

Spotlight on Spectra

A multi-disciplined construction team dedicated to customer satisfaction.

Founded in 1989 as California Spectra Instrumentation, Spectra is one of Southern California's leading instrumentation and electrical contractors, specializing in providing services to the heavy industrial market sector, specifically to oil refining, oil production and power generation facilities.

Since its purchase in 2015 by Total American Investment Co., Spectra has expanded its scope of services and is now an SB-54 compliant provider of electrical and instrumentation, mechanical and piping, civil construction, maintenance, and tank and vessel services.

Spectra is a signatory to the IBEW, Boilermakers, Pipe Trades, Laborers, Carpenters and the OE. And Spectra can provide extensive project controls, productivity tracking, quality assurance and control, constructability support, Primavera P6/MS Project, and document control within each of its specialties.



Electrical and Instrumentation

The Electrical, Instrumentation and Controls Group has the technical expertise and up-to-date equipment to deliver the latest electrical, instrumentation and controls technology. Among the available services are:

- analyzer installation
- automation and controls
- control systems upgrade projects
- TDC, DCS, Delta-V, SCADA systems
- panels and junction boxes
- CEMS analyzers
- automated gasoline blending systems
- blown and conventional fiber optics
- safety integrated systems

Mechanical and Piping Services

Spectra's experienced construction professionals have vast experience in refinery and petroleum upstream construction,

including equipment installation, process and utility piping, steel structures and supports, ducting and stacks, and underground pipelines. Spectra can provide multi-disciplined project execution. Other services include:

- modular equipment
- cogeneration and power facilities
- tanks, towers, heaters and vessels
- storm water and drainage systems
- platforms, stairs, ladders
- canopies and load racks
- leak and anomaly repairs
- demolition and abandonment



Civil/Construction

Spectra's Construction Division serves the petroleum, chemical, power, manufacturing, water and wastewater industries, performing new construction, upgrades, and maintenance, including piping, equipment installation, repair and replacement, structural steel, civil, concrete, and other facility improvements.

"Spectra's Construction Division provides a full range of civil construction services from small foundations and flat-work to extensive and complex equipment foundations, as well as trenching, excavation and underground utilities," says President John Feikema. "We can provide civil work involving and related to process piping, structural supports, ladders and stairs, equipment installation, and facility improvements."

Spectra performs:

- site work, grading and earthmoving
- foundations, cellars, and vaults
- containment structures
- digesters
- restoration and demolition
- slabs and trenches
- caissons and piling

Maintenance Services

Spectra provides long-term routine maintenance, supplemental maintenance, shutdown maintenance, and repairs and alterations to process equipment to oil refining, oil production, chemical, power



generation and other industrial facilities. Maintenance services also include:

- testing programs
- corrosion/deterioration repair
- foundation restoration
- leak repairs
- turnarounds
- weld overlay and surface restoration
- pipeline anomaly repair
- demolition
- tube replacements
- valve maintenance
- piping modifications
- seal replacements
- shutdowns and emergency outages

Tank and Vessel

The Tank and Vessel Division can self-perform key elements of tank maintenance, repair, and construction programs. Compliant with API 12D, 12F, 650, 653 for tank work and ASME Section VIII for pressure vessel work, Spectra is accredited and authorized to use the National Board Code Fabrication ("R") stamp.

This division performs:

- new tank construction
- piping modifications
- valve automation
- containment construction and repairs
- vessel repairs
- corrosion/deterioration repairs
- wind/fire damage repairs
- shell deformity repairs
- floating roof repairs
- leak detection
- seal replacements

The Tank and Vessel Division can manage inspection and maintenance programs and handle all aspects of instrumentation, lighting, and grounding. ■