

Global 전문 기술직 직종의 구분 (Classes of Global Technology Titles/Positions)

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Global projects수행 중 만나게 되는 수많은 기술자들의 Title을 통해 전문 분야와 책임 및 역할을 알 수 있는 방법을 소개하고 본인의 영문 Profile/Business Card를 만들 때 참고가 되었으면 합니다.

[기술직 일반] Top Level (typical): Leader < Superintendent or Supervisor < Chief < Manager/Director/General Manager

(1) Engineer (Junior < Senior < Principal < Senior Principal): B.S degree + P.E./P.Eng licensor
--- 각주의 Professional Engineer Society Rule에 따르면 공인된 Professional Engineer 가 아니면 Business Card의 Title에 "Engineer"를 사용하지 못하게 되어 있음.

(2) Professional Engineer (P.E. in Global or P.Eng in Canada): An Engineer licensed by State, Province, and Country, and to be used within the permitted effective date.

(3) Staff Engineer: normally used for Principal level and above

(4) Lead Engineer: Leader of the Project, Task Force, or Area

(5) Chief Engineer: Leader of the Specific Technical Group

(6) Distinguished Engineer: Engineer with outstanding engineering achievements, and to be recommended by the Company's Board Members

(7) Fellow Engineer: Industrial/Company Technical Committee Panel Member with outstanding engineering achievements, and to be recommended by the members

(8) Chartered Engineer: An engineer registered with the Engineering Council in UK. Similar with Distinguished Engineer above.

(9) Technologist: A person who is completely aware of various technologies. A technologist has a greater role than a technician, Typically, requires high school diploma and/or 2yrs college diploma. Sometime requires accredited certifications for specific duty (e.g., NACE).

(10) Technician: A person with a practical understanding of technology. Typically, applicable regardless of any education grade. Sometime requires accredited certifications for specific duty (e.g., NACE).

(11) Inspector: People has advanced inspection skill (NDE & DE), and to be recommended by the company and/or to be certified by the technical society (NBIC, API, ASNT, AWS, etc.).

(12) Specialist: People has a specific technology, and to be certified by the technical society (typically 2-8 years field experience required for the certification). (e.g., NACE)

(13) Expert: People has a specific technology, and to be recommended by the company.

This term (as "expert witness") is also used in the court.

(14) Subject Matter Expert (SME): People has a specific technology, and to be recommended by the company. Typically working as a problem solver in case by case.

[금속, 재료, 용접, 부식, 건전성, 검사 분야] excluded Mechanical (Fixed Equipment, Rotating Machinery, Construction) and Piping/Pipeline (Stress Analysis) Engineer

(a) Mechanical Reliability Engineer: An engineer has a skill for mechanical and metallurgical test & Inspection as well as fabrication & construction (for maintenance).

(b) RBI Engineer: An engineer has a skill for mechanical (design, rerating, integrity, etc.) and metallurgical (degradation, crack propagation, etc.) engineering. Requires strong knowledge and/or certification for API 580/581/571/579, EN 16991/others, ISO 13485/others, etc.

(c) Mechanical Maintenance Engineer: An engineer has a skill for mechanical and metallurgical fabrication, construction, and maintenance

(d) Piping Materials/Specification Engineer: For piping spec and material classes

(e) Pipeline Reliability/Integrity Engineer: For reliability and/or integrity

(f) Materials Engineer: For metals and non-metals. Sometimes, the role is the same as the Materials and Corrosion Engineer.

(g) Materials and Corrosion Engineer: For materials selection, corrosion control (inhibition, coating, CP), welding, heat treatment, specification, and RCFA

(h) Metallurgical Engineer: For metallurgical science and engineering practice. Sometimes, the role is the same as the Materials and Corrosion Engineer.

- (i) Metallurgist: Typically for research and engineering for metallic materials.
- (j) Materials Scientist: For new materials, fuel cell, hydrogen/CO₂ fuel, etc. in Lab
- (k) Materials Research Scientist/Engineer: Typically, during service in Plant.
- (l) Welding Engineer: People with ability to prepare WPS/PQR/WPQ/Welding Maps & Sequence, and to solve any welding issues/problems
- (m) Welding Inspector/Examiner: People to control welding and welders per the WPS/PQR/WPQ. Typically to be certified by the technical society [Certified Associate Welding Inspector (CAWI)/ Certified Welding Inspector (CWI)/ Senior Certified Welding Inspector (SCWI), ABSA Welding Examiner, others]
- (n) Corrosion Engineer/Technologist/Technician/Specialist: For corrosion control (materials/coating/CP/chemical treatment design, CML, TML) and monitoring
- (o) CUI (corrosion under insulation) Engineer/Technologist/Technician/Specialist: People with ability to design CUI prevention and inspection (ILI) & analyze the CUI. Requires strong knowledge for API RP583, NACE SP0198, MTI-bull.7, ASTM G189, EFC WP15-Appendices, etc.
- (p) Non-Metallic Materials (Insulation, Refractory, Concrete, Ceramic, Plastic, etc.) Engineer
- (q) Polymer Engineer: People with ability to analyze the polymer materials
- (r) Coating Engineer/Technologist/Technician/Specialist: Normally requires certifications accredited by industrial societies
- (s) Chemical Treatment (Dosing, Inhibition) Engineer/Specialist
- (t) Cathodic Protection Engineer/Technologist/Technician/Specialist
- (u) NDE Specialist/Technologist/Technician: Typically requires certifications per applicable NDE type by the technical society (ASNT, AWS, etc.).
- (v) Failure Analyst Engineer/Lead/Manager: People with ability to analyze the microstructures for RCFA in Lab.
- (w) QA/QC Engineer/Technologist/Technician/Specialist: With strong knowledge for ISO 9001/14001/others, EN 13445/others, ASME BPVC/Piping/PRD/PCC, etc.