The Rolligon 14x14 Khan Tractor/Trailer vehicle is an ultra-high traction, very heavy capacity truck designed for heavy off/limited on road application. The vehicle allows tire interchangeability between the Rolligon super wide, high flotation tires and the Goodyear/Firestone "Terra Tires". During wet season operations the Rolligon tires provide loaded ground pressures as low as 5.07 psi (0.35 kg/cm²) enabling the vehicle to penetrate areas where conventional trucks cannot operate. For dryer season operations, "Terra Tires" are recommended allowing full utilization of the truck throughout the weather year.

The eight wheel drive (8x8) tractor detaches from the six wheel drive (6x6), 55 ft. (16.76m) long trailer to act as a stand alone support vehicle. When coupled, the tractor/trailer unit provides full 14 wheel drive (14x14). Identical power units and transmission are located on the tractor and trailer linked by Rolligon's Dual Acceleration/Shift System (DASS). The twin power unit/transmission systems act as one when linked.

For extremely heavy requirements, a sixteen wheel drive (16x16) version is capable of carrying up to 75 tons. The 16x16 Super Khan features a ten wheel drive (10x10) tractor with specified trailer.

Special Rolligon Winterization packages are available for these heavy duty units, making them ideal for arctic and similar environments. These units are ideal transports in arctic or desert areas.
ENGINE OPTIONS (All Diesel)
Std: Cummins NTA 855 400 BHP (300 kw) @ 2100 RPM
Opt: Caterpillar 3406 TA, 375 BHP (281 kw) @ 2100 RPM
HP to gross vehicle weight ratio: 7.6 hp/ton.
Vehicle features dual engines, one on tractor one on trailer.
Total horsepower is double above.

TRANSMISSION
Full powershift eight speed transmissions with torque converter lock-up. Transmissions are integral mount. Drives all power systems and hydraulic systems for vehicle.
Tractor and trailer each have separate transmission.

AXLES
Std: Clark BD-90 series planetary axles.
Opt: Rockwell SPRC 1755 series planetary axles.
No-Spin differentials. Walking beam suspension.
Optional air suspension available.

STEERING
Full hydraulic power steering, dual cylinders. T-1 steel steering joint consists of extra heavy members all solid welded and treated. Tractor articulated at steering section, arctic rated.

BRAKES
Drum and shoe, air activated through foot pedal at operator station.
Brake on tractor and trailer, air lock safety.
When trailer uncoupled from tractor, parking brakes automatically engage on trailer.

TIRES AND WHEELS
Wet: Rolligon 72 x 68 - 28 60 ply Super Wide
Dry: Goodyear 73 x 44 - 32 20 ply Terra Tires
Dry: Firestone 73 x 44 - 32 20 ply Terra Tire
Opt: Rolligon 72 x 82 - 28 60 ply X Super Wide
All above tires are interchangeable without vehicle/mounting modifications.
Rolligon tire ply ratings based on equal ply strength ratings of conventional cord tires.
All steel wheels standard on this truck.

OPERATOR'S STATION
Completely enclosed operator cabin, air-condition and heated.
Seating for four (4) men standard, optional six (6) or eight (8) man cab available. Winterized cab available. Full compliment of identical monitoring gauges for tractor and trailer power units mounted in console. Single accelerator.

FRAME
Dual bent T-1 steel plate channels form front and rear frames.
All welded assembly with roll/pivot section at articulation joint.
Heavy T-1 steel plate steering trunions with lubricated 4 inch O.D. (10.16 cm) articulation pins. Arctic rated.

CARGO DECK - Standard
All steel structure and substructure.
Steel surface with tail roller. Optional wood surface available.
Steel skid rails standard. Both decks feature live tail roll.
Dimensions:
Tractor: Length: 22 ft. (6.7 m) Width: 9 ft. (2.7 m)
Trailer: Length: 55 ft. (16.7 m) Width: 9 ft. (2.7 m)
Trailer deck on 5 degree slope to rear of unit for self on/off loading.
Support landing gear standard for trailer.
Winch: Total capacity 140,000 lbs. (63,504 kg)

ACCESSORIES - Standard
Dual headlights
Tire inflation kit
Tire puncture kit
Front grill guard
Wheel lug wrench
Large tool boxes
Stake pockets on decks
Winch guide pins on decks
Operation and Maintenance Manual

OPERATION CHARACTERISTICS-Standard Vehicle
Empty Vehicle Weight (Std) 91,000 lbs. (41,277 kg)
Ground Pressure no load 2.3 psi (0.16 kg/cm²)
Maximum Load Paylaid 120,000 lbs. (54,432 kg)
Ground Pressure with load 5.4 psi (0.38 kg/cm²)
Ground Clearance 30 in (76 cm)
Forward Gradeability 60%
Side Gradeability 40%
Maximum Forward Speed 35 mph (56 km/hp)
Turning Radius 60 ft. (18.2 m)
Dimensions:
Length 70 ft. (21.3 m)
Width, Rolligon Tire 15 ft. (4.6 m)
Width, Terra Tire 11 ft. (3.3 m)
Height 12 ft. (3.6 m)
Ground to cargo deck 6.5 ft. (1.9 m)
Fuel Capacity 400 gal. (1514 l)
All specifications per standard unit.

For additional information please contact:
ROLLIGON CORPORATION
10635 BRIGHTON LANE
STAFFORD, TEXAS 77477 U.S.A.
TELEPHONE: (281) 495-1140
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INTERNET: www.rolligon.com
Rolligon Corporation has been active in large and small scale pipeline construction projects in almost every country. From the jungles of Peru to the deserts of North Africa, Rolligon vehicles have completed job requirements when no other vehicles could move the required equipment in. Rolligon’s large off road tires allow the loaded vehicle to remain on top of the terrain. This translates into “success” in all languages, whether in deserts, swamps, arctic, tundra or environmentally sensitive areas.

Rolligon 6x6 tractor with pipe trailer. Capacity: 15 tons.

Rolligon pipeline construction units come in a variety of sizes and capacities. Small 4 x 4 units act as welder and general support vehicles while 6 x 6, 8 x 8 and 10 x 10 units coupled with matched pole trailers transport tons of pipe down rugged right-of-ways quickly and efficiently.

Capacities range from two (2) to seventy-five (75) tons depending on the unit selected and the scope of the job. Many units are completely amphibious with approximately 50% of the maximum land rated payload, when equipped with the appropriate Rolligon tire.

All vehicles are capable of mounting the Rolligon super-wide tire or the “Terra Tire” for high versatility.

Rolligon 8x8 tractor with pipe trailer. Capacity: 20 tons.

Rolligon 6x6 support unit with crane.
ROLLIGON CORPORATION

Rolligon Corporation has been manufacturing off-road, all terrain vehicles, geophysical drill rigs, special off-road trailers and related equipment since the mid 1950’s. Since that time Rolligon has placed vehicles and equipment in almost every country around the world where oil and gas is being sought, drilled or pipelined. We are active in the dredging industry, pipeline construction, powerline construction, right-of-way clearing, swamp draining/reclamation, timber harvesting and many other industries.

Currently The Company Occupies The Following Manufacturing Facilities:

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Square Feet</th>
<th>Square Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Space</td>
<td>6,600</td>
<td>614</td>
</tr>
<tr>
<td>Vehicle Manufacturing Plant</td>
<td>40,000</td>
<td>3,716</td>
</tr>
<tr>
<td>Tire Manufacturing Plant</td>
<td>15,000</td>
<td>1,385</td>
</tr>
<tr>
<td>Company Property</td>
<td>435,600</td>
<td>40,467</td>
</tr>
</tbody>
</table>

The company holds many patents and produces the line of low pressure, high flotation off-road rubber tires. These tires are suitable for applications in temperatures ranging from -60 deg. F (-51 deg. C) to +140 deg. F. (+60 deg. C) on all terrain surfaces.

Currently The Following Tire Sizes Are Produced:

- 40 Inch Diameter, 50 Inches Wide (40 x 50-12) (101.6 x 127.0 - 30.48 CM)
- 54 Inch Diameter, 68 Inches Wide (54 x 68-18) (137.2 x 172.7 - 45.7 CM)
- 54 Inch Diameter, 68 Inches Wide (54 x 68-25) (137.2 x 172.7 - 63.5 CM)
- 72 Inch Diameter, 68 Inches Wide (72 x 68-28) (182.8 x 172.7 - 71.1 CM)
- 72 Inch Diameter, 82 Inches Wide (72 x 82-28) (182.8 x 208.3 - 71.1 CM)
- 72 Inch Diameter, 96 Inches Wide (72 x 96-28) (182.8 x 243.8 - 71.1 CM)

All tires are available in ratings of 20, 40, or 60 ply strength.

Rolligon Corporation manufactures two categories of off/limited on-road vehicles in its standard manufacturing line. The first is classified as a “Low Ground Bearing Pressure” (LGP), all wheel drive vehicle. Rolligon Corporation defines the “Low Ground Bearing Pressure” classification of vehicles as those designed to produce less than 6.5 pounds per square inch (0.457 KG/CM) of pressure on the terrain surface when the vehicle is loaded to maximum capacity.

The second is classified as a “Higher Ground Bearing Pressure” (HGP), all wheel drive vehicle. These vehicles often produce ground bearing pressures as high as 35 psi (2.48 KG/CM) and are used in areas where soft ground conditions are not critical. Large “Terra Tires” are used in place of the Rolligon “Low Pressure, Super Wide” (LP5SW) and “Low Pressure Extra Super Wide” (LPXSW) tires.

The Rolligon Vehicle Line Consists of The Following Models:

<table>
<thead>
<tr>
<th>MODEL VEHICLE</th>
<th>WHEELS</th>
<th>CARRYING CAPACITY</th>
<th>LGP MODEL</th>
<th>HGP MODEL</th>
<th>ARCTIC MODEL AVAILABLE</th>
<th>AMPHIBIOUS CAPABILITIES</th>
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<tbody>
<tr>
<td>4450</td>
<td>4 x 4</td>
<td>4,000, 1,814</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>6x60</td>
<td>4 x 4</td>
<td>10,000, 4,536</td>
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<td>X</td>
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<tr>
<td>6x6 Challenger</td>
<td>6 x 6</td>
<td>30,000, 13,608</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8x8 Brute I</td>
<td>8 x 8</td>
<td>60,000, 22,680</td>
<td>X</td>
<td>X</td>
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<tr>
<td>8x8 Brute</td>
<td>8 x 8</td>
<td>60,000, 22,680</td>
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<tr>
<td>8x8 Super Brute</td>
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<td>85,000, 38,556</td>
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<tr>
<td>10 x 10 Titan</td>
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<td>60,000, 27,216</td>
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<td>12 x 12</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>14 x 14 Khan</td>
<td>14 x 14</td>
<td>120,000, 54,432</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16 x 16 Super Khan</td>
<td>16 x 16</td>
<td>150,000, 68,040</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

All Rolligon Vehicles are equipped with diesel engines, powershift transmissions (exception: 4450), planetary axles, hydraulic articulated power steering and the finest heavy duty components available in the off-road industry. Several engine options exist allowing the customer to select the powerunit best applicable to his area of operations depending on spare part and service backup.

A complete staff of service technicians is available for on site service anywhere in the world with 24-hours notice. In-house repair and service facilities are maintained at our Stafford (Houston), Texas plant.

For additional information on Rolligon Vehicles, drill rigs, products or services, please contact:

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TELEPHONE: (281) 495-1140 • FAX: (281) 495-1145 • INTERNET: www.rolligon.com
Rolligon Corporation has been building large and small, all-wheel drive trucks for arctic operations for over 20 years. With equipment on the North Slope of Alaska, the South Polar Cap, the Siberian Plains and all points in between, Rolligon has a reputation of cold weather capabilities.

Temperatures of -50°F (-45°C) require special designs and materials for safe, dependable operations. Rolligon has long been considered the leader in arctic transport vehicles since the early days of the "Top Roller Drive".

Rolligon arctic rated vehicles come in a variety of sizes and capacities. Small 4x4 units act as welder and general support vehicles while 6x6, 8x8 and 10x10 units coupled with powered trailers transport tons of cargo across delicate tundra, ice roads and open terrain.

Capacities range from two (2) to seventy-five (75) tons depending on the unit selected. Special winterization equipment allows the vehicle to operate even under the most severe conditions. On board radar and guidance systems are available.

All vehicles are capable of mounting the Rolligon super-wide tire or the "Terra Tire" for high versatility.
ROLLIGON ARCTIC VEHICLES AND EQUIPMENT

Rolligon Corporation has for many years been recognized as the leader in the arctic vehicle manufacturing industry. Rolligon’s history dates back to the early to mid 1950’s when “Top Roller Drive” units were developed by Rolligon.

Since those days many improvements have taken place allowing vehicles to sustain harsher climates with security and safety for the operators.

Today Rolligon Corporation offers a wide variety of vehicles arctic equipped for the cold climates.

4450 - Traditionally this unit has been employed as an ice road drill rig carrier and general utility vehicle. When winterized the small unit is well suited for drilling and pumping operations for ice road construction. The unit is available on the Rolligon 40 x 50 -12, 54 x 68 - 18 and several sizes of terra tires.

4 x 4 ROUGHNECK - This sturdy 4 x 4 unit is ideal as a medium range work vehicle. The new units feature higher horsepower diesel engines, planetary axles, powershift transmissions, forward mounted arctic cabin for four men and Rolligon’s 72 x 68 - 28 tire. The vehicle is highly amphibious and will retrofit Rolligon’s 72 x 96 - 28 tire for extremely low ground pressure, high flotation requirements.

6 x 6 CHALLENGER - A 15 ton capacity, 6 x 6 vehicle with fair flotation characteristics, this unit is able to work in areas where fording depths are as deep as four feet (1.22 m). The Rolligon 72 x 68 - 28 tire allows deeper working depths and stream crossings without achieving flotation, yet ground pressures remain below 5 psi (0.351 kg cm²) under full load. In 5 ft. (1.5 m) depths the vehicle begins to assume flotation.

8 x 8 BRUTE I - Standard with a four (4) man arctic cabin, this unit carries the line of Rolligon vehicles into the “Heavy Duty, High Capacity” end of the spectrum. Designed for sever arctic conditions, the unit is rated at 50,000 lbs. of carrying capacity. Eight (8) wheel drive provides exceptional traction and affords ground pressures as low as 4.5 psi (0.316 kg cm²) under full load. This truck is recommended in applications where amphibious operations constitute a high percentage of the work load.

8 x 8 SUPER BRUTE - Designed for use exclusively with 72 x 44 - 32 Terra Tires or Tundra Grip tires. Unit features high horse power diesel engine, sever winterization characteristics, up to eight (8) man cab fully sealed, over sized planetary axles and 30 ft. (9.1 m) long, 9 ft. (2.7 m) wide rear deck. Single 100,000 lbs. (45,360 kg) rear deck winch allows self on/off loading over 5 degree sloped rear deck with live tail roller. Vehicle payload capacity is 85,000 lbs. (38,556 kg).

14 x 14 KHAN - This unit consists of an eight (8) wheel drive tractor coupled to a six (6) wheel drive flat bed trailer. The tractor and trailer feature identical diesel engines, transmissions and heavy planetary axles. The combination comes with severe arctic winterization package on both tractor and trailer. The 8 x 8 tractor can be operated when detached from the trailer as a stand alone support work vehicle. The trailer cargo space is 55 ft. (16.7 m) long, 9 ft. (2.7 m) wide.

Maximum payload capacity of the tractor/trailer is 120,000 lbs. (54,432 kg). The 8 x 8 tractor as a stand alone truck, has a payload capacity of 45,000 lbs. (20,412 kg). The vehicle can be equipped with Rolligon 72 x 68 - 28 V6 Low Pressure - Super Wide (LPSW V6) tires, or the 20 ply “Terra Tire”.

Either tire interchanges with no vehicle modifications.

The trailer and tractor accelerate and shift simultaneously through Rolligon’s Dual Accelerator/Shift System (DASS). The DASS allows the operator to have a single foot accelerator and shift tower. When the tractor and trailer are linked, the system coordinates the independent facilities to act as one. When the tractor is detached, the system converts to the single unit demand without modification.

16 x 16 SUPER KHAN - This unit is an expansion of the 14 x 14 KHAN in that the carrying capacities increase to 150,000 lbs. (68,040 kg). Horsepower requirements increase as do component sizes.

For additional information please contact:

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