

#### Mechanical Drawworks Model 1100/4212 Main Drum

- > Demountable, forged steel brake rims are 42" diameter x 12" wide
- > Brakes are cooled by circulating water
- > Drum shaft diameter is 7"
- > Single line pull is 51.800 lbs.
- > Design with 2 x C15 power @ 540 HP
- > Two speed transmission shaft
- > High and low speed clutch assembly
- > Torque converter w/engine
- > Wichita 325 Auxiliary brake standard

#### **Drawworks Options**

- > Parmac Model V80 hydrobrake
- > LEBUS grooving on main drum 1 1/8" diameter
- > Crown block saver

#### Mast Model 122 x 440 Twin Box (per API 4F)

- > Twin box leg fixed base design allows fast positioning of rig before mast is raised. Clear height is 122' below crown.
- > Static hook load capacity: on 10 lines 440,000 lbs. > Crossover crown with 36" fast-line sheave plus five 30" sheaves
- > All sheaves mounted on Timken double-row bearings
- > Racking capacity 12,000' of 4 1/2" drill pipe
- > Two hydraulic raising rams and two hydraulic telescoping rams
- > 1 1/8" wire line standard

#### **Mast Options**

> Mast lights, standpipes, hydraulic catheads

#### **Drive Train**

- > Power is by twin Cat C15 @ 540 HP w/torque converters
- > Chain drive with oil spray lubrication
- > Two-speed transmission shaft with high & low drum clutch shaft
- > Shifting is done with air activated jaw clutch
- > Main drive is 1 1/2 triple, two-speed is by 1 3/4 triple chain

#### **Trailer**

- > Four axle heavy duty trailer is main frame
- > Four axle heavy duty air ride suspension @ 25,000 lbs. capacity
- > Attachments are ready for rear dolly and front jeep

#### **Trailer Options**

> Tool boxes, extra fuel tanks, spare tires, operator platforms can be supplied as needed

#### **Dollies**

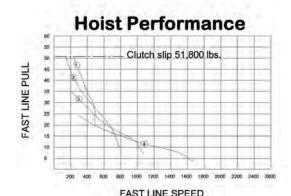
- > Front Attachment: 2 axle jeep dolly
- > Rear Attachment: 2 axle rear air ride dolly

#### **Controls and Hydraulic System**

- > Hydraulic power is supplied from 65 HP electric motor APU
- > The console panel for all leveling jacks, mast raising and extending cyl., engine, transmission, and main drum are located at one position for simple, quick rig-up. Operator's console can be provided movable to 12', 15', or 18' 6".
- > 50 gpm hydraulic pump for all rig hydraulics and tong operation
- > Filters provided on pressure and return lines

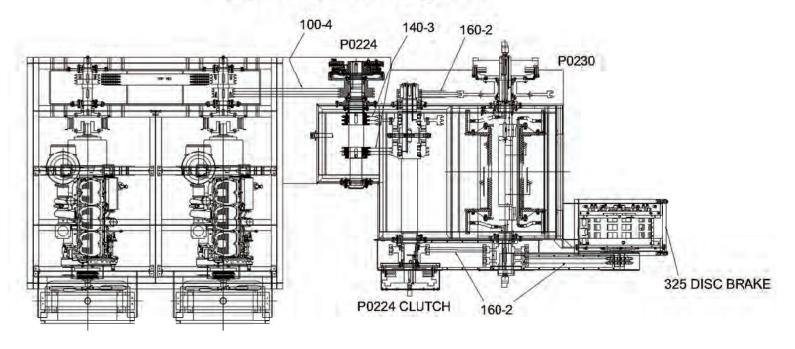
#### **Options**

- > 70 gpm hydraulic pump
- > Hydraulic oil cooler for continuous use and hot climate applications
- > Single or dual 8,000 lbs. or 12,000 lbs. catline winch for safe. efficient lifting
- > Hydraulic catworks for precise control of make-up and break-out torques
- > Cold weather packages for -40° operation
- > Folding platforms off operator side of rig
- > Spare line spool
- > Mast lite package
- > Rig ramps and crossbase supports
- > Rig substructure Hydraulic Telescopic type
- > Rotary chain case drive
- > Optional 5th trailer axle with lift

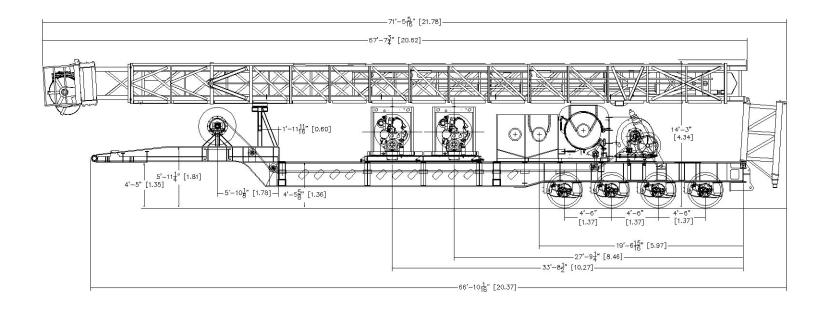




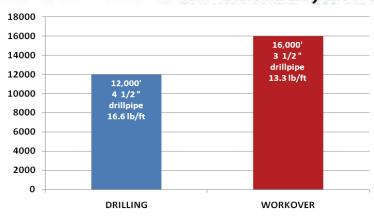




### **Vehicle Layout**



## LCI-1100-TE DADCRAFT INDUSTRIES, LTD.



#### Electric Drawworks Model 1100/4212-42 Main Drum

- > Demountable, forged steel brake rims are 42" diameter x 12" wide
- > Brakes are cooled by circulating water
- > Drum shaft diameter is 7"
- > Single line pull is 51,800 lbs.
- > Design with 2 x 762 motors 600 HP
- > Two speed transmission shaft
- > High and low speed clutch assembly
- > Wichita 325 Auxiliary brake standard

#### **Drawworks Options**

- > Parmac Model V80 hydrobrake
- > LEBUS grooving on main drum 1 1/8" diameter
- > Crown block saver

#### Mast Model 122 x 440 Twin Box (per API 4F)

- > Twin box leg fixed base design allows fast positioning of rig before mast is raised. Clear height is 122' below crown.
- Static hook load capacity: on 10 lines 440,000 lbs.Crossover crown with 36" fast-line sheave plus five 30" sheaves
- > All sheaves mounted on Timken double-row bearings
- > Racking capacity 12,000' of 4 1/2" drill pipe
- > Two hydraulic raising rams and two hydraulic telescoping rams
- > 1 1/8" wire line standard

#### **Mast Options**

> Mast lights, standpipes, hydraulic catheads

#### **Drive Train**

- > Power is by twin 762 electric motors
- > Chain drive with oil spray lubrication
- > Two-speed transmission shaft with high & low drum clutch shaft
- > Shifting is done with air activated jaw clutch
- > Main drive is 1 1/2 triple; two speed is by 1 3/4 triple chain

#### Trailer

- > Four axle heavy duty trailer is main frame
- > Four axle heavy duty air ride suspension @ 25,000 lbs. capacity
- > Attachments are ready for rear dolly and front jeep

#### **Trailer Options**

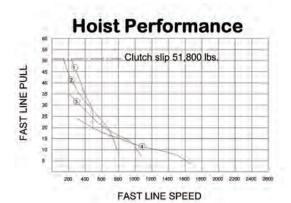
> Tool boxes, extra fuel tanks, spare tires, operator platforms can be supplied as needed

#### Controls and Hydraulic System

- > Hydraulic power is supplied from 4 cylinder diesel in combination with 65 HP electric motor APU
- The console panel for all leveling jacks, mast raising and extending cyl., engine, transmission, and main drum are located at one position for simple, quick rig-up. Operator's console can be provided movable to 12', 15', or 18' 6".
- > 50 gpm hydraulic pump for all rig hydraulics and tong operation
- > Filters provided on pressure and return lines

#### Options

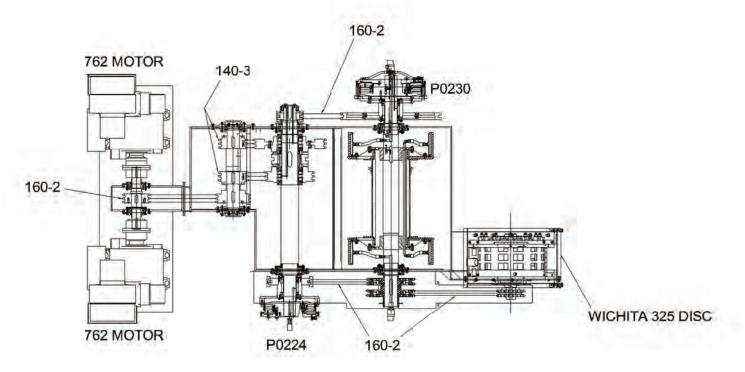
- > 70 gpm hydraulic pump
- > Hydraulic oil cooler for continuous use and hot climate applications
- Single or dual 8,000 lbs. or 12,000 lbs. catline winch for safe, efficient lifting
- > Hydraulic catworks for precise control of make-up and break-out torques
- Cold weather packages for -40° operation
- > Folding platforms off operator side of rig
- > Spare line spool
- > Mast lite package
- > Rig ramps and crossbase supports
- > Rig substructure Hydraulic Telescopic type
- > Rotary chain case drive
- > Optional 5<sup>th</sup> trailer axle with lift



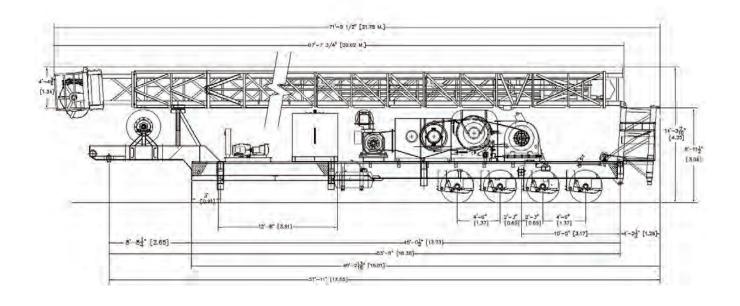


### **Power Flow Diagram**

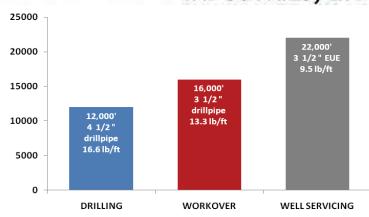




**Vehicle Layout** 



## LCI-1100-T OADCRAFT INDUSTRIES, LTD.



#### **Drawworks Model 1100/4212-42**

#### **Main Drum**

- > Demountable, forged steel brake rims are 42" diameter x 12" wide
- > Brakes are cooled by circulating water
- > Drum shaft diameter is 7"
- > Single line pull is 51,800 lbs.
- > Outboard P0230 clutch
- > Wichita 325 Auxiliary brake standard

#### **Drawworks Options**

- > Parmac Model V80 hydrobrake
- > LEBUS grooving on main drum 1 1/8" diameter
- > Rotary drive-torque shaft from right angle box
- > Crown block saver
- > Disc brake in lieu of Parmac Auxiliary brake

#### Mast Model 122 x 440 Twin Box (per API 4F)

- > Twin box leg fixed base design allows fast positioning of rig before mast is raised. Clear height is 122' below crown.
- > Static hook load capacity:

on 8 lines 400,000 lbs.

on 10 lines 440,000 lbs.

- > Crossover crown with 36" fast-line sheave plus five 30" sheaves
- > All sheaves mounted on Timken double-row bearings
- > Racking capacity 12,000' of 4 1/2" drill pipe
- > Two hydraulic raising rams and two hydraulic telescoping rams
- > 1 1/8" wire line standard

#### **Mast Options**

- > Mast lights, standpipes, 24" sandline sheave
- > Hydraulic cathead assembly

#### **Drive Train**

- > Twin C15 or Ser 60 Detroit (475 to 540 HP Twin engine)
- > Allison CLT 6061 transmission
- > Optional M6610 Allison transmission (gear driven compound behind the transmissions)
- > Engine, transmission, and compound mounted in rubber above deck for easy access
- > Pressure lubricated combination right-angle box/drop box for drive to drawworks, rotary drive

#### Trailer

- > Four axle heavy duty trailer is main frame
- > Four axle heavy duty air ride suspension @ 25,000 lbs. capacity
- > Attachments are ready for rear dolly and front jeep

#### **Trailer Options**

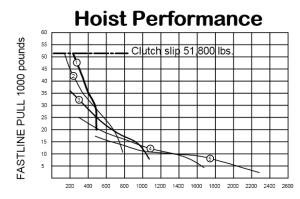
> Tool boxes, extra fuel tanks, spare tires, operator platforms can be supplied as needed

#### Controls and Hydraulic System

- > The console panel for all leveling jacks, mast raising and extending cyl., engine, transmission, and main drum are located at one position for simple, quick rig-up. Operator's console can be provided movable to 12', 15', or 18' 6".
- > 50 gpm hydraulic pump for all rig hydraulics and tong operation
- > Filters provided on pressure and return lines

#### **Options**

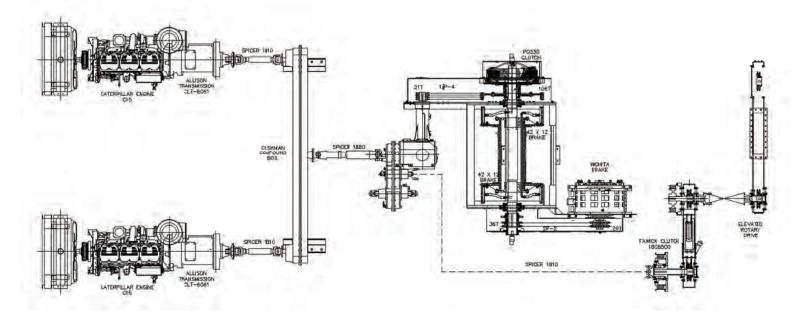
- > 70 gpm hydraulic pump
- > Hydraulic oil cooler for continuous use and hot climate applications
- > Single or dual 12,000 lbs. catline winch for safe, efficient lifting
- > Hydraulic catworks for precise control of make-up and break-out torques
- > Cold weather packages for -40° operation
- > Folding platforms off operator side of rig
- > Spare line spool
- > Mast lite package
- > Rig ramps and crossbase supports
- > Rig substructure Hydraulic Telescopic type
- > Rotary chain case drive
- > Optional 5<sup>th</sup> trailer axle with lift



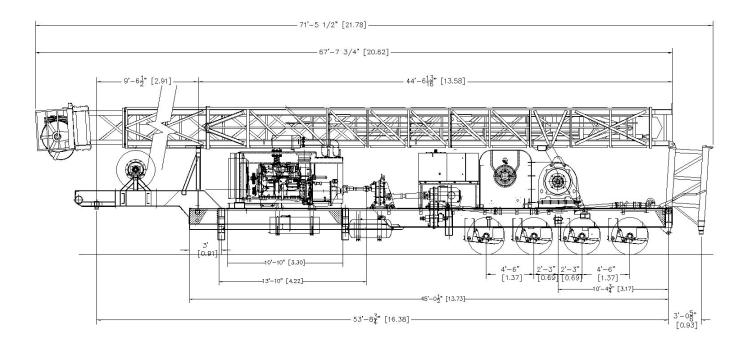


## **Power Flow Diagram**





### **Vehicle Layout**



## LCI-1000-BBL OADCRAFT INDUSTRIES, LTD.



#### MUD SYSTEM (1000 BBL)

#### Two Tank Mud System (12' W x 8' H x 50' L)

- > 500 BBL suction tank round bottom
- > 500 BBL solids tank round bottom
- > 100 BBL pill tank

## Trip Tank/Gas Buster One 8' W x 40' L Skid with:

- > One 2 1/16" x 4 1/16" 5,000 lbs. choke (four 2 1/16" 5,000 lbs. valves, four 4 1/16" 5,000 lbs. valves, one cross, one 2 1/16" manual chokes) on one end of skid. One end of skid plumbed for 2" hydraulic super choke
- > One 50 BBL twin trip tank
- > Two 2" x 3" centrifugal pumps with 20 HP electric motors with 30" OD poorboy gasbuster in center that lays over on choke to transport

#### Water Tank (10' W x 8' H x 40' L)

- > 500 BBL water tank
- > Two 2" x 3" centrifugal pumps 20 HP
- > Water tank support dog house frame

#### Dog House (10' W x 20' L)

> One v-crimped top dog house that is placed in position on top of the water tank to 18' sub floor

#### Generator House (10' W x 8' H x 45' L)

- > One generator house with 1/4 crimped walls
- > Two generator sets, one at each end of the skid with MCC located at the center of the unit
- > Two C15 generator sets at each end

#### 10,000 Gal. Fuel Tank (8' W x 8' H x 35' L) One v-crimped square fuel tank

- > Two 1 HP electric fuel charge pumps
- > One 20' L v-crimped change house w/12 lockers and 1 bench
- > 1/4 v-crimp walls
- > One lubester tank (3 compartment)

#### **Mud Pumps**

- > Two each 1,000 HP Triplex
- > Master skids with pumps
- > Cat 3508 Series engines for power, belt driven
- > 5 x 6 charge pumps on master skid

#### **Mud Pump Options**

> Engine transmission drive system

#### Junk Basket / Closing Unit (8' x 36' Skid)

- > Junk basket 8' x 20'
- > Bop closing unit (10 bottle)
- > Bop piping to end of skid

#### Locker / Parts Skid

- > 1/4 v-crimp wall structure
- > 8' x 15 1/2' tool room
- > 8' x 17 1/2' locker room
- > Front skid with two 25 HP air compressors
- > Lites, knowledge box, and 4 lockers

#### Solids Equipment

> Per customer order



# LCI-1000-BBL OADCRAFT INDUSTRIES, LTD.

## **Mud System Layout** 34'-5<del>3</del>" SH3007 113'-1011" SUDING DOOR 7' X 11' 4'-65"



