

Curriculum vitae

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Birth date: 23-Sep-1980



Work experience

11/2020-Present Senior Corrosion Engineer& workshop Manager (SGS, Kangan, Iran)

In-service inspection of PH#19 South Pars Gas Complex. Including:

- Supervising the inspection activities of the inspection team
- Conducting internal inspection and FFS assessment when necessary
- Allocating CMLs, Condition Monitoring Locations, for the equipment and piping.
- Overseeing cathodic protection survey of the site facilities.
- Analyzing the actual corrosion condition of plant, including Corrosion Coupons and Probes data, Corrosion Inhibitors injection rates., and monitoring the developed IOWs.
- Monitoring the internal corrosion of the main pipelines (sea lines)

06/2021- Present Senior Corrosion Engineer (PAMCO)

Developing RBI Module of Effectus software for fixed equipment in oil and gas industry with the following details:

- POF: API 581, developing pertinent sections for Corrosion Circuits, Material database, Damage Mechanisms details of assessment and POF calculations.
- COF: API 581, developing the required sections for Level 1 of COF assessment.
- Inspection Planning: primarily API 581, incorporating applicable inspection methods to the damage mechanisms (corrosion circuits) and obtaining the inspection planning based on the inspection effectiveness, assigned targets and aforementioned calculations of risk.

05/2020- 6/2021 Senior Corrosion Engineer (Self-employed)

Developing an Internal Corrosion Assessment methodology for multiphase pipelines. Some details of calculations are:

- Pressure gradient: linear, based on input and output pressures
- Temperature gradient: nonlinear, based on the thermal conductivities of the system (neglecting the convective resistance of the fluid inside the pipeline)
- liquid holdups, in-situ velocities and hydraulic diameter for all inclinations: Beggs & Brill equations.
- flow regimes Horizontal: Beggs & Brill, Inclined: Guzhov, Vertical: under development
- Water Condensation rates: Sloan and/or Tohidi Equations
- Hydrocarbon condensation (Retrograde behavior): under development
- Water sedimentation: Brauner Equations
- BLC: D&M 95 (flow dependent)/ Cassandra
- TLC: General and pitting corrosion D&M 93 (Flow independent) with/without the H₂S factor
- TLC: localized corrosion: D&M 93 (Flow independent) with DNV-RP-G-101 approach.

03/2019- Present Senior Corrosion Engineer (freelancer)

Developing Kratos Power Inspection Solution software for fixed equipment in oil and gas industry with the following details:

- RBI module: API 581, I am primarily in-charge of POF, Probability Of Failure, and Inspection Planning programming
- FFS module: API 579, my main responsibility is to recheck and validate the calculations for General, localized and pitting damages.
- IOW module: API 584, I have organized and developed the entire module for Gas sweetening, Acid Gas Enrichment and Tail Gas Treatment Units (Amine Systems). The module though can be utilized in other units once they are scrutinized and their IOWs are determined.

For further information, <http://power-inspection.com>

06/2018–11/2020 Senior Corrosion Engineer (Techinco, Kangan, Iran)

In-service inspection of PH#12 South Pars Gas Complex. Including:

- Supervising the RBI project with a focus on POF and Inspection Planning. (API 581 Method)
- Developing IOWs (Integrity Operating Windows) for high-risk equipment and piping.
- Conducting internal inspection and FFS assessment when necessary
- Allocating CMLs, Condition Monitoring Locations, for the equipment and piping.
- Overseeing cathodic protection survey of the site facilities.
- Analyzing the actual corrosion condition of plant and monitoring the developed IOWs.
- Monitoring the internal corrosion of the main pipelines (sea lines)

07/2018–07/2019 Corrosion Manager-part time (POMC, Tehran, Iran)

Risk-Based Inspection of PH#12 Pars Oil and Gas Company (POGC) offshore platforms using DNVGL Synergi Plant and RBI offshore (DNV RP G 101 Method). Including:

- Preparing the Corrosion Circuit, CML/EPs and Inspection Planning procedures.
- Defining Corrosion Circuits and assigning them to the equipment and piping.
- Calculating pHs, CO₂/H₂S and other pertinent Corrosion Rates.
- Preparing and gathering the required data for POF calculations.
- allocating CMLs.
- Assigning inspection methods to the equipment/piping and developing an Inspection Plan.

12/2016–06/2018 Senior Corrosion Engineer (2R Inspection Co, Kangan, Iran)

In-service inspection of PH#12 South Pars Gas Complex. Including:

- Conducting internal inspection and FFS assessment when necessary
- Overseeing cathodic protection survey of the site facilities.
- Analyzing the actual corrosion condition of plant and monitoring the developed IOWs.
- Monitoring the internal corrosion of the main pipelines (sea lines)

12/2015–12/2016 Inspection Manager (SGS-Arya, Kangan,Iran)

In-service inspection of PH#12 South Pars Gas Complex. Including:

- Supervising the inspection team.
- Conducting internal inspection and FFS assessment when necessary
- Monitoring the internal corrosion of the main pipelines (sea lines)
- Preparing repair procedures for pressure retaining components.

12/2014–12/2015 Head of In-service Inspection (POMC, Kangan, Iran)

In-service inspection of PH#12 south pars gas refinery. Including:

- Holding technical meetings with the plant manager, maintenance manager, etc.
- Attending the pre-overhaul meetings to define the overhauls periods, high priority equipment.
- Overseeing the prepared repair procedures, WPSs, etc.
- Supervising the activities of my teammates.

06/2012–12/2014 Corrosion Engineer (Fateh Sanat Kimia, Assaluyeh, Iran)

In-service inspection of off-shore platforms phases 1#10, Pars Oil and Gas Company (POGC)

- supervising the RBI project with a focus on POF and Inspection planning (API 581 Method)
- Corrosion Assessment and internal inspection of the offshore equipment.
- corrosion control of the sea lines; both internally and externally including cathodic protection and coating survey, the onshore section, corrosion coupon replacement, and ER measurements.
- painting inspection of top side equipment and piping.

06/2009–003/2012 Share Holder & Quality Control Manager (OSI, Karaj, Iran)
Fabrication of exhaust systems for 160MW gas turbines, MAPNA. Including:

- Preparing Quality Control Plans.
- Supervising the QC team
- Preparing WPSs & PQRs
- Supervising the assembling and dimensions check.

10/2008–06/2009 Material Engineer (Kaveh Mobadel Group, Karaj, Iran)
Shell and tube, air-cooled heat exchanger, pressure vessel design and fabrication. Including:

- Material selection for corrosive Environments.
- Material Control and QC.
- WPS and POR preparation.

11/2006–09/2008 Corrosion Engineer (Techinco, Assaluyeh, Iran)
In-service inspection of PH# 1 to 5 South Pars Gas Complex. Including

- Conducting internal inspection for pressure vessels.
- Conducting Cathodic protection inspection and survey.
- Painting and coating inspection.
- Corrosion Coupon replacement and Corrosion Probes measurements.

(Senior) Corrosion Engineer (Short-term experiences in different Companies, Iran)

- Corrosion assessment of onshore and offshore facilities of Iranian Offshore Oil Company.
- Final inspection of the cathodic protection system, Pars petrochemical port, Iran.
- Cathodic protection design and installation for phase 2, Ghadir Urea & Ammonium plant, Iran.
- Cathodic protection design and installation for Olefin unit of Maroon petrochemical plant, Iran.
- Cathodic protection design and installation for Fadjr petrochemical plant, Iran.
- FFS Assessment of corroded pipeline of Aria-Sasol petrochemical plant, Iran.

Education, Trainings and Certifications

09/2009–12/2011	Master Degree in Corrosion Eng. and Protection of Materials University of Tehran, Tehran, Iran
09/1998–09/2003	Bachelor Degree in Metallurgical Engineering Amir Kabir University of Technology, Tehran, Iran
4/2018	Senior Internal Corrosion Technologist NACE
12/2017	Internal Corrosion for Pipelines-Advanced NACE, Dubai, UAE
08/2017	DNVGL Synergi Plant & RBI software & RP G101 Expert Training DNVGL, Assaluyeh, Iran

Personal Skills

Linguistic Proficiency

Persian: Mother tongue **English:** Proficient (IELTS 8) **German:** B1 level (B2 under training)

Job-Related Skills

- Pipeline integrity management. ASME B31.8S, API 1160, ASME B31.8 EFC 23, NACE SP0206, NACE SP0208
- CO2 Corrosion Modeling. Norsok M-506, de Waard – Milliams 93&95 and Cassandra models.
- Material selection acc.to ASME SEC II, NACE MR0175, MR0103, EFC16,17
- RBI API 580,581, DNV-RP-G101, ASME PCC3
- Cathodic protection design and inspection. NACE RP0169, NACE RP0193, NACE RP0285, NACE RP0572, NACE TM0497
- In-service inspection acc. to API 510,571, API 570, NACE RP0296, RP0472, API 579
- Welding and material based on ASME SEC II, VIII, IX