interfine® 629 HS @ 80µm

Location of application

Arendonk/Hoboken

Project owner

Statoil - Statkraft

Applicator

Iemants Steelconstruction nv

Surface preparation

Blasted Sa 2½

Project size

> 140,000 liters



Godewind

Track record 2016

Applied system

Interzinc® 52 @ 60µm
Intergard® 475 HS @ 180µm
Interthane® 870 @ 80µm
Interthane 870 @ 80µm

Location of application

Arendonk/Hoboken

Project owner

Dong

Applicator

Iemants Steelconstruction nv

Surface preparation

Blasted Sa 2½

Project size

> 80,000 liters



Veja Mate Offshore Substation

Track record 2016

Applied system

Intershield® 300 @ 175µm (7 mils)

Intershield 300 @ 175µm (7 mils)

Interthane® 990 @ 60µm (2 mils)

Location of application

Germany - North Sea

Project owner

Highland Group

Applicator

Iemants Steel Construction

Surface preparation

Blasted Sa 2½

ISO12944 environment

ISO20340



Burbo Bank Topside, Jacket and Transition Pieces

Track record 2016

Location of application

Europe

Project owner

Dong

Surface preparation

Blasted Sa 2½

**Applied system**

Topside, Jacket -

Intershield® 300 @ 175µm (7 mils)

Intershield 300 @ 175µm (7 mils)

Interthane® 870 @ 60µm (2 mils)

Applicator

Iemant Steel construction

Project size

30,000 liters

Applied system

Transition pieces -

Interzone® 954

Interzone 954

Interthane 990

Applicator

OSB/Bladt

Project size

35,000 liters

Offshore Wind Substations

Track record 2016

Projects

Race Bank, Burbo Bank, Walney Extension

Project Location

Off UK

Project Owner

Dong

Total capacity

1495MW

Number of sub-stations

5

Location of application

Benelux

Fabricator

Iemants / Fabricom

Products

Intershield® 300, Interzone® 954, Interthane 870,
Interthane® 990, Intergard® 405



Greater Gabbard Wind Farm Offshore Substations

Track record 2009

Location of project

UK

Products/system used

Area 1 - Jackets
Interzone® 954 @ 500µm,
Interzone 954 @ 250µm

Area 2 - Transition pieces - decks

Interzone 954 @ 500µm,
Aggregate @ 3,000µm,
Interzone 954 @ 500µm

Project owner

Scottish and Southern Energy

Applicator

Burnt Island Fabrications

ISO12944 environment

C5M

Total area

30,000m² (322,917ft²)



Kenersys Wind Tower

Track record 2011

Location of project

India

Products/system used

Area 1 - Exterior
Interzinc® 52, Intergard® 475HS,
Interthane® 990

Area 2 - Interior

Interzinc 52, Intergard 475HS

Project owner

Kenersys

Applicator/Fabricator

WINNP

Surface preparation

Sa 2.5

Total area

20,346m² (219,003ft²)



Suzlon Wind Tower

Track record 2010

Location of project

India

Products/system used

Area 1 - Internal
Interzinc® 52, Intergard® 345

Area 2 - External
Interzinc 52, Intergard 345,
Interthane® 990

Project owner
Suzlon Energy

Applicator/Fabricator

Dong-Kuk S&C

Engineer

Sr. Manager

Total area

15,440m² (166,195ft²)



Donghai Bridge Offshore Wind Power

Track record 2010

Location of project

China

Products/system used

Interzinc® 52, Intergard® 475HS,
Interthane® 990

Project owner

Shanghai Donghai Wind Power Co. Ltd

Applicator/Fabricator

Shanghai Electrical Power Machinery Works

ISO12944 environment

C5M/C4

Surface preparation

Sa2.5

Project size

70,000 litres (18,492 gals)



REpower Demonstration Turbine, Husum

Track record 2007

Location of project

Germany

Project owner

REpower Systems

Products/system used

Area 1 - Turbine internals

Intercure[®] 99

Area 2 - Turbine externals

Interzinc[®] 52, Intercure[®] 99

ISO12944 environment

C4



West of Duddon Sands Offshore Wind Farm

Track record 2013

Location of project

Irish Sea (UK territorial waters)

Products/system used

Intercure® 200, Intergard® 269,
Intergard® 475HS, Interplus® 256,
Interseal® 670HS, Interthane® 870,
Interzinc® 52, Interzone® 954

Owners

Dong Energy, Scottish Power

Wind farm capacity

389MW

Asset

Offshore sub-station topside & jacket

Location of application

Netherlands

Fabricator

Iemants

ISO12944 environment

C5-M



DanTysk Offshore Wind Farm

Track record 2013

Location of project

German North Sea

Products/system used

Interzone® 954, Interfine® 878

Owners

Vattenfall, Stadtwerke München

Wind farm capacity

288MW

Asset

Transition pieces and monopiles

Location of application

Netherlands

Fabricator

Smulders

ISO12944 environment

C5-M



London Array Transition Pieces

Track record 2012

Location of project
North Sea

Products/system used
Interzone® 954
Interthane® 990

Project owner
DONG Energy, E.ON, Masdar

Wind farm capacity
630MW

Number of turbines
175

Assets coated
Transition pieces

Location of application
Denmark

Fabricator
Bladt

ISO12944 environment
C5-M



Images courtesy of London Array Limited



Dolwin Alpha Offshore Convertor Platform

Track record 2013

Location of project
German North Sea

Weight
9000 tonnes

Offshore wind projects supported
MEG 1, Borkum West 2

Capacity
800MW

Location of fabrication
Netherlands

Contractor
Heerema Fabrication Group

Products/system used
Interzinc® 52,
Intergard® 475HS,
Interthane® 990,
Intershield® 300,
Intergard 740

Packages
Deck Areas, Structural Steel,
Escape Routes

Volume
75,000 litres



REpower Demonstration Turbine

Case history 2012

Focus products: Turbine Internals - Intercure® 99,
Turbine Externals - Interzinc® 52 and Intercure 99

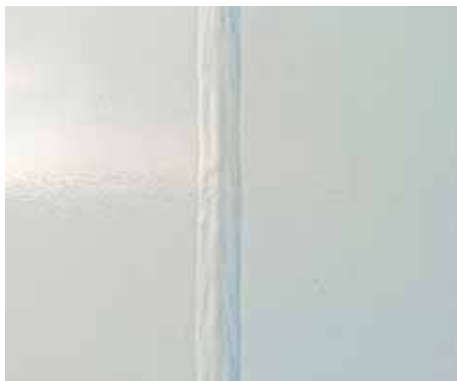
Original coating project: 2007

Country of fabricator: Germany

Fabricator: SIAG

Project owner: REpower Systems

ISO12944 environment: C4



Five years in-field performance with no coating breakdown, rusting, flaking or delamination. The coating looks 'good as new' even on welds, edges and corners.

Acciona Wind Towers

Track record 2013

Location of project

Nova Scotia, Canada

Turbine manufacturer

Acciona

Fabricator

DSTN / DSME Trenton

Projects

Hermanville & Clear Springs (30MW)

Products/system used

Interzinc® 52, Intergard® 345,
Interfine® 878

Number of turbines

10

ISO12944 environment

C4



Fukushima Recovery Floating Offshore Wind Project

Track record 2013

Location of project

Japan

Areas coated

Floating foundation

Products used

Intershield[®] 300, Interfine[®] 878

Foundation manufacturer

MES (Mitsui)

ISO12944 environment

C5-M Offshore

Water depth

120 metres (394 ft)

Distance to shore

20km (12½ miles)



Westermost Rough Offshore Wind Farm

Track record 2014

Location of project

North Sea, 9km off the UK

Products/system used

Interzone® 954, Interthane® 990

Owners

Dong Energy

Wind farm capacity

210MW

Number of assets

35

Asset/areas coated

Transition pieces and monopiles

Location of application

Denmark

Fabricator

Bladt Industries

ISO12944 environment

C5-M



Borkum Riffgrund Offshore Wind Farm

Track record 2014

Location of project

North Sea, 37km off Germany

Products/system used

Interzone® 954, Interthane® 990

Owners

Dong Energy

Wind farm capacity

277MW

Number of assets

77

Asset/areas coated

Transition pieces and monopiles

Location of application

Denmark

Fabricator

Bladt Industries

ISO12944 environment

C5-M



Enercon Wind Towers

Track record 2015

Location of project

Turkey

Products/system used

Area 1 - Internal system
for structural steel

Interseal® 1052 @ 140µm (6 mils)
Interthane® 870 @ 60µm (2 mils)

Area 2 - External system
for structural steel

Interseal 1052 @ 250µm (10 mils)
Interthane 870 @ 70µm (3 mils)

Project owner

Çimtaş Steel

ISO12944 environment

C3/C5

Project size

8,500m² (91,493ft²)



Enercon Wind Towers

Track record 2013

Location of project

Kırşehir, Turkey

Products/system used

Area 1 - Internal system
for structural steel

Intercure® 200HS @ 150µm (6 mils)

Interthane® 990SG @ 50µm (2 mils)

Area 2 - External system
for structural steel

Interzinc® 52 @ 70µm (3 mils)

Intergard® 475HS @ 190µm (8 mils)

Interthane 990SG @ 60µm (2 mils)

Project owner

Enercon Wind Towers

Applicator

Ateş Çelik Welding & Coating

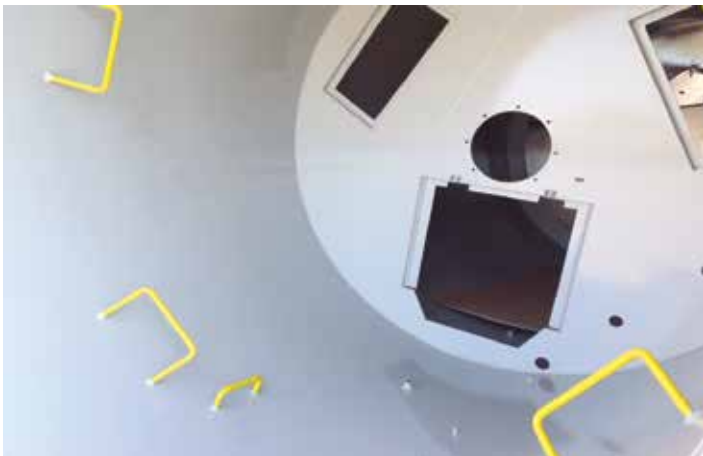
ISO12944 environment

C4 Semi industrial
(medium durability)

Project size

9,450m² (101,719ft²)

5,300 lt (1,400 gals)



Alstom Wind Towers

Track record 2014

Location of project

Turkey

Products/system used

Area 1 - Internal System
for Structural Steel

Interzinc® 52 @ 60µm (2 mils)

Intergard® 345 @ 100µm (4 mils)

Area 2 - External system
for structural steel

Interzinc® 52 @ 60µm (2 mils)

Intergard® 345 @ 115µm (5 mils)

Interthane® 990 @ 75µm (3 mils)

Project owner

Alstom Wind Towers

Applicator

Gestamp Wind Steel

ISO12944 environment

C4 Semi industrial (medium durability)

Project size

9,000m² (96,875ft²)



GE Wind Towers

Track record 2014

Location of project

Turkey

Products/system used

Area 1 - System for Structural Steel - Internal System

Interzinc® 52 @ 60µm

Intergard® 475HS @ 80µm

Interthane® 870 @ 60µm

Area 2 - System for Structural

Steel - External System

Interzinc® 52 @ 60µm

Intergard® 475HS @ 150µm

Interthane® 870 @ 70µm

Project owner

GE Wind Towers

Applicator

Gestamp Wind Steel

ISO12944 environment

C4 Semi industrial
(medium durability)

Project size

31,860 m² (342,938 ft²)

24,000 lt (6,340 gals)



Nordex Wind Towers

Track record 2014

Location of project

Turkey

Products/system used

System for Structural Steel - Internal System

Intergard® 345 - 130µm (5.1 mils) dft

Interthane® 3230SG - 50µm (2 mils) dft

System for Structural Steel - External System

Interzinc® 52 - 50µm (2 mils) dft

Intergard® 345 - 140µm (5.5 mils) dft

Interthane® 3230SG - 50µm (2 mils) dft

Project owner

Nordex Wind Towers

Applicator

Gestamp Wind Steel

ISO12944 environment

C4 Semi Industrial (Medium Durability)

Project size

20,000m² (215,278ft²)



Amrumbank West offshore wind farm

Track record 2013/14

Location of project

German North Sea

Products/system used

Interthane® 990, Interzone® 954

Wind farm capacity

288MW

Asset/areas coated

Transition pieces

Location of application

Netherlands

Fabricator

Smulders

ISO 12944 environment

C5-M



Senvion Wind Power

Track record 2015

Location of project

Turkey

Products/system used

Internal system

Interzinc® 52 @ 40µm (2 mils)

Intergard® 345 @ 120µm (5 mils)

External system

Interzinc 52 @ 40µm (2 mils)

Intergard 345 @ 120µm (5 mils)

Interthane® 3230SG @ 60µm (3 mils)

Project owner

Senvion Wind Power

Applicator

Gesbey Gestamp

ISO12944 environment

C3/C5

Total area

2,000m² (21,528ft²)



Gamesa Wind Towers

Track record 2016

Location of project

Turkey

Products/system used

Internal system -

Intergard® 345 @ 160µm (6 mils)

External system -

Interzinc® 52 @ 60µm (2 mils)

Intergard 475HS @ 150µm (6 mils)

Interthane® 990 @ 60µm (2 mils)

Applicator

Gesbey Gestamp

ISO12944 environment

C4

Project size

46,000m² (495,140ft²)

