

# PC391 BAKKEN CASING COMPRESSOR



## Shipping Dimensions

- 1.2m W x 2.4m L x 2.4m H  
(4'0" W x 8'0" L x 8'0" H)

## Shipping Weight

- 1.3 tonnes (2,500 lbs.)

## DESIGN SUMMARY

### COMPRESSOR MODULE

- Corken D391 Two-Stage Reciprocating Compressor c/w Heavy Duty Flywheel

### DRIVER

- 15HP explosion proof motor

### SUCTION SCRUBBER

- 10<sup>3</sup>/<sub>4</sub>" OD Vertical Inlet Mist Extractor c/w Level Gauge

### PIPING AND CONTROLS

- Inlet Regulator - Fisher 627 with 15 to 40 psig spring
- Manifolded Low Suction Recycle with two (2) Fisher 627 regulators
- PSV for suction, inter-stage, and discharge

### COOLING SYSTEM

- Stainless Steel Four-pass Fin Tube Interstage Gas Cooler
- Stainless Steel Six-pass Fin Tube Discharge Gas Cooler

## CONTROL PANEL

- VFD Control Panel with Integral PLC
- Instrumentation and Control include
  - Suction Pressure Transmitter
  - Low Suction Pressure Switch
  - High Discharge Pressure Switch
  - High Discharge Temperature Switch
  - Low Oil Pressure Switch
  - High Inlet Scrubber Level Switch
  - Class 1 Zone 1 Wiring to Skid Edge

## ENCLOSURE/SKID

- Utilidor building
- Two sets of access doors
- Removable panel for belt drive
- Skid has four corner lifting, containment lip, and drain connection
- 1,000W Electric Heater

## CUSTOM OPTIONS

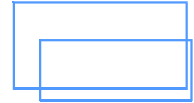
- Inlet/Outlet flex hoses
- H<sub>2</sub>S detection with shutdown to VFD Panel
- H<sub>2</sub>S beacon
- Heat trace cable (70ft)
- Interconnecting wiring for VFD panel from compressor (45ft)
- Under skid insulation w/ fire retardant (2" thickness)
- Sour service controls, valves, PSVs, and instrumentation

## ENHANCED VALUE

- VFD allows broad flow ranges
- One button startup
- Ability to adjust and control desired casing pressure
- Designed for Bakken oil wells
- Service center in Estevan, SK
- 25,000 ft<sup>2</sup> fabrication facility
- 40 years combined Bakken optimization experience
- Over 500 casing gas systems installed in 10 years
- 24/7 Support
- Well capitalized, with extensive inventory

Joint collaboration with

LEVEL BEST



## PC391 BAKKEN CASING COMPRESSOR

Driver: 460VAC/3PH/60Hz  
 BHP/Driver speed: 15 BHP @ 1,760 rpm  
 Compressor: Corken D391  
 Compressor speed: 825 rpm  
 Altitude: 2500 ft  
 Ambient temp: 60 °F  
 Inlet temp: 60 °F  
 Interstage temp: 170 °F  
 Gas Analysis: typical Bakken  
 Gas Sp. Gr.: 0.99  
 Molar Weight: 28.7  
 Discharge pressure: See Chart

Suction	150 psig Discharge		200 psig Discharge		300 psig Discharge		400 psig Discharge	
	mscfd	HP	mscfd	HP	mscfd	HP	mscfd	HP
0 psig	23	6.7						
5 psig	32	7.7	32	8.2				
10 psig	42	8.5	41	9.2				
15 psig	51	9.2	50	10.0	49	11.2		
20 psig	60	9.8	60	10.7	58	12.1	57	13.1
25 psig	70	10.3	69	11.4	68	12.9	66	14.1
30 psig	79	10.7	79	11.9	77	13.7	76	15.0
35 psig			88	12.4	86	14.4		
40 psig			98	12.9	96	15.0		