

# CHEMICAL ADDITION UNIT



Sanjel's Chemical Addition Unit is a liquid chemical additive system, as well as a self-contained mini-laboratory that enables the quality control of all fluids and gelling systems throughout pumping operations. At the heart of the chemical additive system are six hydraulically-driven positive displacement chemical pumps that can pump nine different chemicals "on the fly".

## Applications

- Conventional fracturing operations
- Foam fracturing operations
- High Foam Quality (FQ) unconventional fracturing systems
- Fracturing through coiled tubing
- High rate slick water fracturing

## Equipment

- 6 – Hydraulically-driven positive displacement liquid additive pumps
- 6 – Removable 265 gal totes
- Large sump for chemical containment
- 5' x 8' heated wet or dry chemical storage area

## Instrumentation and Control Systems

- ERAD control system for automatic operation of individual liquid additive pumps
- Mass flow meters display individual rate and total for each pump
- Computerized electronics with manual override
- Auxiliary power provided by 1100 Genset
- Additive concentrations can be varied during pumping to tailor fluids per stage

## Laboratory

- 4' x 8' heated lab area
- FANN 35 viscometer
- Water bath
- Waring blender