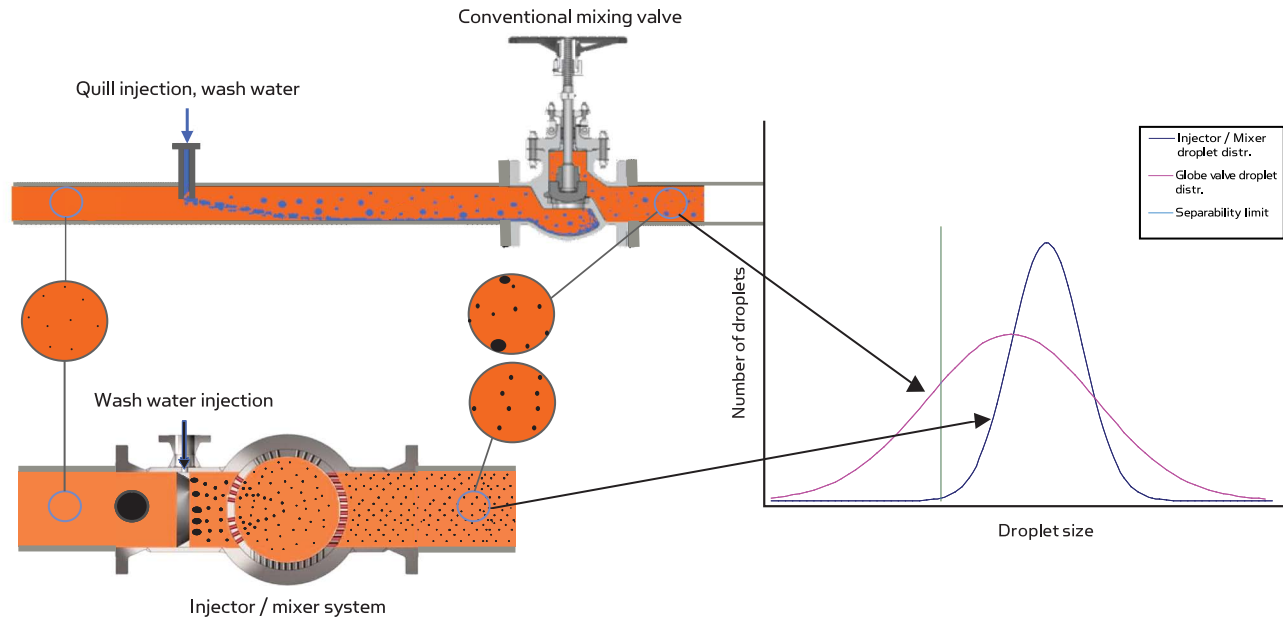


# Increase Treatment Capacity with New, Innovative ProSalt DESALTING TECHNOLOGY

## CONVENTIONAL MIXER VS. ProSalt INJECTOR / MIXER SYSTEM



*This graphic shows close to uniform droplet size distribution at separable droplet sizes and high exposure area at acceptable pressure drop.*

Desalting is a crucial step for crude oil downstream refining processes since both the free water and emulsified dissolved water contain salt, which can cause corrosion, leading to failure of critical process equipment, i.e., hydrocracker.

Efficient injector / mixer desalting technology holds the key to effective salt content removal, efficient utilization of wash water and chemicals, and improved crude-water separability. Besides increased treatment capacity, the technology allows reduced wash water requirements, reduction in oil in water content, and low installation costs, and thus high returns on investment.

The system replaces the conventional static mixer and mixing valve with a novel inline injector / mixer assembly. This assembly requires minimum maintenance, has a high turndown ratio, and provides unobstructed flow conditions while providing efficient mixing of various production chemicals and dilution water used in desalting.

The injector / mixer system generates a homogenous phase flow over the pipe cross-section in combination with a pressure drop that is significantly lower than conventional mixing methods, while controlling shear forces. This achieves an improved oil / water separation, with less emulsion.

The injector / mixer assembly has demonstrated operational benefits for most crude oil / wash water flow rates over a wide range of specified pressure drops.

### REFERENCES

Available upon request.

### FOR MORE INFORMATION

Contact your nearest ProSep Inc., office.

[www.prosepinc.com](http://www.prosepinc.com)

*This technology was featured in Oil, Gas & Petrochem Equipment, February and March 2007.*