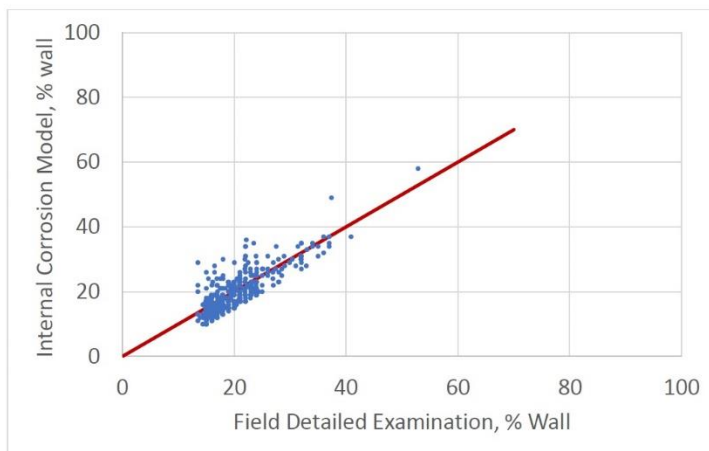


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What is the value of Pi (π)?



Pi or π is a unique number without which circumference or area of any circular material can't be defined, i.e., we can't differentiate small, medium, large or extra large pizza!

And π is an "irrational number," i.e., its exact value can't be determined.

- Scientifically the value is continuous indefinitely... 3.142857143...
- Practical way is to define the value of π as 3.14 which meets the accuracy of many engineering calculations but has some uncertainty.
- Oversimplification by assuming the value of π to be 3 will lead to disastrous miscalculations and catastrophic failures.

Localized corrosion occurs in random manner and hence the data displays spread. Therefore, prediction of localized corrosion should account for the spread and uncertainty. The uncertainty may be expressed as standard deviation, coefficient of variation, Gumbel statistical distribution, and Weibull's statistical distribution. Describing localized corrosion rate as a single value (without uncertainty) is equivalent to assuming the value of π as 3.

Localized pitting corrosion rate prediction software products such as [iFILMS™](#) and [Expedition™](#) predict localized corrosion rates or percentage wall thickness as well as calculates the uncertainty in the prediction. [iFILMS™](#) and [Expedition™](#) are validated using inline inspection and field digs, and the uncertainty is established using unity plots.

Raising Star of This Newsletter:

Jessie Wong



My Story

I graduated as a Mechanical Engineer from the University of Calgary in 2012. I began my career with Lloyd's Register and had many roles within the organization. Believe it or not, I first started as a temp receptionist while I was still in school! Once graduated, I was recruited to their Asset Integrity team and worked with my clients in implementing their risk-based inspection (RBI) Programs.

I soon realized that my calling was not to stay technical, so I became a Project Manager, then shortly after a Team Leader with my own reports. In this role, I began to learn about the operational side of the business and supported our manager in the internal reporting.

When an opportunity came to become a Program Manager for our Americas region, I couldn't turn it down. I moved down to Houston and wore many hats, from finance, to marketing, to sales and to client management. It was truly an invaluable experience to learn so much about running a business in such a short time.

Again, an opportunity brought me back to Calgary and I took on the role of Operations Manager for our Canada region. I was able to take all the things I learned as a Program Manager and lead the team that I "grew up" in the organization.

After maternity leave, I was looking for a change of pace, and started my own company – JDW Engineering in Fall 2021. I still support my Integrity colleagues while I continue to find new ways to use my skillsets. I'm excited to see what the next chapter brings!

My Style

I was raised by a single mom who instilled the value of education and hard work from an early age. Over the years, I complete my set of core values with my Three C's: Commitment, Collaboration, and Consistency. My word is my bond and I live in services of making things better. I love working with people because they are the most unpredictable and exciting part

of life! Lastly, it might take me longer to decide, but once it's made, I don't often change my mind.

I have always been someone who loves to tinker; I love working on anything that I can improve over time. The two oxymorons that best describe me are outgoing-introvert and happy-pessimist! A healthy balance between all four of those things are critical in how I approach my work. I'm often the person who sits and observe in a meeting and have no reservations about pointing out something that isn't right.

Things That Excite Me to Continue in the Industry

Our industry requires collaboration between various folks from various background and skillset. Associations, such as International Pressure Equipment Integrity Association (IPEIA), provide opportunities to meet, learn, discuss, debate, and workout solutions that will improve industry performance. I am excited to be the 2022 Program Chair for IPEIA and speak to experts in our industry in planning our Technical Presentations.

Changes I would Like to Make in the Industry

Digitization is where I have my eyes on. As the industry continue to evolve, we need to find a way to marry the lessons learned from years past, with the technologies of the future. We cannot afford to forget about what those before us have gone through to get the industry to where it is. However, our industry needs to be more agile, proactive, and find more ways to use technology to keep people safe.

Advice to Attract Youngsters to the Industry

Never hesitate to challenge the status quo! Just because you're the one being trained; it doesn't mean that the trainer can't benefit from finding better ways of working. Be inquisitive, ask questions, and when you're rewarded for your work, ask for more responsibilities. It's amazing what impact you can make when you simply ask: How can I help you do more?