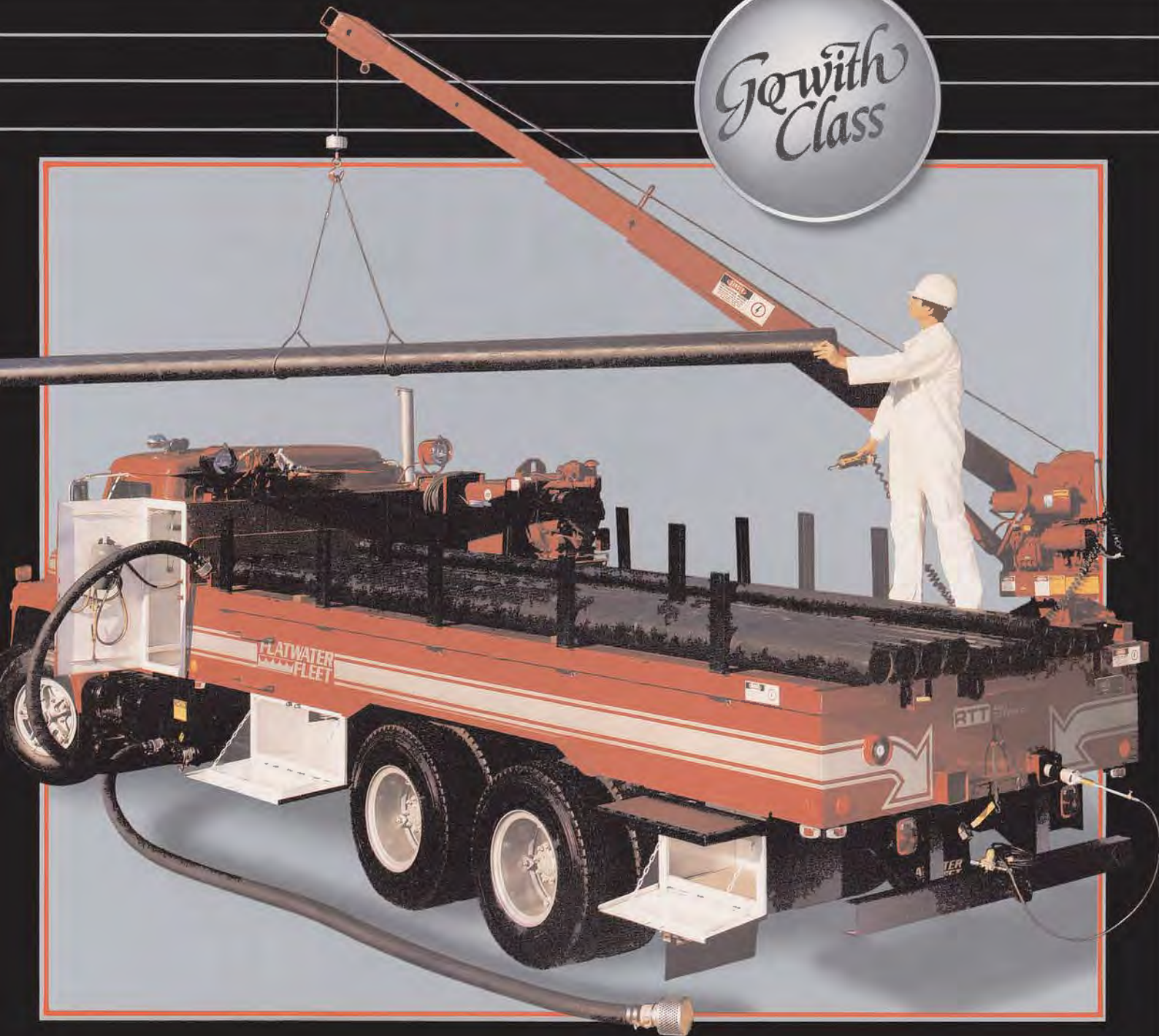


FLATWATER[®]
FLEET

DRILLSITE TENDERS



RTT RIG TENDER[®]

HOW TO INCREASE AND DO IT

Increase drillsite productivity and you increase your profitability. The goal is as simple as that. But how to get there? For many years drilling contractors around the world have relied on Flatwater Fleet to arrive at that goal—and do it with class.

FLATWATER FLEET DRILLSITE TENDERS ARE FOR PROFESSIONAL DRILLERS:

■ drillers who effectively manage time, people, material and equipment for maximum "bit-on-the-bottom" production;

MOBILE FUELING

NIGHT

TOW TRUCK
WINCHING



WATER TRANSFER
PUMPS

STORAGE
CABINETS

EASE DRILLSITE PRODUCTIVITY WITH CLASS.

■ drillers who pride themselves on the effort it takes to be competitive and keep a positive bottom line;

■ and drillers who take as much pride in the quality of their equipment, as they do in the quality of their work.

For drillers who understand the relationship between increased productivity and profitability, Flatwater Fleet drillsite tenders are a vital part of their drilling operation.

How much more productive would *your* drilling operation be if just one man and one truck could take all the water, fuel, drill pipe and casing you needed for a full day's drilling?

Flatwater Fleet takes a *systems approach* to the operational needs of the driller. It's an approach that maximizes efficiency and productivity at the drillsite by saving time.

T LIGHTING

WELDER/GENERATOR

REMOTE CONTROL
CRANE

DRILL PIPE
AND CASING

BAFFLED
WATERBED

TOOL BOXES/WORK BENCH



A SYSTEMS APPROACH TO THE NEEDS OF THE DRILLER AT THE DRILLSITE.

The system is comprised of:

- A baffled waterbed that also serves as a platform to carry tools and supplies to the drillsite.
- Fueling capability to keep drill rigs and other engines producing all day. Flatwater Fleet tenders are mobile fueling stations complete with fuel tank, level gauge, transfer pump, hose and nozzle.
- Cabinets to keep cutting torches, hand tools, spare parts and rain gear safe, clean, dry and secure.

ADD TO THE SYSTEM THE OPTIONAL "ONE-MAN" FEATURES YOU NEED:

- Loading and unloading capability through deck-mounted remote control cranes.
- Water transfer capability through high capacity, self-priming water pumps.
- "Tow-truck" winching capability through front-of-truck or back-of-truck winches.
- Complete self-contained welder/generator capability with long leads for casing and screen connections, repairs and electrical power.

See back page for more options.

FLATWATER FLEET LETS YOU CREATE A TOTALLY INTEGRATED DRILLSITE SUPPORT SYSTEM. ALL YOU ADD IS THE OPERATOR.

Flatwater Fleet standard and optional features allow you to customize and create a totally integrated unit for maximum utility and efficiency. You'll never need to shut down and leave the drillsite for materials or equipment, nor will you be forced to operate at less than 100 percent efficiency because of something you couldn't carry.

At Flatwater Fleet we are always looking for new ways to increase productivity and save time at the drillsite. Because we build only drillsite tenders, we can concentrate all our energies on designing and engineering solutions to driller's specific needs. We have the experience, knowledge and flexibility to work with drillers around the world whether the requirement is water wells, minerals and mining, soil testing, pollution control, or drilling that is shallow or deep, slim hole or large diameter, mud, air, or auger.

Standard system features shown top to bottom: fuel tank and pump, work bench, lighted tool cabinet, flood/work lights, vertical and horizontal storage cabinets with optional welder/generator.



THE LOOK OF QUALITY IS A CLUE TO THE QUALITY WITHIN.

THE LOOK OF QUALITY.

Flatwater Fleet tenders may be mounted on either new or reconditioned trucks. If you prefer one of our reconditioned trucks, the paint will look as good or better than a new truck. These trucks go through a seven step painting process that begins with sand-blasting and ends with an application of a tough, smooth-to-touch, oil-resistant polyurethane topcoat. Color and distinctive Flatwater Fleet striping are of the owner's choice.



QUALITY ENGINEERING WITH AN EMPHASIS ON DEPENDABILITY AND SIMPLICITY.

Along with classy looks, Flatwater Fleet tenders are known for what's beneath. Engineering emphasizes rugged dependability and simplicity for easy maintenance and trouble-free operation. The Flatwater Fleet design is time tested and field tested around the world and under all working conditions including use by the United States Military.

ALL SEASON OPERATION:

A water heating manifold is an integral part of the waterbed. An optional propane torch assembly gives up to 500,000 BTUs of heat. The heating manifold also serves as an in-transit hose storage chamber to prevent cutting, crushing or loss of water hoses.

LOW CENTER OF GRAVITY:

Tenders have a low ground to deck height for safe handling under full-load conditions, yet still maintain a good ground clearance (nearly two feet even under tool cabinets).

EASY AND CLEAN DRAINING:

The waterbed can be drained from the front, side or rear and with the truck in any position; a gauge indicates the water level in the bed. The unique "clean bottom" internal design makes sure the bed drains clean of sand and silt while also providing for total baffling front to back and side to side.

FAST AND SAFE LOADING AND UNLOADING OF DECK:

Heavy-duty stake pocket/chain rail is mounted flush with deck to allow just one person to tie down or unbind a load.

DECK BEDS RATED TO 100,000 lbs (45,000kg):

Waterbed decks are engineered to crush load in excess of 100,000 lbs. (45,000kg). The waterbed is full width/full length 1/4" (6.4mm) steel plate. All seam welds are de-coated, gapped and double-welded for 100 percent penetration. A "flex-mounting" suspension system is used to isolate over-the-road stress and vibration and prevent it from damaging the waterbed and components.

SMOOTH HYDRAULIC POWER:

The optional hydraulic system driven by truck engine provides trouble-free, continuous and convenient operation of accessories and auxiliary equipment such as: front winch, water loading pumps, crane, frac pumps, grouters and more. The power system is a compact and easily maintained unit combining pump, reservoir, valve and filter assembly.



Hydraulic power system helps keep a Flatwater Fleet tender strictly a one-man operation.

THE CHOICE OF TENDER IS YOURS.

There are more than 40 Standard Model RTT-Rig Tenders and RST-Rig Suppliers to serve your drillsite needs. Models can be matched to any make of truck from 14,000 lb. to 80,000 lb. GVW (6,300kg) to (36,300kg) and from 160 to 450 horsepower engines. Truck chassis can be single axle, tandem or all-

terrain; gas or diesel powered; manual or automatic transmission; two or all-wheel drive; new or rebuilt. Trucks furnished by customers are also accepted providing correct specifications are met. Flatwater Fleet also ships tenders for customer installation either domestic or export.



RTT-RIG TENDER with 1,000 gal. (3,800 L) water and 150 gal. (570 L) fuel mounted on a cab-over single axle diesel truck.

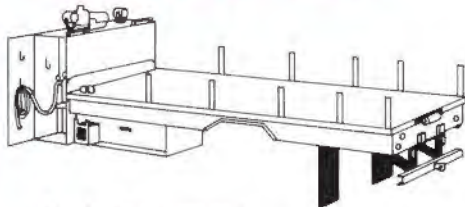


RTT-RIG TENDER with 1,000 gal. (3,800 L) water and 300 gal. (1,140 L) fuel mounted on an all-terrain, articulated, all-wheel drive carrier. Tenders are also mounted on tracked all-terrain carriers.

AREN'T YOU READY FOR A FLATWATER FLEET DRILLSITE TENDER?

SPECIFICATIONS:

RTT RIG TENDER®



Standard Features and Technical Specifications

WATERBED:

Front fill with vent, rear vent; stake and chain rail with heavy-duty channel stakes, mud flaps, wheel wells, D.O.T. lights and reflectors; water level gauge; heavy-duty bumper pintle hook-frame reinforced; three (3) rear drains; front corner drain level gauge; 4-point "flex" mount.

FUEL TANK:

Fuel capacity 230 gals (874L) with transfer pump; and 50' (15M) of hose with nozzle. 315 gals (1197L) optional.

VERTICAL CABINETS:

Two (2) gas cylinder brackets with hooks on driver's side; removable shelves and hooks on passenger side.

TOOL BOXES:

Dual (2) horizontal tool boxes under the waterbed forward of rear axle with step ladder.

NIGHT LIGHTING:

Dual (2) front-mounted floodlights plus front cabinet and tool box lights.

Custom sizes and many other options available.

SINGLE AXLE MODELS

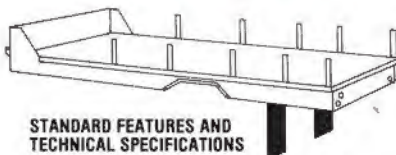
| Model No. | Deck Length | Water Capacity | Empty Weight | Loaded Weight | Min. Chassis GVW Recommended |
|-----------|-----------------|----------------------|----------------------|-----------------------|------------------------------|
| RT-600 | 12' (3600mm) | 600 gal. (2280L) | 5,900 lb (2655kg) | 12,350 lb (5558kg) | 21,200 lb (9540kg) |
| RT-800 | 16' (4800mm) | 800 gal. (3040L) | 6,870 lb (3083kg) | 14,730 lb (6629kg) | 27,000 lb (12,150kg) |
| RT-900 | 18' (5400mm) | 900 gal. (3420L) | 7,350 lb (3308kg) | 16,610 lb (7476kg) | 30,100 lb (13,545kg) |
| RT-1050 | 20' (6000mm) | 1050 gal. (3990L) | 7,820 lb (3519kg) | 18,000 lb (8100kg) | 35,000 lb (15,750kg) |

TANDEM AXLE MODELS

| | | | | | |
|---------|-----------------|------------------------|-----------------------|-------------------------|-------------------------|
| RT-850 | 18' (5400mm) | 850 gal. (3230L) | 7,340 lb (3303kg) | 16,250 lb (7313kg) | 41,000 lb (18,450kg) |
| RT-1400 | 18' (5400mm) | 1400 gal. (5320L) | 7,960 lb (3582kg) | 21,250 lb (9,660kg) | 44,800 lb (20,160kg) |
| RT-1900 | 18' (5400mm) | 1900 gal. (7220L) | 8,280 lb (3726kg) | 25,720 lb (11,574kg) | 54,000 lb (24,300kg) |
| RT-2400 | 18' (5400mm) | 2400 gal. (9120L) | 8,620 lb (3879kg) | 30,360 lb (13,662kg) | 60,000 lb (27,000kg) |
| RT-950 | 20' (6000mm) | 950 gal. (3610L) | 7,900 lb (3555kg) | 17,640 lb (7938kg) | 41,000 lb (18,450kg) |
| RT-1500 | 20' (6000mm) | 1500 gal. (5700L) | 8,470 lb (3812kg) | 23,000 lb (10,350kg) | 44,800 lb (20,160kg) |
| RT-2100 | 20' (6000mm) | 2100 gal. (7980L) | 8,820 lb (3969kg) | 28,120 lb (12,654kg) | 54,000 lb (24,300kg) |
| RT-2700 | 20' (6000mm) | 2700 gal. (10,260L) | 9,170 lb (4127kg) | 33,260 lb (14,967kg) | 62,000 lb (27,900kg) |
| RT-1050 | 22' (6600mm) | 1050 gal. (3990L) | 8,380 lb (3771kg) | 19,030 lb (8,564kg) | 44,800 lb (20,160kg) |
| RT-1700 | 22' (6600mm) | 1700 gal. (6460L) | 8,760 lb (3942kg) | 24,670 lb (11,102kg) | 44,800 lb (20,160kg) |
| RT-2300 | 22' (6600mm) | 2300 gal. (8740L) | 9,150 lb (4118kg) | 30,330 lb (13,649kg) | 60,000 lb (27,000kg) |
| RT-3000 | 22' (6600mm) | 3000 gal. (11,400L) | 9,520 lb (4284kg) | 35,900 lb (16,155kg) | 62,000 lb (27,900kg) |
| RT-1200 | 24' (7200mm) | 1200 gal. (4560L) | 8,850 lb (3983kg) | 20,410 lb (9185kg) | 44,800 lb (20,160kg) |
| RT-1900 | 24' (7200mm) | 1900 gal. (7220L) | 9,460 lb (4257kg) | 26,760 lb (12,042kg) | 54,000 lb (24,300kg) |
| RT-2500 | 24' (7200mm) | 2500 gal. (9500L) | 9,870 lb (4442kg) | 32,900 lb (14,805kg) | 62,000 lb (27,900kg) |
| RT-3200 | 24' (7200mm) | 3200 gal. (12,160L) | 10,280 lb (4626kg) | 39,040 lb (17,568kg) | 62,000 lb (27,900kg) |

RST RIG SUPPLIER®

A BASIC TENDER FOR
BASIC DRILLSITE SUPPORT.



STANDARD FEATURES AND TECHNICAL SPECIFICATIONS

WATERBED:

Front fill with vent, rear vent; stake and chain wells, D.O.T. lights and reflectors; water level gauge; front corner drains; three (3) rear drains; 4-point "flex" mount; front headache rack.

FUEL TANK: (Optional)

100 to 600 gals. (45 L to 270 L).

Custom sizes and many other options available.

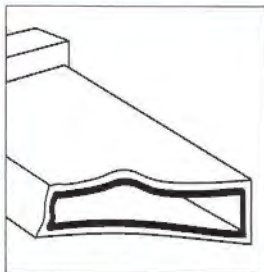
SINGLE AXLE MODELS

| Model No. | Deck Length | Water Capacity | Empty Weight | Loaded Weight | Min. Chassis GVW Recommended |
|-----------|-----------------|----------------------|----------------------|-----------------------|------------------------------|
| RS-800 | 16' (4800mm) | 800 gal. (3040L) | 5,400 lb (2430kg) | 12,200 lb (5490kg) | 27,000 lb (12,150kg) |
| RS-1050 | 20' (6000mm) | 1050 gal. (3990L) | 6,400 lb (2880kg) | 15,100 lb (6795kg) | 30,100 lb (13,545kg) |

TANDEM AXLE MODELS

| | | | | | |
|---------|-----------------|------------------------|----------------------|-------------------------|-------------------------|
| RS-1400 | 18' (5400mm) | 1400 gal. (5320L) | 6,500 lb (2925kg) | 17,970 lb (8087kg) | 47,000 lb (21,150kg) |
| RS-1900 | 18' (5400mm) | 1900 gal. (7220L) | 6,820 lb (3069kg) | 22,600 lb (10,170kg) | 44,800 lb (20,160kg) |
| RS-1500 | 20' (6000mm) | 1500 gal. (5700L) | 7,000 lb (3150kg) | 19,860 lb (8937kg) | 44,800 lb (20,160kg) |
| RS-2100 | 20' (6000mm) | 2100 gal. (7980L) | 7,350 lb (3308kg) | 24,980 lb (11,241kg) | 44,800 lb (20,160kg) |
| RS-1050 | 22' (6600mm) | 1050 gal. (3990L) | 6,900 lb (3105kg) | 15,900 lb (7155kg) | 41,000 lb (18,450kg) |
| RS-2300 | 22' (6600mm) | 2300 gal. (8740L) | 7,500 lb (3375kg) | 27,000 lb (12,150kg) | 54,000 lb (24,300kg) |
| RS-1900 | 24' (7200mm) | 1900 gal. (7220L) | 8,000 lb (3600kg) | 23,640 lb (13,401kg) | 44,800 lb (20,160kg) |
| RS-3200 | 24' (7200mm) | 3200 gal. (12,160L) | 8,820 lb (3969kg) | 35,920 lb (16,164kg) | 62,000 lb (27,900kg) |

MORE OPTIONS FOR INCREASED PRODUCTIVITY



INTERNAL COATING

The interior of the waterbed is blasted and coated with a special material proven over years of testing. Prevents rust and scale. Approved by both FDA and EPA for potable water. Safe for environmental wells.



HIGH-CAPACITY FUEL TRANSFER PUMP

Air-operated from truck air brake compressor. Pumps 25-35 gpm (95-135 lpm) – even over long distances. Virtually maintenance free.



REAR FOLDING WORKER'S PLATFORM

Heavy duty, self-cleaning worker's platform provides easy deck access, crane operation. Especially handy with large capacity water beds. Reduces working height. Folds up when in transit.



HYDRAULIC LEVELING JACKS

Powerful, yet compact rear corner-mounted outriggers level water bed on uneven ground. Provides big assist when stuck in mud or snow. Mandatory with some crane applications.



14,000 LB. (6.3 TON) CAPACITY HYDRAULIC CRANE

Full circle rotation, 25 ft. (6.5m) hydraulic telescoping boom. Variable speed, remote control. Anti-two blocking and emergency safety shutdown.



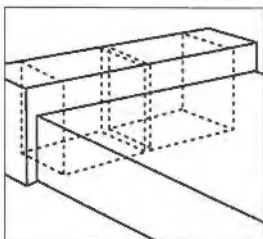
REAR-MOUNTED HYDRAULIC WINCH

20,000 lb. (9 ton) capacity, hydraulic-powered winch located at rear of truck – beneath water bed – direct to frame. Cable guide roller allows for off-angle pulling.



HYDRAULIC-POWERED HYDRO-FRACTURING

Compact and powerful. Mounted on top-center of water bed. Lots of room remaining for crane, casing, drill pipes, etc. Hydraulic-powered by big bore truck engine. 20 to 90 gpm (75-340 lpm) flow at 1500-2500 psi (105-175 bar) – simultaneously! All controls at rear for easy operation.



SPLIT BULK FUEL TANK

Two 115 gal. (435 l) fuel tanks, side-by-side at front of RTT - Rig Tender. Meets U.S. D.O.T. requirements. Separate fill, drains, level gauges – but common pump through unique hook-ups.



FUEL HOSE REEL

Two sizes – 50 or 100 ft. (15 or 30m) of fuel hose. Three types – manual, spring or electric motor rewind.



CHAIN VICE

8-inch (200mm) capacity. Heavy-duty. Removable for storage. Rear mounted – parallel to end or side of water bed.



SPARE TIRE RACK

Heavy-duty, military style. Deck-mounted forward of crane for no loss of pipe carrying capacity.



GROUTER

Single "TURBO" Hopper and single heavy-duty pump that both mixes and pumps bentonite grout – 100 gmp @ 150 psi (380 lpm @ 10 bar). Hydraulic-powered. Hopper stores on water bed deck – handled with crane. No splash. Easy hook-up.



PORTABLE WATER TANKS

Collapse to compact size and store on water bed deck. Snap open on ground in few seconds. Nine sizes from 600 to 5,000 gal (2,200 to 19,000 l).



MORE TIME AND LABOR SAVING OPTIONS:

A. WELDER/GENERATOR:

200 amp AC/DC welder/generator driven by either gas or diesel engine. 120/240V, 2.5 KVA, 60 Hz., 115/230V, (2.0 KVA, 50 Hz.) with 100' (30M) leads. Space-saving welder rack for deck mount or front elevated mount is available separately.

B. CRANES:

Electric/Hydraulic or full hydraulic. One man can safely load or unload tools and materials by remote control at the yard or at the job site. Seven crane models are available from 2,200 lb. to 14,000 lb. (1,000kg to 6,350kg) lift capacity and a reach up to 27' (8100mm) and reach out of 20' (6000mm).

C. WATER PUMPS:

Hydraulic or PTO driven. Load and unload drilling water or pump or transfer slurries. Pumps are self-priming, and positive displacement. Two inch (50mm) pumps 140 GPM (9LPS); 3" (75mm) pumps 230 GPM (14.5LPS). Hoses store neatly in combination hose storage chamber/ water heating manifold.

D. WINCHES:

Hydraulic or PTO driven. Pull your rig or tender out of mud, sand or snow and save valuable production time. Safe operation with air control from inside the cab. Back-of-cab winches also available.

E. TIE-DOWN STRAP:

Cargo control straps are made from webbed nylon, have a tensile load capacity of 20,000 lbs. (9,000kg) and are tightened by built-in ratchets. Straps can be passed through loops welded on waterbed to accommodate irregular shaped and/or split loads. Number of straps and placement of loops is determined by owner.

MISCELLANEOUS ACCESSORIES:

- Heavy-duty 1/8" (3mm) steel tool boxes for mounting under waterbed
- Partial or full width steel roller at rear top of waterbed for assisting in end-loading
- Hooking bar at front of waterbed for attaching high line/snatch block
- Snapout workbench located at rear corner of waterbed for use as a work surface in making repairs
- Worker ramp for off-ground loading and unloading; folds up against rear of waterbed
- 500,000 BTU propane waterbed heating torch assembly; attaches to heat manifold
- Self-storing 8" (200mm) chain vise
- Mid-deck stakes for splitting deck load
- Tool boxes, work benches, vises
- Tow hooks, trailer hitches, bumpers
- Flood/work lights for night drilling



**FLATWATER®
FLEET**

5354 Twig Blvd.
Saginaw (Duluth), Minnesota 55779 U.S.A.
Phone: 218/729-8721
FAX: 218/729-7644