

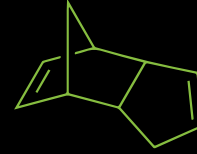
Creating the Refinery of the Future

Texmark, Deloitte, and an ecosystem of technology providers harness digital disruptors to help drive profitability with predictive maintenance



TEXMARK CHEMICALS
GALENA PARK, TX

48 YEARS
IN BUSINESS



SPECIALIZES IN THE PRODUCTION OF DICYCLOPENTADIENE

THE PROJECT



A VISION to become the Refinery of the Future



4 DIGITAL DISRUPTORS in play
(Internet of Things, Advanced Analytics, Edge Computing, Artificial Intelligence)



\$1M initial investment with potential for **\$5-10M** to cover all critical assets

“When it comes to digital transformation, it doesn’t come to an end, it continues.

We will never stop learning.”

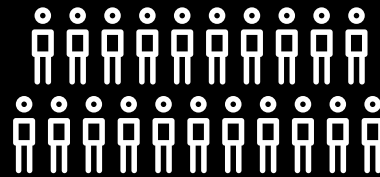
– Doug Smith, CEO, Texmark Chemicals

THE DELIVERY

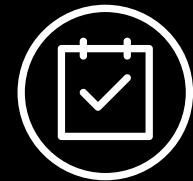
ECOSYSTEM PLAYERS INVOLVED



21 SKILLED RESOURCES UTILIZED



0 PRODUCTION INTERRUPTIONS



A PHASED APPROACH



PHASE 1

Established digital foundation by engaging edge-to-core connectivity and implementing location-based services



PHASE 2

Integrated HPE Edgeline Converged IoT platform enabling high-speed data capture analytics



PHASE 3

Engaged ecosystem to deliver turnkey IoT solution featuring predictive maintenance and asset monitoring

IMPACT



Predictive maintenance increases mean time between failures and helps identify root causes, for overall **20 PERCENT EXPECTED REDUCTION IN DOWNTIME**



Potential to **REDUCE THE 1,000 HOURS PER YEAR** currently spent conducting walk-downs and vibration analysis to determine malfunctions



Target **0 SAFETY INCIDENTS** and unplanned outages



Expected **50 PERCENT REDUCTION** in planned maintenance costs

WHAT OUR CLIENTS HAVE TO SAY

“Deloitte was a big part of educating us on how technology would, in fact, enhance what we are doing, not get in the way or complicate things, but instead streamline our operations.”

– Linda Salinas, VP of Operations, Texmark Chemicals

“Deloitte was absolutely **focused on business outcomes**. They had such a wealth of knowledge of the economics of digital manufacturing leveraging IoT and what we’re trying to accomplish here at the Refinery of the Future. What we’re trying to do here was something that hadn’t been done before and they’re really well suited to do that.”

– Doug Smith, CEO, Texmark Chemicals

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