

Marathon Oil Corporation

# Catalyst Addition System at Petroleum Refinery

With an outdated and unreliable catalyst addition system in place, Marathon found it was losing the ability to keep process yields at optimal levels because they were unable to add catalyst when necessary. SSOE was secured to implement the change Marathon needed to improve conversion of its heavier feedstocks into gasoline and lighter fractions.

Consistently ranked as a top industrial process and chemical design firm, SSOE applied its experience in petroleum refinery processes to provide recommendations for installation of the third party addition system. As part of the scope, SSOE served as the liaison between Marathon and the third party equipment provider to integrate changes to piping, connecting PLCs to the refinery control system, as well as executing a design for a replacement foundation for the system. Noting that the system was close in proximity to other foundations within the refinery, SSOE provided an innovative foundation system to minimize impact to the congested area. Power plans for the controls system, including 120 V power for the third party system, were also provided.

In the end, SSOE's plan helped increase profit potential as a result of implemented improvements, created operational savings, and helped minimize downtime during the upgrade.

## value promise

Increased profit potential while creating \$1 million in operational savings from catalyst system improvements.

**location** Canton, Ohio

## highlights

Controls engineering

Chemical process engineering (piping and foundation)