SCM-CIP
CLEAN IN PLACE TANK CLEANING

The Clean in Place Tank Cleaning System is a purpose built pressure wash unit. The tank cleaning nozzles provide 360 degree impact indexed coverage for cleaning the inside of all tanks and pits. Using wash water containing a degreasing agent, the tank cleaning head is supplied with a continuous stream of wash water at pressures of up to 225 psi and flow rates of 100 gpm. As a consequence of the pressures and flows attained during normal operation, accumulations of materials that may have aged and solidified through time are broken down and slurried in readiness for uplift back to the tank cleaning process tank by the recirculation pump.

AUTOMATED CONTROL SYSTEM

A PLC & HMI (Human Machine Interface) based system to fully control the tank cleaning system for ease of operation. All control functions including, preparing wash solution, control of high pressure pump, tank selection and wash history are controlled from a central control panel to increase cleaning efficiency and effectiveness. All cleaning sequences are pre-programmed for ease of operation and to reduce cleaning time and rig crew non-productive time.

FEATURES & BENEFITS

- Dual pump skid providing 400 gpm wash water at 250 psi (16 bar) or single pump skid providing 200 gpm of wash water at 250 psi (16 bar)
- Dual pump skid has capability to run 4 nozzles (clean multiple tanks at once)
- Process time: 30 – 60 mins per tank (depends on tank geometry and solids build up)
- 50 – 100 bbls of wash solution storage capacity
- Clean pipe manifolds
- Fully automated option
- Re-circulated of wash water back to storage tanks
- Environmentally friendly wash solutions
- No man entry to mud tanks
- Reduce non production rig time
- Portable or permanent automated systems available
- All chemicals used are environmentally safe

AUTOMATED FEATURES

- 17” touch screen control panel (HMI)
- Fully automated cleaning cycles
- Clean multiple tanks at once
- Increased efficiency
- Monitor: pump volumes, pressure, cleaning histories, cleaning times
- Easily adjust cleaning times to increase efficiency

CONTAINMENT AND HANDLING

CLEANING NOZZLES

Programmable and Non-Programmable wash nozzles are available and are easily inserted into any mud tank through an 8" opening. Tank cleaning nozzles are selected during the shadow study and nozzle layout analysis to determine the optimum nozzle for improved cleaning efficiency.

SMC-NON PROGRAMMABLE NOZZLE

The Non-Programmable nozzle produces a homogenous 360^0 coverage pattern that is superior to that of any other rotating jet head in its class. The Non-Programmable nozzle is an integrated turbine tank cleaning machine where the flow of water through the machine produces the 360^0 rotation.

General	
Rotation	360º
Flow	60-100 gpm
Pressure	70-150 psi (5-10 bar)
Rotational Speed	1.5-4 rpm
Material	AISI 316
Max Working Pressure	10 bar (150 psi)

SCM-PROGRAMMABLE NOZZLE

The Programmable nozzle is a single nozzle automated tank cleaning machine constructed of 316 SS. The nozzle allows the operator to wash the tank a full 360^0 or to set the nozzle angle and wash a particular section of the tank. All drive mechanisms are external to the tank and therefore easy to maintain.

General	
Rotation	Adjustable
Flow	35-310 gpm
Pressure	50-200 psi (3.5-13.8 bar)
Rotational Speed	1-1.6 rpm
Material	AISI 316
Standard Length	59.06" (1,500 mm)
Tank Connection	PN 16 DN 150
Weight	94.8 lbs (43 kg)

SPECIFICATIONS

General	
Model	SCM-CIP Dual Process Tank & Pump Skid
Pump Capacity	400 gpm at 250 psi
Tank Capacity	2 x 50 bbls
Dosing Pump	Air Diaphragm
Instrumentation	Digital Flow Meter 2 x Digital Pressure Gauge Chemical Dosing Meter
Screening	SCM-PrimaG 3P Shale Shaker
Operating Pressure	250 psi
Nozzle Operating Volumes	100 gpm
Dimensions	
Length	240" (6,096 mm)
Width	96" (2,438 mm)
Height (with Shaker)	165" (4,206 mm)
Weight	
Net	18,000 lbs (8,165 kg)
Utility Requirements	
Voltage	380 / 460 V
Phase	3 Phase
Frequency	50 /60 Hz
Power	100 hp (75 kW)
Air	100 psi
Safety	Explosion Proof electric's suitable for zone 1 use. Supply hoses with embedded wired for electro-static deviation to earth.