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Video transcript

The power of digital corrosion management.
In corrosion management, the figures speak for themselves. The estimated cost of corrosion management every year across all the industries is over $2 trillion, which is a huge figure. This figure is only going to increase as assets get older, and traditional methodologies fail to address the most pressing challenges in corrosion management today.

Not only does corrosion management mean very high cost, but it is also the cause of the most severe incidents in the industry. Effective corrosion management in refineries – or rather, cost effective corrosion management – is directly linked to the ability to gather, analyze and visualize a high volume of data in real time.

This enables timely and cost effective decision making. This is exactly what the traditional methodology fails to address.

How can digital corrosion management help?
In corrosion management, I see as a leading practice today and moving forward 3 main leading practices. The first is advanced analytics and big data. These enable predictions with high accuracy – when and where corrosion will occur. This enables targeted inspection, which means a reduction in the frequency and scope of inspection which of course means lower costs, but also means enhanced asset integrity and safety.

Secondly I see that advanced analytics and big data provide the ability to predict with high accuracy the corrosion rate, which as a result enables optimized corrosion inhibitors. This means reduced cost and expanded asset life.

I also see that Internet of Things (IoT) can greatly add to overall inspection practices. It can do that by reducing cost and time of inspection because equipment is not taken offline, and installation is not removed, but also it can add to reducing safety concerns relevant to inspection.

What should refiners start doing?
What I see in the industry with respect to corrosion management is a common shift towards digitalization. I see that operators that embrace digital corrosion management and embrace this challenge would be best placed to address challenges in corrosion management and therefore be best placed to be the leading refiners in the future.