STEM-Corrosion™

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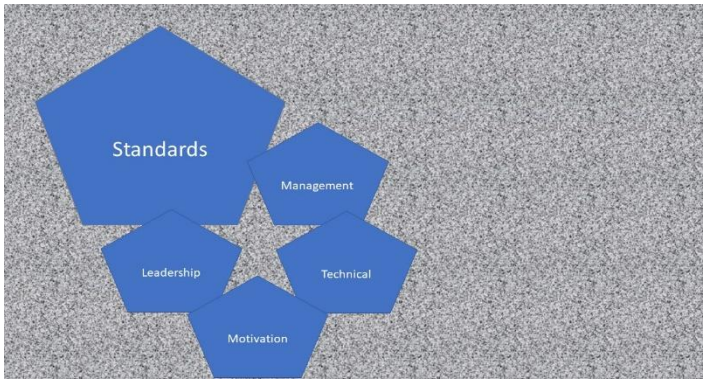
Role of Standards: Black and White or Shades of Gray?



Standards are mutually agreed upon minimum values or conditions that suppliers, users, producers, third-party laboratories, and subject matter experts (SME) are comfortable with, based on the current state of knowledge and experience on a given subject. Standards are live documents and are periodically (typically every 4 to 7 years) revised.

Associations, including AMPP (formerly NACE International or SSPC), ASTM International (formerly American Society for Testing and Materials), American Petroleum Institute (API), International Organization for Standardization (ISO), and Canadian Standards Association (CSA), develop standards on corrosion control and integrity management.

Standards should be used as baseline to develop company specific or project specific corrosion control and integrity management programs. Standards should not be treated as "white and black documents" i.e., don't assume that merely following standards will result in good solutions. Indeed, many standards have shades of gray, i.e., they only provide general, minimum criteria to build a good corrosion control or integrity management programs.

Tools, software, and programs developed based on best practices described in the standards and based on understanding the merits and limitations of various standards are likely to provide cost-optimized and effective solutions.

iFILMS™ - developed by integrating 25+ standards - provides internal corrosion control solutions, and **Expedition™** - developed by integrating 200+ standards - provides external corrosion and stress corrosion cracking control solutions.

Top Influencer of This Newsletter:

John Baron

My Story

I have worked in Materials and Corrosion engineering my entire career since graduation, starting out with Shell Canada in 1971. In those days, our team was named Chemical Engineering as corrosion engineering was not yet recognized as a separate field.

After a few years at Shell, it was suggested that developing increased expertise in non-metallics was required due to increased applications and suggested that I pursue this specialty. It was a career turning point, as I have now spent the past 50 years working primarily in non-metallics materials research and applications.

I retired from Shell in 2000 and have since worked as a consultant.

My Style

I always prefer and enjoy working in a team whether on an organizational or project basis. I try to work in an open straight forward fashion, with free-flowing ideas and solutions that can be discussed or debated. Low tolerance for hidden agendas or politics. In my experience, the best solutions usually arise from team efforts. I also enjoy learning continuously, about new products or technology applications, something that still seems to occur almost every day. Over the years I have been extremely fortunate to learn and work as part of some great teams.

Greatest Contribution

I would like to think my greatest contribution to industry has been to help and mentor people in non-metallic materials applications. I have been fortunate in being allowed to develop some expertise and having the chance to share that knowledge through means such as training sessions, technical presentations, and contributing to various industry developments of best practices and standards. For example, preparing the Canadian Association of Petroleum Producers (CAPP) Best Practice documents for reinforced composite pipelines and High-Density Polyethylene (HDPE) lined pipelines.

Pinnacle Moment

Throughout my career I have been involved with NACE International now the Association of Materials Protection and Performance (AMPP), at the section, regional and national levels. Similarly, I benefitted from working on Canadian Standard Association (CSA Group) pipeline standards and helping to initiate and develop requirements for non-metallic materials. I was immensely proud to be recognized by CSA and accept their Award of Merit in 2011.

My association with NACE and CSA has been greatly beneficial over the years and I developed mainly close friendships with industry colleagues that I cherish to this day. I strongly recommend getting involved and engaged with industry associations such as NACE and CSA. The benefits far outweigh the time and effort.

Advice to Industry

As an industry we are only as good as the people employed. My advice is to allow development of people carefully and provide suitable mentoring, both inhouse and through involvement in industry activities. It takes time and patience, well beyond school graduation to become knowledgeable in any field of expertise, but especially I think in corrosion and materials engineering.

Continuous learning, development, and improvement of technical staff, on the job mainly should be embraced and recognized by organizations, but sometimes is not. Things overall corporately have become more short-sighted in my opinion in terms of personnel development.

I also strongly encourage technical staff to spend as much time as possible out in the field as I always did, getting your hands dirty at the hot face, provides great opportunity to observe and learn.