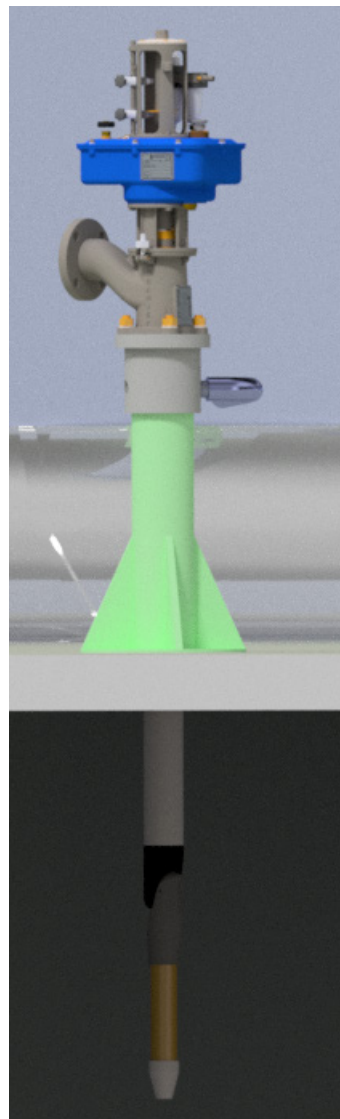




Orbijet Cleans the World



SC 60A Crude Oil Washing Machine  
Fits through the support legs for floating roof tanks.

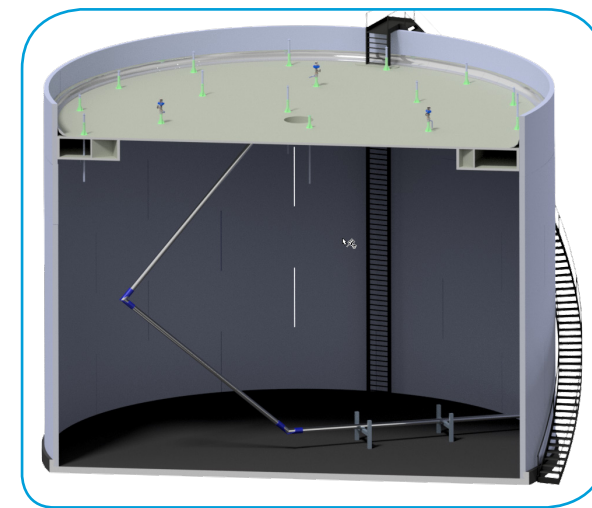


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15200 Middlebrook Drive, Suite E  
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USA

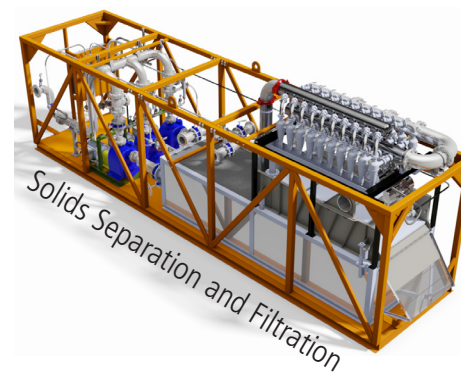
**Phone:** 281.218.9400  
**Fax:** 713.513.5884  
**Email:** info@orbijet.com

**Website:** www.orbijet.com

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## Crude Oil Washing System Type 2571



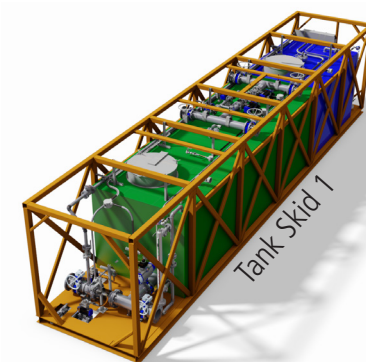
Solids Separation and Filtration



Controls and Pump Skid



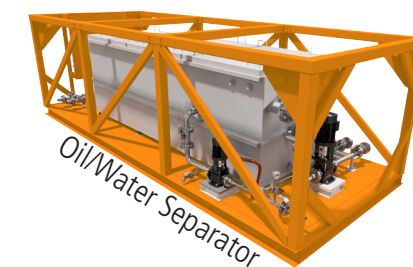
Electric Generator - Diesel Fueled



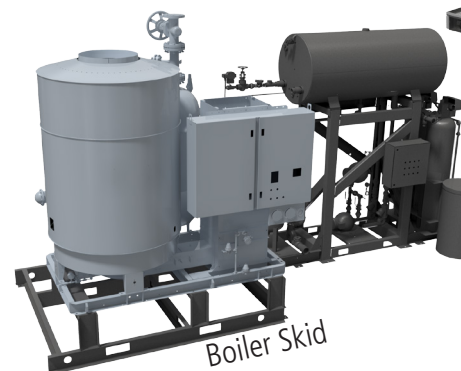
Tank Skid 1



Tank Skid 2



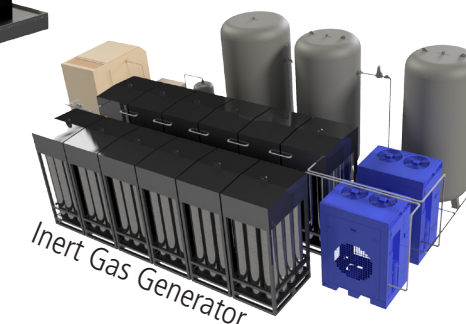
Oil/Water Separator



Boiler Skid



Air Compressor Skid

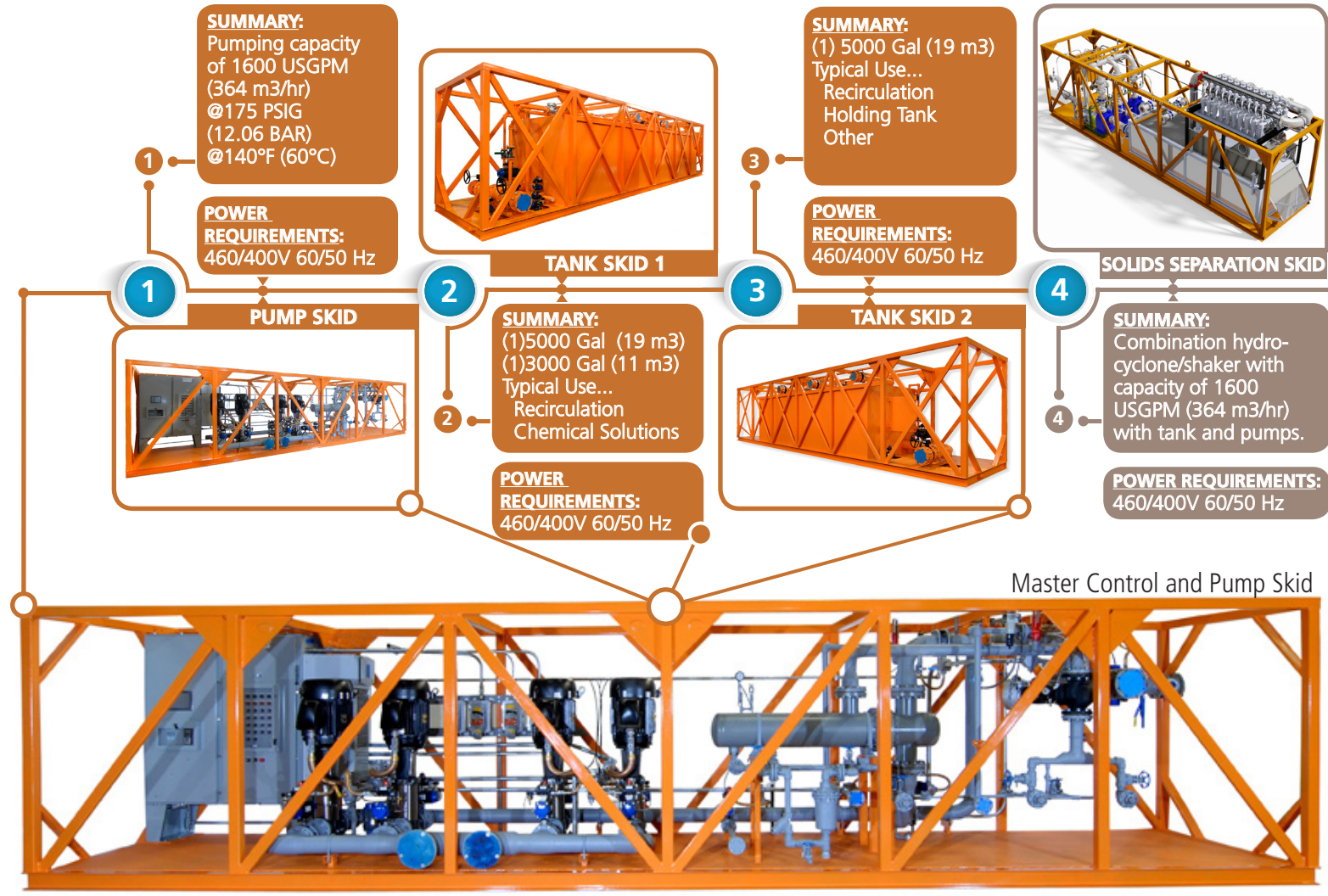


Inert Gas Generator

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# Type 2571 | Crude Oil Washing System

CIP (Clean In Place) System



Clean in Place System (CIP) Type 2571 has the capability to create a recirculation loop within the tank to be cleaned via the selected tank cleaning machines thus dislodging and mixing the tank bottoms to be carried away via the return pump system to our proprietary solids separation system where the fluid stream is reduced of solids to less than 300 micron. The solids fraction is discharged to holding bins for further treatment or disposal by others and the aqueous phase is returned to the tank skids for continued recirculation in the tank(s) to be cleaned until all solids are removed from the tank.

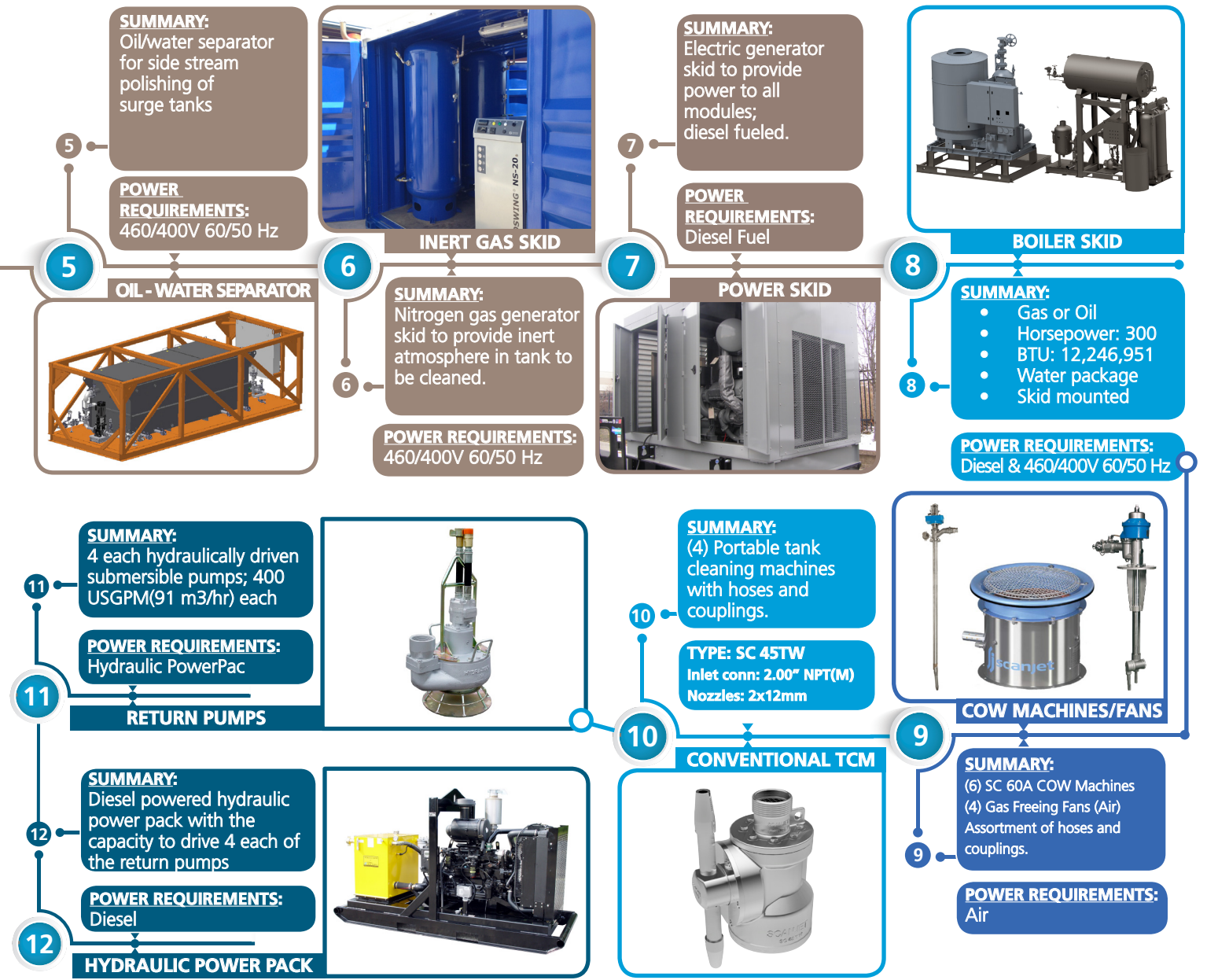
Skid Modules (All modules fit in a 40' Container for shipping purposes)	
Modules	Function
Pump Skid	Primary pump and master control skid.
Tank Skid 1	Primary tank skid; recirc and chemistries
Tank Skid 2	Secondary tank skid; recirc and storage
Solids Separation	Solids separation of cleaning fluid streams
Oil/Water Separator	Oil/water separations skid
Inert Gas Skid	Inerting of tanks being cleaned
Power Skid	Diesel powered generator.
Boiler Skid	Diesel powered; steam to heat exchanger
Air Compressor Skid	Air supply to entire system.



Our oil/water separation skid can be engaged for side stream polishing of the aqueous stream thus reducing the oil in water fraction for remediation of the fluid streams and recovery of the oil or microemulsion chemistries that can be used for a more complete recovery of the oil and remediation of the solids. The required heat source is supplied via our boiler skid and power is supplied via our power generation skid. Tanks are inerted with our Nitrogen Gas skid. Each skid frame is uniquely designed for portability on land and offshore use. The majority of the system is PLC controlled from the primary controls/pump skid and connection to other skids are via an Ethernet/IP Network with Remote I/O. Modules that are included with this system are listed in the Skid Modules Table above.

## Clean In Place (CIP) System Portable & Fixed Crude Oil Washing System (COW)

Type 2571 is a Crude Oil Washing system that is designed to clean large hydrocarbon storage tanks with solvents, hot water, and chemistry solutions such as our proprietary microemulsion remediation chemistries.



Summary Performance Characteristics of Products in this Full Package		
Component	Summary Description	Reference/Part Number
Controls/Pump Skid	Pumping capacity of 1600 USGPM (364 m3/hr) @175 PSIG (12.06 BAR) @140°F (60°C); VFD	7521467
Tank Skid 1	5000 gallon tank; 3000 gallon chemical tank; automated valves where prudent	7521477
Tank Skid 2	5000 gallon tank; automated valves where prudent	7521494
Separations Skid	Combination hydrocyclone/shaker with capacity of 1600 USGPM (364 m3/hr) with tank	7521527
Oil/water Separator	Oil/water separator for side stream polishing of surge tanks	7521515
Inert Gas Skid	Nitrogen inert gas skid to control LEL levels in tank to be cleaned	7521555
Power Skid	Generator skid to provide power to all modules; diesel powered	7521560
Boiler Skid	Boiler skid to provide steam to the pump skid heat exchanger; diesel powered	7521508
Programmable TCM	6 each Single nozzle programmable type SC 60A Crude Oil Washing Machines	Pending
Conventional TCM	4 each Portable tank cleaning machines type SC 45TW with capacity of 104 USGPM(23.5 m3/hr)	Pending
Return Pumps	4 each hydraulically driven submersible pumps; 400 USGPM(91 m3/hr) each	7521565
Hydraulic Power Pack	Diesel powered hydraulic power pack with the capacity to drive 4 each of the return pumps	7521567
P&ID Drawing	Details drawing of all components, calculations, and flow paths.	2571-09-PID
Sundry	Assortment of supply/return hoses; cables for skid connections; junction boxes; etc.	7521564
Air Compressor Skid	Diesel driven air compressor	7521572