



**MATRIX PDM
ENGINEERING**

CRYOGENIC STORAGE

Matrix PDM Engineering is staffed by dedicated, experienced professional engineers with expertise in the areas of structural design, process design, insulation, stress analysis, civil design, reinforced and prestressed concrete design, metallurgy, welding, gas dynamics, heat transfer, refrigeration, mechanical design, electrical design, controls, and instrumentation. As standards committee participants, Matrix PDM engineers develop industry codes for project requirements through its representation on major committees such as ACI 376 and API 620, as well as experience with facility owners. Matrix is an expert in storage tank and facility design requirements and safety practices associated with LNG and refrigerated liquids.

Matrix partners with facility owners to develop specific, standard designs suitable to a particular process, or utilization requirement for use on an ongoing basis.

A HIGHER STANDARD IN ENGINEERING.



UNMATCHED EXPERTISE

Matrix PDM Engineering's capabilities and resources provide customers with complete service from the conceptual development of a project, through economic evaluation and planning, to EPC project execution.

Matrix has considerable experience applying the requirements of the United States Code of Federal Regulations, 49 CFR Part 193, which applies to new LNG facilities subject to the Interstate Pipeline Act. We have permitted, designed, and constructed turnkey facilities per these regulations.

In addition, success in our industry requires an unwavering commitment to safety, mechanical integrity, and risk management. Zero-incident performance is the only acceptable result and we are committed to the principle that "Zero is Possible." Our safety performance is born out of our statistics and various industry awards.

Engineering expertise

- Feasibility studies
- FEED studies
- P&ID development
- Plot plan development
- Structural design/analysis
- Tank design/analysis
- 3D modeling of facilities
- Piping design/analysis
- Electrical design/analysis
- Instruments/control systems
- Control system programming
- Project cost estimates
- Commissioning/training
- Natural gas processing

Capabilities

- Storage
 - Spheres
 - ASME
 - Section VIII
 - Low-pressure tanks
 - API standard 620
- Impoundment systems
- Truck, rail-car, and ship loading and off-loading
- Boil-off compression and vaporization
- Foundations
- Piping insulation
- Pumping
- Product heating
- Flares
- Fire protection
- Electrical power distribution
- Instrumentation and controls
- Peak shaving
- Liquefaction



For more information
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