

# SPECIALTY TANKS, VESSELS AND SYSTEMS

Matrix NAC provides comprehensive, multi-discipline solutions with industry leading expertise in aboveground storage, low temperature and cryogenic tanks, terminals, specialty vessels, silos and other bulk storage, natural gas processing, sulfur recovery, processing and handling, process plant design, power generation environmental controls and material handling, industrial power distribution design and engineering, electrical, instrumentation and controls / controls and automation, marine structures and material handling systems and terminals.

**Safety. Integrity. Positive relationships.  
Stewardship. Community service.  
Delivering the best. It is these core  
values that have forged our reputation  
for excellence.**



**A HIGHER STANDARD IN CONSTRUCTION.**





## AN ADAPTABLE, COLLABORATIVE PARTNER

Matrix NAC has the capability, experience and expertise to design and construct your facility on a turnkey, EPC basis.

### These facilities include:

- Storage—ASME BPVC Section VIII Spheres, API Standard 620 Low Temperature Cryogenic Tanks
- Refrigeration systems
- Product pumping
- Product heating
- Truck, rail-car and ship loading and unloading facilities
- Flares
- Fire protection
- Electrical power distribution
- Instrumentation and controls

## LNG TERMINALS AND FACILITIES

Over the years, Matrix NAC has been actively involved in the design and construction of several of the industry's largest terminals. Matrix NAC is familiar with all components of these facilities including storage tanks, impoundment systems, ship loading and off-loading systems, boil-off compression and vaporization, foundations, piping insulation, pumping and fire protection systems. For bunkering terminals or peak shaving facilities, we can provide liquefaction systems in combination with our select technology partners. These facilities include storage tanks that are among the world's largest metal containers. We are experts in the design and construction of the various LNG storage concepts, including single, double and full containment.

Matrix NAC 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 in accordance with these regulations.

## STORAGE OF REFRIGERATED LIQUIDS

Facilities for the storage of ammonia, ethane, ethylene, propane, propylene, butane or butadiene can be stored either under pressure in spheres or in refrigerated low-pressure storage tanks.

## LIQUIFIED ELEMENTS OF AIR STORAGE

These tanks are specially engineered for the severe operating conditions associated with cryogenic temperatures.

### Our expertise includes:

- Insulation systems
- Tank piping
- Foundations/heaters
- Instrumentation

Years of experience and product development have yielded economical and proven LOX and LIN tank designs. These provide the dual benefits of economic configurations and shorter schedules.

## ENGINEERING SKILLS & SERVICES

- Feasibility studies
- Front-end engineering development studies
- P&ID development
- Plot plan development
- Structural design/analysis
- Tank design/analysis
- 3D modeling of facilities
- Piping design/analysis
- Electrical design
- Instruments/control systems
- Project cost estimates
- Commissioning/training

