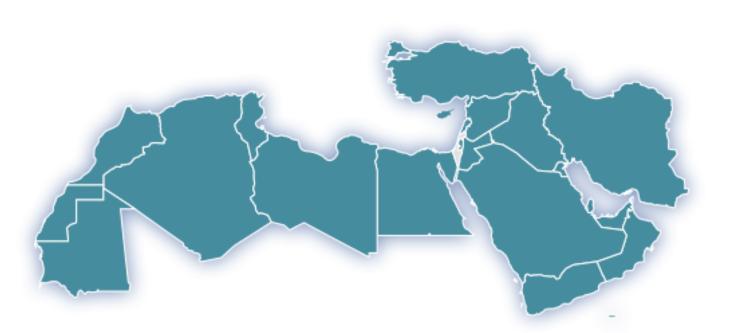


شركة الزينط المتكاملة Integrated Petroleum Company FZC. Geographical Coverage

United Arab Emirates Saudi Arabia Bahrain Kuwait Oman Qatar Lebanon Jordon Syria Iraq Yemen Palestine Libya Morocco Tunisia Sudan Algeria



Middle East & North Africa



INTEGRATED PETROLEUM CO. FZC having it's corporate office in the United Arab Emirates (UAE) is in the business of supplying Oilfield Equipment and Service to serve the Industry in the Middle East & North Africa since 2004.

We established relations with manufacturers of oilfield equipment and international services companies to work as their partners to market their equipment as well as utilize their expertise. Amongst other international reputed Oilfield Equipment Manufacturers, we signed Partner / Exclusive Agency Agreement with a well known multinational company for exclusive rights to market and sell their products in the MENA region. As part of Al Marwan Group Holding our strong establishment involves the corporation with our sister companies such as East & West Trading Est. in providing complimentary services and equipment at our own facility in the United Arab Emirates to offer our clients quality, state-of-the-art and most innovative Heavy Machinery, Drilling & Completion Equipment and Services in cooperation with :

#### SERVACORP "SERVA 'SJS' LTD"

Manufacturer of petroleum drilling & completion equipment

Complying with DNV issued ISO 9001 : 2000 Standards

We believe in business integrity and promise:



**"TOTAL COMMITMENT TO CUSTOMER SATISFACTION"** 

## CEMENTING EQUIPMENT







- A. Continuous high-energy mixing.
- B. Density auto control.
- C. Engine emergency kill air inlet shutoff.
- D. Overpressure shutdown.
- E. SPS packing system.
- F. Non-radioactive densitometer.
- G. Stainless steel console.
- H. Engraved stainless panels.
- I. Dual-scale gauges.
- J. Remote monitoring and data record system.
- K. Integral high-pressure irons.

## CEMENTING EQUIPMENT DOUBLE PUMP CEMENTING UNIT

Double pump cementing units are available in:

1) Truck

**Truck Ignition & Mobility** 

2) Skid

Integrated Engine

3) Trailer-mounted

Integrated Engine & Truck Mobility



## DOUBLE PUMP CEMENTING UNIT - TRUCK/TRAILER

MODEL	PCT-521A	PCT-621A	PCTLR-521A	PCTLR-621A
Carrier Type	Truck	Truck	Semi-trailer, dual axles	Semi-trailer, dual axles
Engine Rating	(2)X CAT C-15 540HP (Opt.) (2)X CAT C-13 475HP	(2)X CAT C-15 540HP (2)X CAT C-13 475HP	(2)X CAT C-13 475HP (1)X CAT C-9 300HP, (Opt.)	(2)X CAT C-13 475HP (1)X CAT C-9 300HP (Opt)
Transmission	Allison 4700 OFS	Allison 4700 OFS	Allison 4700 OFS	Allison 4700 OFS
Triplex Plunger Pump	(2)X SERVA TPH400	(2)X SERVA TPD600	(2)X SERVA TPH400	(2)X SERVA TPD600
Pump Fluid End	(1)X SERVA 4"; (1)X SERVA 4.5"	(1)X SERVA 3.5"; (1)X SERVA 4.5"	(1) SERVA 4"; (1) SERVA 4.5"	(1) SERVA 3.5"; (1) SERVA 4.5"
Displacement Tank	Two Compartments, 10 BBL, Open Top, c/w (1)X Agitator/Each Tank	Two Compartments, 10 BBL, Open Top, c/w (1)X Agitator/Each	Two Compartments, 10 BBL, Open Top, c/w (1)X Agitator/Each	Two Compartments, 10 BBL, Open Top, c/w (1)X Agitator/Each
Maximum Pressure	4" Pump: 14,000 psi (97 MPa) 4.5" Pump: 11,200 psi (77 MPa)	3.5" Pump: 10,400 psi (72 MPa) 4.5" Pump: 6,290 psi (43 MPa)	4" Pump: 14,000 psi (97 MPa) 4.5" Pump: 11,200 psi (77 MPa)	3.5" Pump: 10,400 psi (72 MPa) 4.5" Pump: 6,290 psi (43 MPa)
Maximum Flow	4" Pump: 319 GPM (1,027 L/min) 4.5" Pump: 403 GPM (1,525 L/min)	3.5" Pump: 336 GPM (1,272 L/min) 4.5" Pump: 480 GPM (1,817 L/min)	4" Pump: 319 GPM (1,027 L/min) 4.5" Pump: 403 GPM (1,525 L/min)	3.5" Pump: 336 GPM (1,272 L/min) 4.5" Pump: 480 GPM (1,817 L/min)

## DOUBLE PUMP CEMENTING UNIT - SKID

MODEL	PCS-521B	PCS-522B	PCS-621B
Engine Rating	(2)X CAT C-13 475 HP Main Engine	(2)X CAT C-15 540 HP M Eng.	(2)X CAT C-15 540 HP M. Eng.
	(1)X Cummins 6bt5.9A 180 HP Hyd. Eng. (Opt)	(1)X CAT C-13 475 HP(Opt.)	(1)X CAT C-13 475 HP (Opt)
Transmission	Allison 4700 OFS	Allison 4700 OFS	Allison 4700 OFS
Triplex Plunger Pump	(2)X SERVA TPH400	(2)X SERVA TPH400	(2)X SERVA TPD600
Pump Fluid End	(1)X SERVA 4";	(1)X SERVA 4";	(1)X SERVA 3.5";
	(1)X SERVA 4.5"	(1)X SERVA 4.5"	(1)X SERVA 4.5"
Mixing Tank	8 BBL	8 BBL	8 BBL
Displacement Tank	Two Compartments, 10 BBL,	Two Compartments, 10 BBL,	Two Compartments, 10 BBL,
	Open Top	Open Top	Open Top
Maximum Pressure	4″ Pump: 15,000 psi	4" Pump: 15,000 psi	3.5" Pump: 10,400 psi
	(103 MPa)	(103 MPa)	(72 MPa)
	4.5″ Pump: 11,200 psi	4.5" Pump: 11,200 psi	4.5" Pump: 6,290 psi
	(77 MPa)	(77 MPa)	(43 MPa)
Maximum Flow	4" Pump: 319 GPM	4" Pump: 319 GPM	3.5" Pump: 336 GPM
	(1,207 L/min)	(1,207 L/min)	(1,272 L/min)
	4.5" Pump: 403 GPM	4.5" Pump: 403 GPM	4.5" Pump: 480 GPM
	(1,525 L/min)	(1,525 L/min)	(1,817 L/min)

## CEMENTING EQUIPMENT SINGLE PUMP CEMENTING UNIT



Single pump cementing units are available in:

Truck
 Skid
 Trailer-mounted

Configurations to deliver consistent, reliable and durable service while remaining simple to operate and easy to service.

## SINGLE PUMP CEMENTING UNIT

MODEL	PCT-511A	PCT-611A	PCS-511B	PCS-611A
Carrier Type	Truck	Truck	Skid	Skid
Engine Rating	(1)X CAT C-13 475HP M.E (1)X Cummins 6bt5.9A 180HP hyd. Eng. (opt)	(1)X CAT C-13 475HP M.E (1)X CAT C15 540HP (opt)	(1)X CAT C-15 540HP M.E (1)X CAT C9 300HP Hyd. Eng. (opt)	(1)X CAT C-13 475HP ME; (1)X Cummins 6bt5.9A 180HP hyd. Eng. (opt)
Transmission	Allison 4700 OFS	Allison 4700 OFS	Allison 4700 OFS	Allison 4700 OFS
Triplex Plunger Pump	(1) SERVA TPH400	(1) SERVA TPC600	(1) SERVA TPH400	(1) SERVA TPC600
Pump Fluid End	(1) SERVA 4.5″	(1) SERVA 4.5"	(1) SERVA 4.5"	(1) SERVA 4.5"
Mixing Tank	10 BBL	10 BBL	7 BBL	10 BBL
Displacement Tank	<ul><li>(1) Twin Compartments,</li><li>10 BBL, open top</li></ul>	<ul><li>(1) Twin Compartments,</li><li>10 BBL, open top</li></ul>	<ul><li>(1) Twin Compartments, 10 BBL, open top</li></ul>	(1) Twin Compartments 10 BBL, open top
Maximum Pressure	4.5″ Pump: 11,200 psi (77 MPa)	4.5″ Pump: 6,290 psi (43 MPa)	4.5" Pump: 11,200 psi (77 MPa)	4.5″ Pump: 6,290 psi (43 MPa)
Maximum Flow	4.5" Pump: 403 GPM (1,525 L/min)	4.5" Pump: 480 GPM (1,817 L/ min)	4.5" Pump: 403 GPM (1,525 L/ min)	4.5" Pump: 480 GPM (1,817 L/min)



Required power for mixing	180 - 260 hp
Mixing capacity	0 – 14.5 bpm (0 - 2.3 m³/min)
Density range	1.3 - 2.5 g/cm <sup>3</sup> (10.85 - 20.86 lb/gal)
Cement slurry density accuracy	±0.024 g/cm <sup>3</sup> (±0.2 lb/gal)
Mixing tank effective volume	14 - 20 bbl
Working temperature	-20°C to +50°C

## CEMENTING EQUIPMENT AUTO MIXING UNITS AUTO MIXING KIT ACM-III

Onshore and offshore applications.

Precise control of density and robust service for harsh environment applications.

Used in all SERVA SJS cementing units

Applicable for replacement or modification of your existing cementing units.

Mixing system with a density auto control logic.

The mixing system includes a mixing tank, an agitator, a HEMI injector, a mix water centrifugal pump, a recirculating centrifugal pump and a piping system.

The density auto control system includes a computer, an ACM software, a densitometer, a flowmeter magnetic valve and an encoder.

## CEMENTING EQUIPMENT AUTO MIXING UNITS ACS-IV-300 AUTO MIXING SKID



Weight	6000 kg (13,228 lbs)
Overall dimensions (L x W x H)	5,200 mm x 2,300 mm x 2,500 mm (17'1" x 7'6" x 8'2") (transport height); 3,000 mm (9'10") (working height)
Density range	1.3-2.5 g/cm³ ±0.02 g/cm³ (10.85 - 20.86 lb/gal ±0.167 lb/gal)
Mixing capacity	2-14.5 bpm (0.3-2.3 m <sup>3</sup> /min)
Working temperature	-20°C to +50°C

The Density Auto Control Mixer Model ACS-IV-300 system is the latest in mixing technology and density control. This system can be used for all cement, flush and spacer mixing operations. It is capable of operating in harsh oilfield environments with a wide variety of ambient temperature ranges of -20°C to 50°C.

## CEMENTING EQUIPMENT BATCH MIXING UNITS

- The BCS-300-100A batch mixing unit is comprised of one 300 HP hydraulic power engine with closed-loop hydraulic system.
- Two (2) X 50bbl batch mixing tanks each equipped with hydraulic-driven paddle agitator.
- Two (2) X SERVA SCP 6 x 5 centrifugal pumps for slurry recirculation and transfer.
- One (1) stainless steel control console and all required piping and manifold.
- All components and systems are assembled in a manner that will provide easy access for maintenance. The unit is capable of mixing cement slurry to the density of  $1.3 \sim 2.5$  g/cm<sup>3</sup>.



## BATCH MIXING UNITS

MODEL	BACT-350-100A	BACS-300-100A	BACTLR-300-100
Carrier Type	Truck, 6x6	Skid	Semi-Trailer, dual rear axles
Overall Dimensions (L x W x H)	(10,973 x 2,489 x 3,962) mm (36′ x 8′2″ x 13′)	(8,000 x 2,489 x 3,099) mm (26'3" x 8'2" x 10'2")	(7,010 x 2,489 x 3,962) mm (23' x 8'2" x 13')
Est. Total Weight	24,040 kg (53,000 lbs)	13,608 kg (30,000 lbs)	14,061 kg (31,000 lbs)
Engine Rating	(1)X CAT C-9 350HP main engine	(1)X CAT C-9 300HP main engine	(1)X CAT C-9 300HP main engine
Mixing Tank	8 BBL	8 BBL	8 BBL
Batch Mixing Tank	(2)X 50 BBL, c/w (1) agitator each	(2)X 50 BBL, c/w (1) agitator each	(2)X 50 BBL, c/w (1) agitator each
Density Control	SERVA ACM IV	SERVA ACM IV	SERVA ACM IV
Maximum Pressure	4" x 3" Pump: 160 psi (1.1 MPa)	4" x 3" Pump: 160 psi (1.1 MPa)	4" x 3" Pump: 160 psi (1.1 MPa)
Maximum Flow	6″ x 5″ Pump: 900 GPM (3,406 L/min)	6″ x 5″ Pump: 900 GPM (3,406 L/min)	6" x 5" Pump: 900 GPM (3,406 L/min)
Density Range	1 - 2.64 g/cm³ (8.33 ~ 22 lb/gal)	1 - 2.64 g/cm³ (8.33 ~ 22 lb/gal)	1 - 2.64 g/cm³ (8.33 ~ 22 lb/gal)
Mixing Capacity	0 ~ 14.4 bpm (0 - 2.3 m³/min)	0 ~ 14.4 bpm (0 - 2.3 m³/min)	0 ~ 14.4 bpm (0 - 2.3 m³/min)

### CEMENTING EQUIPMENT AUXILIARY EQUIPMENT



#### PORTABLE BULK CEMENT MIXING SKID

The unit is a dry mixing equipment used for mixing bulk cement, additives and ingredients.

The skid mounted configuration is more suitable for cementing jobs in remote oilfields or new oilfields. The complete unit is suitable for desert condition (including air compressor).



#### WATER SUPPLY PUMP SKID

The water supply skid can be used as auxiliary facility of cementing job individually, or supply recirculating power to water mixing tank.

It can be classified to electrical driven and engine driven.

### CEMENTING EQUIPMENT AUXILIARY EQUIPMENT



### AIR COMPRESSOR SKID

This air compressor skid supplies stable, clean, dry and high quality compressed air to any equipment requiring air source. Air compressor Displacement 11.1 m<sup>3</sup>/min.

Working Pressure 0.7 MPa (101.5 psi)

### WATER SUPPLY PUMP SKID

The water supply skid can be used as auxiliary facility of cementing job individually, or supply recirculating power to water mixing tank. It can be classified to electrical driven and engine driven.



#### SURGE TANK

The surge tank is used to interface between the bulk storage tanks for cement mixing equipment. The surge tank greatly reduce surges in bulk material flow and reduces dust at the mixer Various sizes are available with the most common size being 70 ft<sup>3</sup> (2 m<sup>3</sup>).

#### MIXING WATER TANK SKID

The mixing water tank skid can be used for oilfield batch allocation of mixing water or other fluids. International standard 20" container, convenient for sea transportation. Electric drive can be applicable for Zone 2 and

certification can be provided.

## STIMULATION EQUIPMENT



- A. Air inlet shutoff for engine emergency kill.
- B. Overpressure shutdown.
- C. SPS packing system.
- D. Stainless steel control console.
- E. Engraved stainless panels.
- F. Dual-scale gauges.
- G. Remote monitoring and data record system available.
- H. Integral high-pressure irons.

## STIMULATION EQUIPMENT ACIDIZING PUMP UNITS



SERVA SJS Acidizing Pump Units are available in:

1) Truck

2) Skid

3) Trailer-Mounted

Truck

They are designed to deliver consistent, reliable and durable service while remaining simple to operate and easy to service.

## SINGLE PUMP ACIDIZING UNITS

MODEL	PSS-511	PSS-611	PST-611
Description	Single Pump Acidizing Unit with TPH400 Pump	Single Pump Acidizing Unit with TPC600 Pump	Single Pump Acidizing Unit with TPC600 Pump
Carrier	Skid	Skid	Truck, 6x4/6x6
Overall Dimensions (L x W x H)	(6,100 x 2,100 x 2,900) mm (20' x 6'10" x 9'6")	(6,100 x 2,100 x 2,900) mm (20' x 6'10" x 9'6")	(9,850 x 2,500 x 4,000) mm (32'3" x 8'2" x 13'1")
Engine	(1) CAT C-13, 475HP Engine (Optional)	(1) CAT C-13, 475HP Engine (Optional)	(1) CAT C-13, 475HP Engine (Optional)
Transmission	ALLISON 4700 OFS	ALLISON 4700 OFS	ALLISON 4700 OFS
Pump Fluid End	(1) SERVA TPH400 Triplex Pump	(1) SERVA TPC600 Triplex Pump	(1) SERVA TPC600 Triplex Pump
Plunger Size	3.375"/4"/4.5"/5" (Optional)	3"/3.5"/4"/4.5" (Optional)	3"/3.5"/4"/4.5" (Optional)
Booster Centrifugal Pump	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)
Maximum Pressure	3.375" Pump: 20,000 psi (137.9 MPa)	3" Pump: 15,000 psi (103.4 MPa)	3" Pump: 15,000 psi (103.4 MPa)
Maximum Flow	5" Pump: 497 GPM (1,883 lpm)	4.5" Pump 557 GPM (2,111 lpm)	4.5" Pump: 557 GPM (2,111 lpm)
Control System	Manual/auto	Manual/auto	Manual/auto

## DOUBLE PUMP ACIDIZING UNITS

MODEL	PSS-521	PSS-621	PST-521
Description	Double Pump Acidizing Unit with	Double Pump Acidizing Unit with	Double Pump Acidizing Unit with
	TPH400 Pump	TPD600 Pump	TPH400 Pump
Carrier	Skid	Skid	Truck, 8x6
Overall Dimensions (L	(7,500 x 2,500 x 3,000) mm	(6,400 x 2,550 x 3,000) mm	(11,500 x 2,500 x 4,000) mm (35'8" x
x W x H)	(24'7" x 8'2" x 9'10")	(21' x 8'4" x 9'10")	8'2" x 13'1")
Engine	(2)X CAT C-13, 475HP Engine	(2)X CAT C-13, 475hp Engine	(2)X CAT C-13, 475HP engine
	(Optional)	(Optional)	(Optional)
Transmission	ALLISON 4700 OFS	ALLISON 4700 OFS	ALLISON 4700 OFS
Pump Fluid End	(2)X SERVA TPH400 Triplex Pump	(2)X SERVA TPD600 Triplex Pump	(2)X SERVA TPH400 Triplex Pump
Plunger Size	3.375"/4"/4.5"/5" (Optional)	3"/3.5"/4"/4.5" (Optional)	3.375"/4"/4.5"/5" (Optional)
Booster Centrifugal Pump	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)
Maximum Pressure	3.375" Pump: 20,000 psi	3" Pump: 15,000 psi	3.375" Pump: 20,000 psi
	(137.9 MPa)	(103.4 MPa)	(137.9 MPa)
Maximum Flow	(2)X 5" Pump: 994 GPM	(2)X 4.5" Pump: 1,114 GPM	(2)X 5" Pump: 994 GPM
	(3,766 L/min)	(4,222 L/min)	(3,766 L/min)
Displacement Tank	Two Compartments, 10 bbls,	Two Compartments, 10 bbl,	Two Compartments, 10 bbl
	Open Top (Optional)	Open Top (Optional)	Open Top (Optional)

## DOUBLE PUMP ACIDIZING UNITS

MODEL	PST-621	PSTLR-521	PSTLR-621
Description	Double Pump Acidizing Unit with	Double Pump Acidizing Unit with	Double Pump Acidizing Unit with
	TPD600 Pump	TPH400 Pump	TPD600 Pump
Carrier	Truck, 8x6	Trailer	Trailer
Overall Dimensions (L	(11,900 x 2,500 x 4,000) mm	(11,900 x 2,500 x 4,000) mm	(11,500 x 2,500 x 4,100) mm (37'9" x
x W x H)	(39' x 8'2" x 13'1")	(39' x 8'2" x 13'1")	8'2" x 13'5")
Engine	(2)X CAT C-13, 475HP Engine	(2)X CAT C-13, 475HP Engine	(2)X CAT C-13, 475HP Engine
	(Optional)	(Optional)	(Optional)
Transmission	ALLISON 4700 OFS	ALLISON 4700 OFS	ALLISON 4700 OFS
Pump Fluid End	(2)X SERVA TPD600 Triplex Pump	(2)X SERVA TPH400 Triplex Pump	(2)X SERVA TPD600 Triplex Pump
Plunger Size	3"/3.5"/4"/4.5" (Optional)	3.375"/4"/4.5"/5" (Optional)	3"/3.5"/4"/4.5" (Optional)
Booster Centrifugal Pump	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)	SERVA SCP 6x5 (Optional)
Maximum Pressure	3" Pump: 15,000 psi	3.375" Pump: 20,000 psi	3" Pump: 15,000 psi
	(103.4 MPa)	(137.9 MPa)	(103.4 MPa)
Maximum Flow	(2)X 4.5" Pump 1,114 GPM	(2)X 5" Pump: 994 GPM	(2)X 4.5" Pump: 1,114 GPM
	(4,222 L/min)	(3,766 L/min)	(4,222 L/min)
Displacement Tank	Two Compartments, 10 bbls,	Two Compartments, 10 bbl,	Two Compartments, 10 bbl
	Open Top (Optional)	Open Top (Optional)	Open Top (Optional)

## STIMULATION EQUIPMENT



SERVA SJS Fracturing Pumping Units are suitable for all kinds of fracturing operations in deep, medium and shallow oil and gas wells.

They can be used for hydraulic fracturing, acid fracturing, high pressure fluid pumping, pressure testing, etc.

## FRACTURING PUMPING UNITS

MODEL	PGS-1050	PGS-2250	PGTLR-2250	PGTLR-2500
Carrier	Skid	Skid	Trailer	Trailer
Engine	CAT C27	CAT 3512B/12V4000	CAT 3512B/12V4000	CAT 3512C/12V4000
Transmission	CAT TH48-E70 ALLISON S8610M	ALLISON 9823 OFS	ALLISON 9823 OFS	ALLISON 9826 OFS
Pump Fluid End	SERVA QPB 1000	SERVA TPA 2250	SERVA TPA 2250	SERVA QPA 2500
Plunger Size	3" /3.5"/4"/4.5"	4"/4.5"/5"/5.5"	4"/4.5"/5"/5.5"	4"/4.5"/5"/5.5"
Maximum Pressure	3" Pump: 103.4 MPa 3.5" Pump: 71.7 MPa 4" Pump: 54.9 MPa 4.5" Pump: 43.4 MPa	4" Pump: 123.8 MPa 4.5" Pump: 97.6 MPa 5" Pump: 79.0 MPa 5.5" Pump: 65.3 MPa	4" Pump: 123.8 MPa 4.5" Pump: 97.6 MPa 5" Pump: 79.0 MPa 5.5" Pump: 65.3 MPa	4" Pump: 105.6 MPa 4.5" Pump: 83.4 MPa 5" Pump: 67.6 MPa 5.5" Pump: 55.8 MPa
Maximum Flow	3" Pump: 413 GPM (1,563 L/min) 3.5" Pump: 562 GPM (2,128 L/min) 4" Pump: 734 GPM (2,780 L/min) 4.5" Pump: 929 GPM (3,518 L/min)	4" Pump: 390 GPM (1,478 L/min) 4.5" Pump: 494 GPM (1,870 L/min) 5" Pump: 610 GPM (2,309 L/min) 5.5" Pump: 738 GPM (2,794 L/ min)	4" Pump: 390 GPM (1,478 L/min) 4.5" Pump: 494 GPM (1,870 L/min) 5" Pump: 610 GPM (2,309 L/min) 5.5" Pump: 738 GPM (2,794 L/min)	4" Pump: 651 GPM (2,463 L/min) 4.5" Pump: 824 GPM (3,118 L/min) 5" Pump: 1,017 GPM (3,849 L/min) 5.5" Pump: 1,231 GPM (4,658 L/min)

## STIMULATION EQUIPMENT FRACTURING EQUIPMENT





#### FRACTURING BLENDERS

Flow rates of blenders cover range from 12 bbl/min to

75 bbl/min.

Both integrated and divided layout designs can be offered.

Top proppant tank is optional.

#### OTF HYDRATION UNIT

The OTF (on-the-fly) hydration unit (truck-, trailer- or skidmounted).

The OTF hydration unit has been widely used in gas fields The required fluid viscosity can normally be generated within 3 minutes and be able to carry on the frac proppants downhole.

### STIMULATION EQUIPMENT FRACTURING EQUIPMENT





#### MANIFOLD SKID

- The MS-1000 manifold skid is used for connecting fracturing units with other units.
- It consists of high and low pressure manifolds and pipe fittings,
- high pressure pipe rack and low pressure pipe rack.
- Size of high pressure manifolds 3" Fig 1502 female union.
- Size of low pressure manifolds 4" Fig 206 female union.

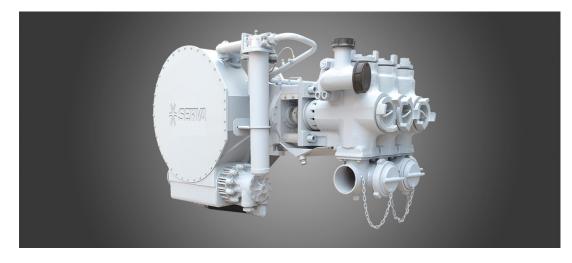
#### FRAC DATA VAN

SERVA SJS frac data vans are fully equipped data acquisition and control centers allowing full command and monitoring of a job as it is being performed in real-time

he instrument van connects all required equipment on site and allows both manual and auto control mode.

It provides real-time data acquisition, displays, records, job data processing, storage, and print out of job data report and service curves.

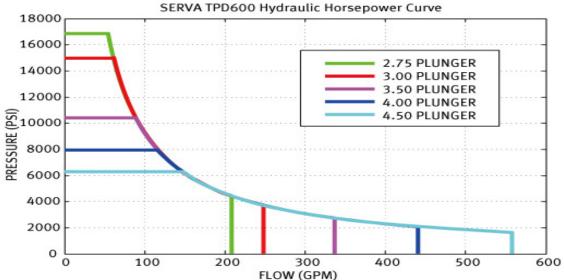
#### SERVA TPH 400 TRIPLEX PLUNGER PUMP



#### SERVA TPH400 Hydraulic Horsepower Curve 25000 20000 3.375 PLUNGER 4.00 PLUNGER 4.50 PLUNGER 5.00 PLUNGER PRESSURE (PSI) PRESSURE (PSI) 10000 6.00 PLUNGER 5000 0 200 400 500 600 0 100 300 700 FLOW (GPM)

#### SERVA TPD 600 TRIPLEX PLUNGER PUMP

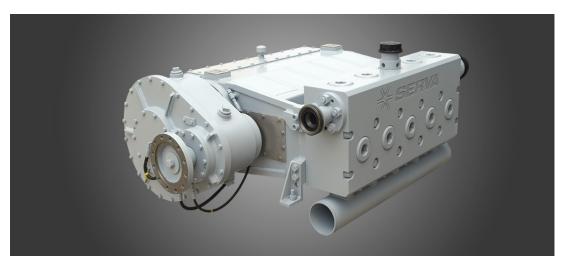


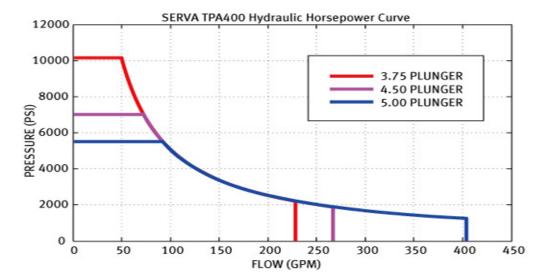


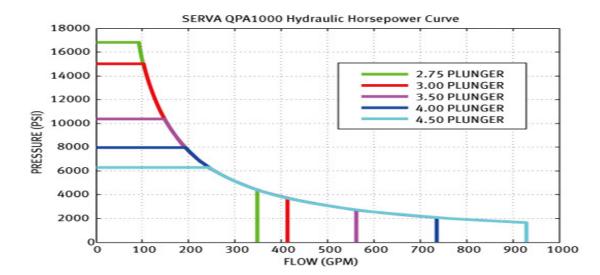
#### SERVA TPA 400 TRIPLEX PLUNGER PUMP



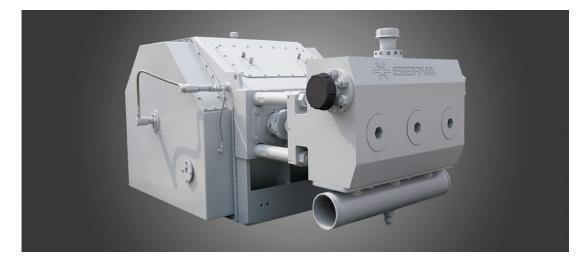
#### SERVA QPA 1000 QUINTUPLEX PLUNGER PUMP

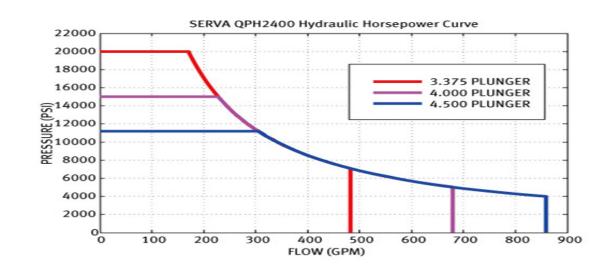


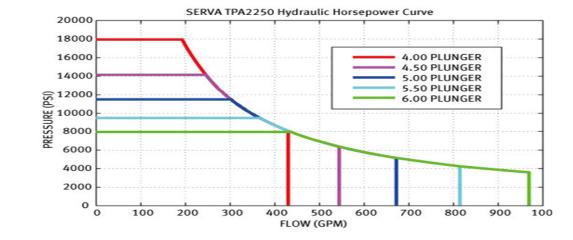




#### SERVA TPA 2250 FRAC PUMP



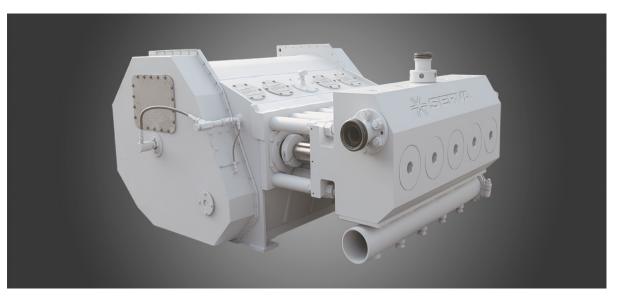


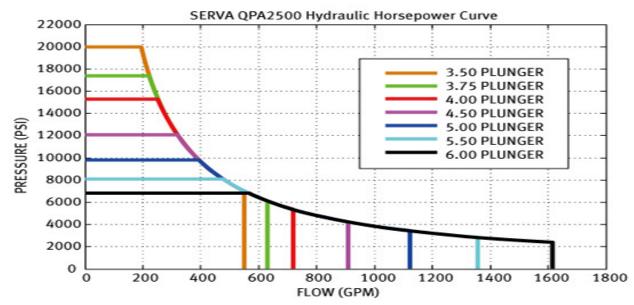


#### SERVA QPH 2400 QUINTUPLEX PLUNGER PUMP



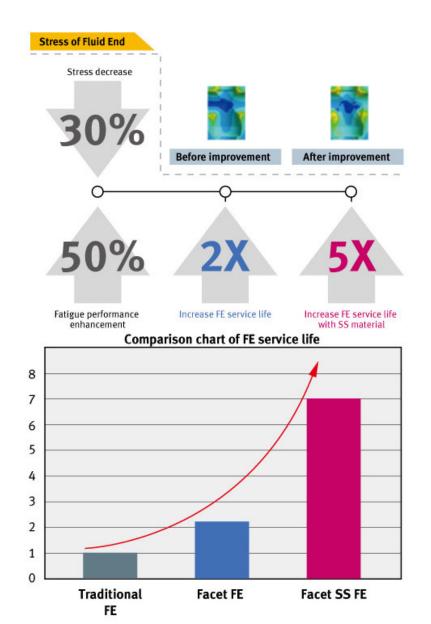
#### SERVA QPA 2500 FRAC PUMP





#### SERVA FLUID ENDS





## NITROGEN EQUIPMENT



- Rugged and heavy duty construction allows for high reliability in oil well service operations.
- Multiple cold end sizes and drive end strokes allow for wide range of flows and pressures providing flexibility







**Sizes** 

#### NITROGEN EQUIPMENT HEAT RECOVERY NITROGEN PUMPING UNITS



Model 360K They are used for oilfield services such as perforation, gas lifting, gas displacement and foam cementing. Available in Trailer - Mounted, Truck and Skid.

Electrically Driven Temperature Adjusting Valve

## HEAT RECOVERY NITROGEN PUMPING UNITS

MODEL	90K LN2 Pumping Unit	180K LN2 Pumping Unit	360K LN2 Pumping Unit
Carrier	Trailer or Skid	Trailer or Skid	BENZ 4144 8X6
Deck Engine	CAT C13 475 HP @ 2100 RPM	CAT C15 536HP@2000RPM	CAT C27 950 HP@2100RPM
Nitrogen Pump	ACD 3-GUPD or SERVA NTPA-300	ACD 3-GUPD or SERVA NTPA-300	ACD 3-SLS
Vaporizer	VWP-180	VWP-180	VWP-360-15
Plunger Diameter	1.25″	1.625″	2″
LN2 Tank Volume	3,000 gal (not available on skid)	3,000 gal (not available on skid)	2,100 gal
Maximum Pressure	103.4 MPa (15,000 psi)	68.9 MPa (10,000 psi)	103.4 MPa (15,000 psi)
Maximum Flowrate	2,550 m³/h (90,000 SCFH)	5,102 m³/h (180,000 SCFH)	10,185 m³/h (360,000 SCFH)
Overall Dimensions (L x W x H)	(11,500 x 2,500 x 4,000)mm Trailer (4,680 x 2,300 x 2,550)mm Skid	(11,000 x 2,500 x 4,000)mm Trailer (4,680 x 2,300 x 2,550)mm Skid	(12,000 x 2,500 x 4,000)mm

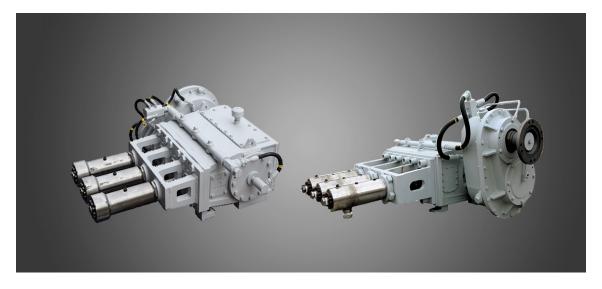
#### NITROGEN EQUIPMENT DIRECT-FIRED NITROGEN PUMPING UNITS

Carrier	BENZ 4144 8X6	
Deck engine	CAT C32 or CAT C27	
Transmission	ALLISON S9806 or ALLISON S8610	
Nitrogen pump	ACD 5-SLS	
Vaporizer	DFV-1000	
Nitrogen tank volume	1,000 gal	
Maximum pressure	103.4 MPa (15,000 psi)	PN
Maximum pressure	80 MPa (11,600 psi)	serv foar
Maximum gas discharge	18,108 m <sup>3</sup> /h (640,000 SCFH), with 2" cold ends	Higl
	29,148 m <sup>3</sup> /h (1000,000 SCFH), with 64 mm cold ends	disc Equ



PNT-640K, Truck mounted, suitable for oilfield service such as foam fracturing, gas lifting and foam cementing. High working pressure and flow-rate with stable discharge temperature. Equipped with DAS.

## NITROGEN EQUIPMENT



## NITROGEN PUMPS

- SERVA NTPA-300 cryogenic pump
- SERVA NTPA-1000 cryogenic pump
- Applications:
- •Oil well service.
- High pressure pumping systems.
- Mobile pumping applications.
- •N2 purging.



MODEL	LN Skid	Liquid Trailer
Working volume	7.5 m <sup>3</sup>	36.7 m <sup>3</sup>
Max. working pressure	0.8 MPa (116 psi)	0.3 MPa (43.5psi)

# **LN STORAGE TANK**

## COILED TUBING EQUIPMENT



Some manufacturers offer coiled tubing units with hydraulic control; others offer electronic. SERVA builds both and lets you decide, from a broad range of axle configurations, tubing diameters and all necessary related well stimulation equipment, including twin fluid pumpers, command centers, pumps, injectors and the revolutionary i-Mast wellservicing unit. Additionally, SERVA i-Mill software provides precise control, icon-driven navigation and widerange system compatibility.

## SERVA 4-Axle CTU





- Unit can be configured as electric over hydraulic or fully hydraulic controls.
- High-visibility control cab with operator's control chair has uninterrupted view of well site and injector.
- Hydraulically deployed stairs for control cabin, one- piece steel construction for maximum rigidity.
- Injector tilt mechanism mounted on rear of trailer allows pipe to remain stabbed.
- Spill containment underneath reel.
- Hydraulic and electric remain for quick rig-in times.
- Ability to shift reel dynamically up to 2' for optimum weight distribution.
- Capable of 100,000 lbs payload on tubing.
- BOP control system integral to tractor wet kit, capable of controlling eight functions.
- Guarded underside of reel.

## SERVA 3-Axle CTU



- Unit can be configured as electric over hydraulic or fully hydraulic controls.
- High-visibility control cab with operator's control chair has uninterrupted view of well site and injector
- Hydraulically deployed stairs for control cabin, one-piece steel construction for maximum rigidity.
- Injector tilt mechanism mounted on rear of trailer allows pipe to remain stabbed.
- Spill containment underneath reel.
- Ability to shift reel dynamically up to 2' for optimum weight distribution.
- Capable of 70,000 lbs payload on tubing reel.
- BOP control system acts as a standalone skid-mounted package

# SERVA iMast





The SERVA iMast Spread brings safety, productivity and innovation to your coiled tubing business.

By combining the SERVA iMast, Command Center, Reel Trailer, Nitrogen and Twin Fluid Pumpers, a seamless control of all products will bring increased safety and efficiency at the well-site.

RAD (FT)	Boom Angle Above 0° (LBS)	Boom Angle Below 0° (LBS)
36	32,500	17,500
38	28,500	17,500
40	24,500	17,500
45	17,500	2,500
50	12,500	2,500
55	2,500	

## DOWN HOLE OIL TOOLS







COMPLETION TOOLS: •Plugs - Cement Retainers - Packers. •HPHT and Corrosive Applications.

•API 11D1 certified.

FLOW CONTROL TOOLS:
Nipples - Sleeves - Plugs - Shifting Tools - Running and Pulling Tools.
HPHT and Corrosive Applications.
API 11D1 certified.

COILED TUBING TOOLS:Connectors - Jars - Motors.HPHT and Corrosive Applications.API 11D1 certified.