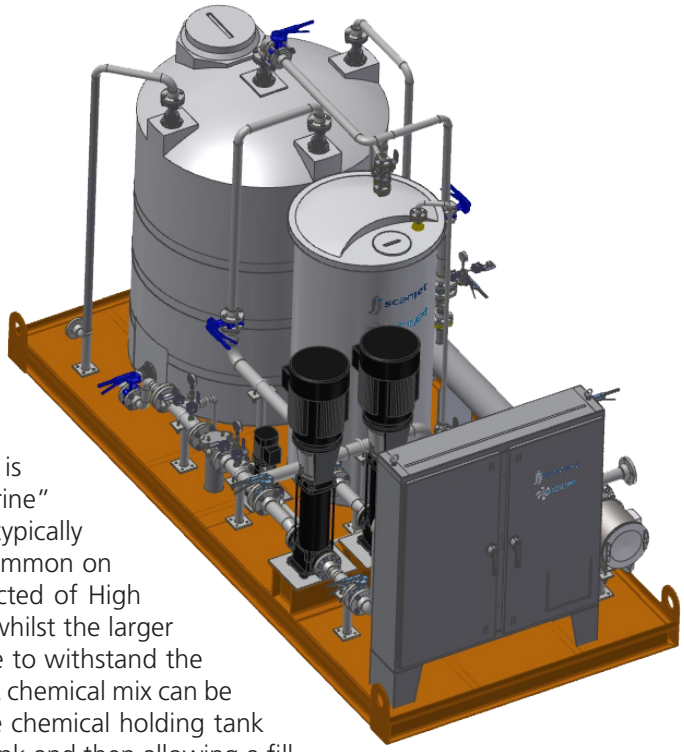
CIP System

Drilling Rig/Ship Cleaning System

Type: CIP3087



CIP3087 is a skid mounted Clean In Place (CIP) System specifically designed for the cleaning of drilling fluid tanks on drilling rigs for both on and offshore and on drill ships. System **CIP3087** is a two tank system with one tank for recirculation of the cleaning fluid and one tank for the holding of cleaning chemistries.

All tanks have overfill pipes that discharge onto and within a containment on the skid in the event of an overfill situation. The vertical multi-stage pumps can be used simultaneously or in singular mode for pump redundancy needs. The entire system is comprised of ATEX certified components and with all certificates of compliance provided with the system documentation package. All piping is constructed of carbon steel and externally coated with a "Marine" quality paint to withstand years of non-corrosive service that is typically experienced in a Marine (Saltwater) environment which is common on Offshore Drilling Rigs and Drillships. The tanks are constructed of High Density Polypropylene (HDPE) for the chemical holding tank whilst the larger recirculation tank is constructed of Cross-Linked Polyethylene to withstand the required temperature and day to day use of this equipment. A chemical mix can be achieved on-skid by taking the required chemistries from the chemical holding tank and transferring the calculated amount to the recirculation tank and then allowing a fill of salt or fresh water into the recirculation tank as required in the cleaning recipe.

Once this is accomplished, the fluid in the recirculation tank is recirculated to mix the water and chemistry components into the proper solution. Heat up to 60˚C (140˚F) can be achieved on the **CIP3087** system by recirculating through the on-board electric heater for the designated number of recirculations required to achieve the ΔT needed. The skid for system **CIP3087** is tested and ran through our frame analysis calculations to insure that it can be lifted by a crane at 4 lift points on the skid when all tanks and lines are empty. System **CIP3087** pumps are controlled by a PLC on the skid and the control cabinet also incorporates a data highway for link to an external primary control center if so wanted.

Performance Parameters and General Specifications			
Ref	Parameter	Value	Comments
1	Design Pressure	208 PSIG (14.35 BAR)	---
2	Design Flow	150 USGPM (34 m^3/hr	---
3	Design Temperature	60˚F (140˚F)	---
4	Filtration	228 micron	Duplex strainer
5	Recirculation/Mix Tank	1,100 Gallons (4,164 liters)	XLPE
6	Chemical Holding Tank	325 Gallons (1,230 liters)	HDPE
7	Construction codes and conformities	ISO9001, ASME, ANSI, ATEX	ABS, DNV, Lloyds, NKK, on request
8	Rated to operated in hazardous zone	Yes	ATEX on all electrical components
9	Controls (Pumps)	PLC with data highway	---
10	Frame	Load and stress analysis for lifting	Stress analysis tables available on request
11	Drawing Number	3087PRJ-05-PID	...
Customization of this skid is available via our engineering services group at eng@orbijet.com			

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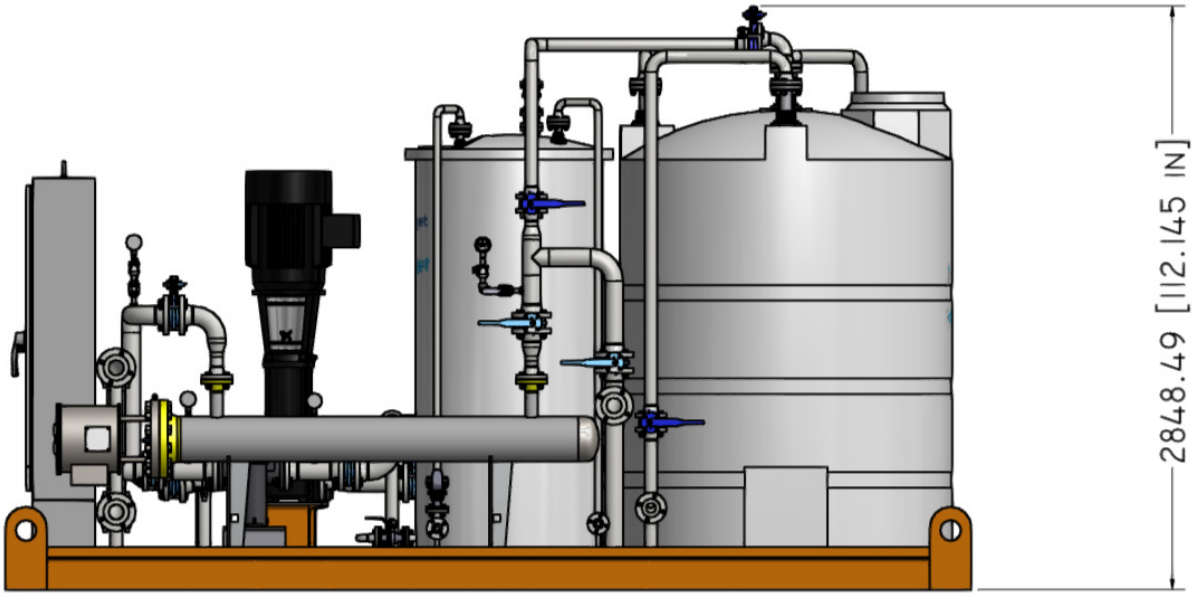

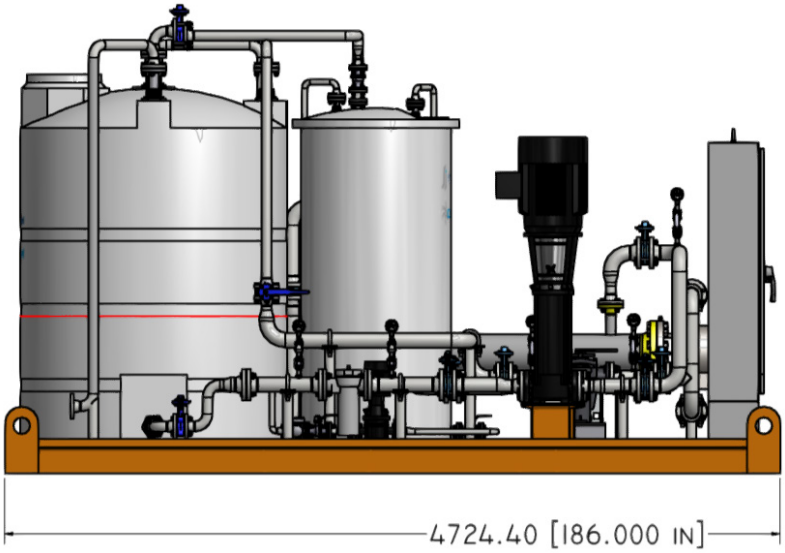

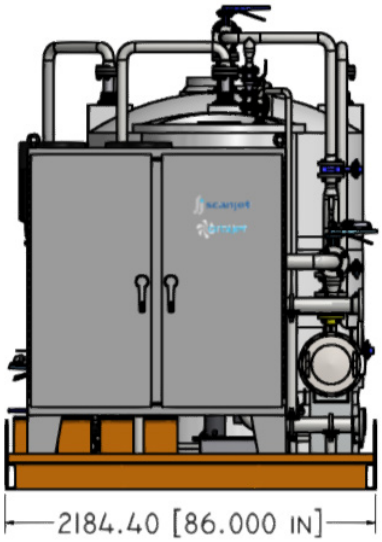

Scanjet SC15TW

Scanjet SC40RT

Scanjet SC30T

Typical Tank Cleaning Machines to be installed in tanks to be cleaned.

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