

# ProSalt™

The **ProSalt™** system's efficient injection and mixing technology holds the key to effective crude oil desalting, efficient utilization of wash water & chemicals and improved crude-water separability.



## FEATURES

- + Independent of upstream piping arrangement
- + Automated online adjustability to meet variable process flow condition (high turndown ratio)
- + Provisions for online de-plugging are available
- + Robust design for low maintenance

## BENEFITS

- + Homogeneous high shear force condition leads to high mixing efficiency (90% in most cases) and less emulsion
- + Capable of multiphase mixing
- + Capable of high mixing efficiencies with a low pressure drop (0.1 to 0.3 bar)
- + Up to 60% reduction in wash water consumption

ProSep's mixing technologies differ from traditional inline mixing technologies as they utilize main stream momentum by reducing open flow area and increase flow velocity, resulting in a high mixing driving force.

The award winning **ProSalt™** system has been primarily installed in upstream desalter applications, although

the technology has been employed in downstream refineries.

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

separation with less emulsion.

The **ProSalt™** system has also decreased client's demulsifier consumption by 48% saving them over \$1 MM per year.

REFERENCES

Case 01

2 units of 24",150#  
ProSalt™  
Mexico  
(854,000 BPD)

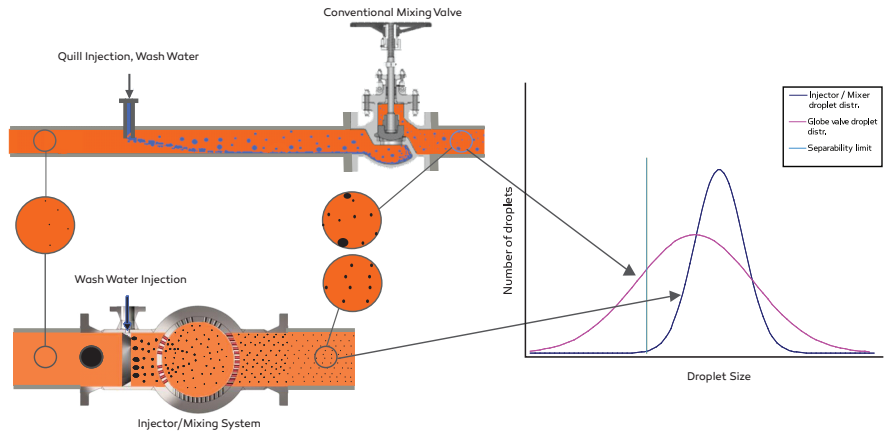
- + Mixing efficiency increased by 30% compared with conventional globe valve
- + 60% reduction in wash water consumption
- + Annual wash water saving of USD \$140,000 & energy saving of USD \$1,305,000

Case 02

1 ProSalt™ Unit  
Middle East

- + Differential pressure across the mixer decreased by more than 50%
- + Wash water rate decreased by 40%
- + Oil in water content reduced by 60%

PROSALT™ VS. CONVENTIONAL MIXER SYSTEM



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**ProSalt™ can increase mixing efficiency by 30% compared with conventional globe valves**

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