

Anomaly Type	Code	Anomaly Criteria	Information Required (in addition to reporting specification)	Checks	Further Actions	Comments
Corrosion	CR	All items general inspection Significant, internal/external corrosion Bare metal Pipework, Vessels and Risers Wall thickness \leq MAWT+1/2(NWT-MAWT) Wall thickness \leq 90% previous measurement Structural Steel and Aperturancs Pitting \geq 3mm Deep Wall thickness \leq 87.5 NWT Microbially induced corrosion - rapid pitting Deposits along line	General Corrosion Thickness of corrosion product Pitting Extent - localised/isolated/general, %coverage Depth - deep, shallow, maximum and average depth (mm), remaining wall thickness (mm) Wall thickness - specified criteria Identify extent of affected area, mark area with 100mm grid, UT each grid square and report minimum thickness for each square (mm)	CRE, CRI, BM, DP, IN, PT, RS, WT, SU, ST	Confirm by UT, the extent of the anomalous area, worst locations and minimum thicknesses. Otherwise as per instructions following assessment. Change out spool if possible. Wrap area of anomaly and arrange for spool to be changed at next available opportunity for example during shutdown. Clean any areas from deposits	Confirm any significant wall thickness through pitting or any other corrosion mechanism using radiography if possible. If wrap is used, update wrap register with accompanying report, inspection dates and frequency
Coatings	CD	All: 1. Any coating system < 90% of specified total DFT. 2. General coating breakdown leading to corrosion \geq Ri 2, of EN ISO 4628-3:2003. 3. Localised coating breakdown leading to severe corrosion where component integrity is compromised. 4. Any exposed metal in splash zone. 5. Any breached weatherproof layer or cladding damage leading to water ingress. 6. Any damage to passive fire protection down to substrate and > 100 square cm. Specifically: a. Any discontinuity coating breakdown or blistering on vessels. b. Any discontinuity coating breakdown or blistering on stainless steel pipework. c. Any breached weatherproof layer or cladding damage on insulated pipework or vessels.	Location: 1. Area to be identified by reference to P&ID or isometric drawing. 2. Extent and nature of coating breakdown and/or corrosion to be described and quantified by relevant standard or pictorial reference.	CDE, CDI, FL, RS, PC, SN, SU	Corrosion loss - assessed as above. Action as above or repaint/recoat area of concern to platform specification, as appropriate.	Refer to specification EN ISO 4628 for assessment of degree of rusting. During inspection use 'Fitz's Coating Defect Atlas' to assess percentage of general coating breakdown. During inspection use 'Fitz's Coating Defect Atlas' to assess percentage of localised coating breakdown.
Debris	DB	Hazardous Associated with damage (e.g. abrasion)	Record type and quantity	PD, CD	Remove or make safe if possible Clean internals	
Vibration	VB	Heavy vibration observed on sensitive piping	Orientation and amplitude of vibration Whether high frequency or low frequency	MD, PD, CK, VS	Measure severity with accelerometer	Corrective action by a specified date
Physical Damage	PD	Bowed or distorted member or support, dents, gouges, bulges	Position of maximum distortion within anomaly area, size and shape	CK, DB, VS, CD	Replace support, member	
		Leaks, PFP illegal cut outs, damaged insulation cladding	Leak rate	CK, DL	Secure or isolate if hazardous For non critical pipework temporary repair such as clamps, wrap to replace during next shutdown/opportunity. For critical items (i.e. cat A) changeout Repair any damaged lagging	If wrap is used, update wrap register with accompanying report, inspection dates and frequency
		Other damage (e.g. to internal vessel furniture)	Location of damage		Repair required before vessel closure	Risk assessment and repair procedure to be advised before repair
		Cuts and holes Penetration through blast or fire walls	Location of damage Condition of hole/cut edges (i.e. clean drilled, cut, sawn etc)	CK, VS, CD	Make safe for personnel protection Replace section	
		Abrasion/fretting	Location and size of area	CR, DB	Measure remaining wall thickness Assess cause of damage	Use linings on clamps, bolts to prevent metal to metal contact.
Variation from Specification	VS	Missing member, component (e.g. pipe support, clamp), sub component (e.g. bolt, bonding wire etc)	Check status of 'as built' drawing Identify and quantify missing items (i.e. number of bolts, bolt size etc) Check for loose subcomponents (bolts etc) Check for missing supports	PD, LS, MC, SP	Make sure missing components are replaced with like for like Update drawing accordingly	Archive old drawing
		Relative movement	Quantify range of movement (i.e. horizontal, vertical, distance)	MD, MV	Secure if safe and possible to do so	
		Leaks, improper fit/make up	Leak rate	LK, LI	Secure or isolate if hazardous Temporary repair such as clamps, wrap	If wrap is used, update wrap register with accompanying report, inspection dates and frequency
		Additional member or component (i.e. not as shown on drawing) Member/component shown in wrong location or not as shown on drawing (i.e. different section/size detail)	Check status against 'as built' drawing Measure position and principal dimensions of additional member/component (i.e. length, breadth, diameter)	DD	Update drawing accordingly	Archive old drawing
		Incorrect materials causing corrosion such as galvanic	Check material against specification	CR, SI	Change out for appropriate material for the service at soonest opportunity	
		Seal Failures	Check materials against specification	SF, SI	Change out for correct spec material	
		Difference to drawing	Check as-built drawing	DD	Update drawing accordingly	Archive old drawing
Weld defect/Fatigue damage/Cracking	CK	All visual cracks All surface breaking NDT defects All planar UT defects	Confirmation of extent by UT and/or feeler gauge (length, width, depth/through thickness) Identify any previous remedial action (weld repair, grinding etc)	MD, PD, VB, MV, WI, WD	Confirmatory grind if no previous remedial work. Remedial grind (not fillet welds) if no UT possible or result < 4mm deep. Otherwise only with specific instruction	

Anomaly Code Description

BM	Bare Metal	MV	Movement (of something fixed)
CD	Coating Damage	PC	Protective Coating
CK	Crack	PD	Physical Damage (global)
CR	Corrosion	PT	Pitting
DB	Debris	RS	Rust Scale
DD	Difference to Drawing	SF	Seal Failure
DL	Damaged Lagging	SI	Structural Integrity
DM	Physical Damage (local)	SN	Staining
DP	Extraneous deposits but not drilling mud	SP	Support Missing
FL	Flaking	ST	Stress Corrosion Cracking
IN	Internal Surface Condition	SU	Surface Condition
LI	Lack of Integrity	VB	Vibration
LK	Leak	VS	Variation to Specification
LS	Loose Subcomponent (Bolt etc)	WD	Weld Defect
MC	Missing Component	WI	Weld Integrity