

ACA Standards Update

Welcome to the fourth corrosion related standards report for 2016.

The standards reporting for 2016 is scheduled against Technical Groups (TG) as indicated below:

Issue 2016 Standards search for TG interests

Feb	Asset Management
May	Water/Waste water (inter-alia) Material
Aug	Concrete & Cathodic Protection
Nov	Oil & Gas

This Standards report focuses on Oil and Gas in relation to corrosion.

As previously this is in two stages, namely:

1. A global standards and publication focus at **16 September 2016**, searching through SAIGLOBAL Publications at <https://infostore.saiglobal.com/store>, for all current publications and standards relating to corrosion of materials in the Oil & Gas industries. This is in a search for "corrosion and oil or gas".

These results are shown under Stage 1, Search 1 and Search 2.

2. A SAI Global search, as previously, at <http://www.saiglobal.com/online/> for new standards, amendments or drafts for AS, AS/NZS, EN, ANSI, ASTM, BSI, DIN, ETSI, JSA, NSAI and standards and amendments for ISO & IEC published from **14 July 2016 to 16 September 2016**, using the key words and key word groups:

- 'durability'.
- 'corrosion' or 'corrosivity' or 'corrosive'; but not 'anodizing' or 'anodize(d)'.
- 'paint' or 'coating'; but not 'anodizing' or 'anodize(d)'.
- 'galvanize' or 'galvanized' or galvanizing'.
- 'electrochemical' or 'electrolysis' or 'electroplated'.
- 'cathode' or 'cathodic'.
- 'anode' or 'anodic'.
- 'corrosion' and 'concrete' or 'concrete' and 'coatings'.

These results are shown under Stage 2.

Summary

Stage 1

Through SAIGLOBAL Publications at <https://infostore.saiglobal.com/store>, for a search on 'Corrosion and Concrete' on 16 September 2016, there were 68 citations including:

- None from AS or AS/NZS;
- 8 from NACE;
- 3 from BSI (All BS EN);
- 2 from ISO;
- 1 from EMUR;
- 1 from Energy Institute;

Stage 2

Across SAIGLOBAL online Standards Publications there was a total of 51 listings of new Standards, Drafts and Amendments found from , 14 July 2016 to 16 September 2016; 1 Standard and 3 Drafts from AS AS/NZS being;

DR2 AS/NZS 2311:2016	Guide to the painting of buildings
DR AS/NZS 4361.1:2016	Guide to the management of paints containing lead and other hazardous metallic pigments - Industrial applications
DR AS/NZS 8124.7:2016	Safety of toys - Requirements and test methods for finger paints (ISO 8124-7:2015, MOD)
AS 1897:2016	Fasteners - Electroplated coatings

Regards,



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Stage 1 Report on SAIGLOBAL Publications at <https://infostore.saiglobal.com/store>, for all current publications and standards relating to 'Water and Waste Water Corrosion

Search 1 - For Titles search on <https://infostore.saiglobal.com/store> on 16 September 2016 for 'corrosion and oil or gas' there were 68 citations:

National Association of Corrosion Engineers (8)	British Standards Institution (3)
Association Francaise de Normalisation (5)	Danish Standards (3)
Comite Europeen de Normalisation (5)	Norwegian Standards (Norges Standardiseringsforbund) (3)
Osterreichisches Normungsinstitut (5)	Polish Committee for Standardization (3)
German Institute for Standardisation (4)	Swiss Standards (3)
Italian Standards (4)	International Organization for Standardization (2)
National Standards Authority of Ireland (4)	Energy Institute (formerly Institute of Petroleum)(1)
Nederlands Normalisatie Instituut (4)	Engineering Equipment Material Users Association (1)
Standardiserings-Kommissionen I Sverige (4)	Standardization Administration of China (1)
Belgian Standards (3)	UK Ministry of Defence standards (1)
US Military Specs/Standards/Handbooks (1)	

Select ones are listed below.

NACE		ISO
NACE 31014:2014 Field Monitoring Of Corrosion Rates In Oil And Gas Production Environments Using Electrochemical Techniques	NACE MR 0175 ISO 15156:2009 (Superseded) Petroleum And Natural Gas Industries - Materials For Use In H ₂ S-Containing Environments In Oil And Gas Production - Part 1: General Principles For Selection Of Cracking-Resistant Materials - Part 2: Cracking-Resistant Carbon And Low-Alloy Steels, And The Use Of Cast Irons - Part 3: Cracking-Resistant Cras (Corrosion-Resistant Alloys) And Other Alloys	ISO 15156-3:2015 Petroleum and natural gas industries - Materials for use in H ₂ S-containing environments in oil and gas production - Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys
NACE 31215:2015 Laboratory Evaluation Of Corrosion Inhibitors Used In The Oil And Gas Industry	BSI	ISO 21457:2010 Petroleum, petrochemical and natural gas industries - Materials selection and corrosion control for oil and gas production systems
NACE 31215:2014 (Superseded) Laboratory Evaluation Of Corrosion Inhibitors Used In The Oil And Gas Industry	BS EN ISO 15156-3:2015 Petroleum And Natural Gas Industries - Materials For Use In H ₂ S-Containing Environments In Oil And Gas Production - Part 3: Cracking-Resistant Cras (Corrosion-Resistant Alloys) And Other Alloys (Iso 15156-3:2015)	EUMUR
NACE 61114:2014 Underdeposit Corrosion (Udc) Testing And Mitigation Methods In The Oil And Gas Industry	BS EN ISO 15156-3:2009 (Superseded) Petroleum and natural gas industries. Materials for use in H ₂ S-containing environments in oil and gas production. Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys	EI GUIDE CORROSION MGMT. Ed. 1 (2008) Guidance For Corrosion Management In Oil And Gas Production And Processing
NACE 1C187:2005 Use Of Galvanic Probe Corrosion Monitors In Oil And Gas Drilling And Production Operations	BS EN ISO 21457:2010 Petroleum, petrochemical and natural gas industries. Materials selection and corrosion control for oil and gas production systems	Energy Institute
NACE SP 01 92:2012 Monitoring Corrosion In Oil And Gas Production With Iron Counts		EI GUIDE CORROSION MGMT. Ed. 1 (2008) Guidance For Corrosion Management In Oil And Gas Production And Processing
NACE MR 0175 ISO 15156:2015 Petroleum, Petrochemical, And Natural Gas Industries - Materials For Use In H ₂ S-Containing Environments In Oil And Gas Production - Part 1: General Principles For Selection Of Cracking-Resistant Materials - Part 2: Cracking-Resistant Carbon And Lowalloy Steels, And The Use Of Cast Irons - Part 3: Cracking-Resistant Cras (Corrosion-Resistant Alloys) And Other Alloys		

New standards, amendments or drafts for AS, AS/NZS, EN, ANSI, ASTM, BSI, DIN, ETSI, JSA, NSAI and Standards or Amendments for ISO & IEC PUBLISHED between 14 July 2016 to 16 September 2016

Key word search on 'durability'- 0 corrosion related Standards found;

Key word search on 'corrosion' or 'corrosivity' or 'corrosive'; but not 'anodizing' or 'anodize(d)'- 9 Standards found; 0 from AS/NZS

ISO/TR 16203:2016	Corrosion of metals and alloys - Guidelines for the selection of methods for particle-free erosion corrosion testing in flowing liquids
ISO 18797-1:2016	Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 1: Elastomeric coating systems-polychloroprene or EPDM
ISO 4623-2:2016	Paints and varnishes - Determination of resistance to filiform corrosion - Part 2: Aluminium substrates
ISO 8168:2016	Aerospace - Bolts, with MJ threads, made of heat and corrosion resisting steel, strength class 1 100 MPa - Procurement specification
ISO/DIS 9455-15	Soft soldering fluxes - Test methods - Part 15: Copper corrosion
DIN EN 3903 (2016-08) (Draft)	Aerospace series - Washers, laminated, in corrosion resisting steel; German and English version FprEN 3903:2015
DIN EN 6029 (2016-09) (Draft)	Aerospace series - Rod-ends, adjustable, single fork with UNJ threaded shank min. engagement: 1,5 x thread diameter in corrosion resisting steel - Dimensions and loads - Inch series; German and English version FprEN 6029:2016
DIN 65442 (2016-08)	Aerospace - bihexagonal head bolts, close tolerance, with medium-length MJ thread, corrosion resisting nickel alloy - nominal tensile strength 1 550 MPa, for temperatures up to 315 °C; Inactive for new design
DIN EN ISO 9455-15 (2016-09) (Draft)	Soft soldering fluxes - Test methods - Part 15: Copper corrosion test (ISO/DIS 9455-15:2016); German and English version prEN ISO 9455-15:2016

Key word search on 'paint without coating' and or 'coating without paint'; but not 'anodizing' or 'anodize(d)' - 36 Standards found; 3 AS/NZS Drafts and 1 AS standards

ISO 1514:2016	Paints and varnishes - Standard panels for testing
ISO 3248:2016	Paints and varnishes - Determination of the effect of heat
ISO 4623-2:2016	Paints and varnishes - Determination of resistance to filiform corrosion - Part 2: Aluminium substrates
ISO/FDIS 3668	Paints and varnishes - Visual comparison of colour of paints
ISO/DIS 6270-1	Paints and varnishes - Determination of resistance to humidity - Part 1: Condensation (single-sided exposure)
ISO/DIS 6270-2	Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure)
ISO/FDIS 8503-5	Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blast-cleaned steel substrates - Part 5: Replica tape method for the determination of the surface profile
I.S. EN ISO 4629-1:2016	Binders for Paints and Varnishes - Determination of Hydroxyl Value - Part 1: Titrimetric Method Without Using a Catalyst (iso 4629-1:2016)
I.S. EN ISO 4629-2:2016	Binders for Paints and Varnishes - Determination of Hydroxyl Value - Part 2: Titrimetric Method Using a Catalyst (iso 4629-2:2016)
DR2 AS/NZS 2311:2016	Guide to the painting of buildings
DR AS/NZS 4361.1:2016	Guide to the management of paints containing lead and other hazardous metallic pigments - Industrial applications
DR AS/NZS 8124.7:2016	Safety of toys - Requirements and test methods for finger paints (ISO 8124-7:2015, MOD)
DIN EN ISO 2811-1 (2016-08)	Paints and varnishes - Determination of density - Part 1: Pycnometer method (ISO 2811-1:2016)
DIN EN ISO 4624 (2016-08)	Paints and varnishes - Pull-off test for adhesion (ISO 4624:2016)
DIN EN ISO 6270-1 (2016-09) (Draft)	Paints and varnishes - Determination of resistance to humidity - Part 1: Condensation (single-sided exposure) (ISO/DIS 6270-1:2016); German and English version prEN ISO 6270-1:2016
DIN EN ISO 6270-2 (2016-09) (Draft)	Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure) (ISO/DIS 6270-2:2016); German and English version prEN ISO 6270-2:2016
AS 1897:2016	Fasteners - Electroplated coatings
ISO 18797-1:2016	Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 1: Elastomeric coating systems-polychloroprene or EPDM

ISO 3575:2016	Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of commercial and drawing qualities
ISO/DIS 1419	Rubber- or plastics-coated fabrics - Accelerated-ageing tests
ISO/FDIS 16773-4	Electrochemical impedance spectroscopy (EIS) on coated and uncoated metallic specimens - Part 4: Examples of spectra of polymer-coated and uncoated specimens
ISO/FDIS 17233	Leather - Physical and mechanical tests - Determination of cold crack temperature of surface coatings
ISO/FDIS 19487	Metallic and other inorganic coatings - Electrodeposited nickel-ceramics composite coatings
ISO/FDIS 19603	Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for determining elastic modulus and bending strength of thick ceramic coatings
ISO/DIS 19674	Fine ceramics (advanced ceramics, advanced technical ceramics) - Methods of test for ceramic coatings - Determination of internal stress in ceramic coatings by application of the Stoney formula
ISO/FDIS 20343	Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for determining elastic modulus of thick ceramic coatings at elevated temperature
ISO/FDIS 8401	Metallic coatings - Review of methods of measurement of ductility
I.S. EN 16784:2016	Timber Structures - Test Methods - Determination of the Long Term Behaviour of Coated and Uncoated Dowel-type Fasteners
I.S. EN 4474:2016	Aerospace Series - Aluminium Pigmented Coatings - Coating Methods
DIN EN ISO 10309 (2016-08)	Metallic coatings - Porosity tests - Ferroxy test (ISO 10309:1994)
DIN EN 12608-1 (2016-08)	Unplasticized poly(vinyl chloride) (PVC-U) profiles for the fabrication of windows and doors - Classification, requirements and test methods - Part 1: Non-coated PVC-U profiles with light coloured surfaces
DIN EN ISO 2179 (2016-08)	Electroplated coatings of tin-nickel alloy - Specification and test methods (ISO 2179:1986)
DIN EN ISO 21809-3 (2016-08)	Petroleum and natural gas industries - External coatings for buried or submerged pipelines used in pipeline transportation systems - Part 3: Field joint coatings (ISO 21809-3:2016); English version EN ISO 21809-3:2016
DIN EN 4072 (2016-08)	Aerospace series - Screws, 100ø countersunk normal head, offset cruciform recess, close tolerance shank, short thread in titanium alloy, aluminium IVD coated - Classification: 1 100 MPa (at ambient temperature) / 425 øC; German and English version EN 4072:2016
DIN EN 4128 (2016-08)	Aerospace series - Bolts, normal hexagonal head, coarse tolerance shank, short thread, in heat resisting nickel base alloy, aluminium IVD coated - Classification: 1250 MPa (at ambient temperature) / 425 øC; German and English version EN 4128:2016
DIN EN ISO 8401 (2016-08) (Draft)	Metallic coatings - Review of methods of measurement of ductility (ISO/FDIS 8401:2016); German and English version FprEN ISO 8401:2016
Key word search on 'galvanize' or 'galvanized' or galvanizing' – 0 Standards found	
Key word search on 'corrosion' and 'concrete' or 'concrete' and 'coatings' – 0 Standards found.	
Key word search on 'cathode' or 'cathodic' - 1 Standards found, 0 from AS/ASNZ	
DIN IEC/TS 62607-4-5*DIN SPEC 42607-4-5 (2016-08) (Draft)	Nanomanufacturing - Key control characteristics - Part 4-5: Cathode nanomaterials for nano-enabled electrical energy storage - Electrochemical characterisation, 3-electrode cell method (IEC 113/308/CD:2016)
Key word search on 'anode' or 'anodes' or 'anodic' – 0 Standards found	
Keyword Search on 'electrochemical' or 'electrolysis' or 'electroplated' – 4 corrosion related Standards found, 1 from AS related to corrosion.	
ISO/FDIS 16773-4	Electrochemical impedance spectroscopy (EIS) on coated and uncoated metallic specimens - Part 4: Examples of spectra of polymer-coated and uncoated specimens
DIN IEC/TS 62607-4-5*DIN SPEC 42607-4-5 (2016-08) (Draft)	Nanomanufacturing - Key control characteristics - Part 4-5: Cathode nanomaterials for nano-enabled electrical energy storage - Electrochemical characterisation, 3-electrode cell method (IEC 113/308/CD:2016)
AS 1897:2016	Fasteners - Electroplated coatings
DIN EN ISO 2179 (2016-08)	Electroplated coatings of tin-nickel alloy - Specification and test methods (ISO 2179:1986)
Keyword Search on 'anodize' or 'anodized' – 1 Standards found	
DIN EN 4827 (2016-09) (Draft)	Aerospace series - Hexavalent chromium free anodizing of aluminium and aluminium alloys; German and English version FprEN 4827:2016