



9000 CHOKE CONSOLE SERIES DATA SHEET

API 16C COMPLIANT



W: 36" D: 36" H: 48"

APPLICATION

The HDI 9000 Choke Console Series is a fully customizable choke console, adaptable to a variety of industry standards and regulations. The HDI 9000 Series operates independent of rig power and is the ultimate backup system for critical well control situations. By using HDI Instrumentation (battery powered, intrinsically safe, and certified), the HDI 9000 Series is ideal for Class 1, Division 1 Hazardous Environments commonly seen on the drill floor. HDI Instrumentation is designed around a user friendly, field proven platform that has been used for over 20 years.

Attached is a General Assembly Drawing of the HDI 9000 System, giving the user a sense of type of system they will receive.

Prior to ordering a HDI 9000 System, HDI asks our clients to confirm all relevant specifications by filling out the attached questionnaire. This form will ensure that HDI is delivering a system that is compliant with all rig specific standards.

Below is a standard configuration offered by HDI. Pricing is available upon request.

INSTRUMENTATION

- (2) HDI 2000B Pressure Gauge(s):
0-16,000 psi display
Sensor(s): 2" 2202 Hammer Union Transducers
with 2' Pigtails
Cable: 100' Inline Cable
- (1) HDI 2000B Pressure Gauge(s):
0-10,000 psi display
Sensor(s): 2" 1502 Hammer Union Transducers
with 2' Pigtails
Cable: 100' Inline Cable
- (1) HDI 2100 Pump Stroke Counter
3 Pump Configuration
Sensor(s): 3 Micro-switches
Cable: 100' Inline Cable, (3) 50' Pump Leg Cables
- (2) HDI 2200 Choke Position Indicator
0-100% display
Sensor(s): Linear Potentiometer
Cable: 100' Inline Cable
- (2) Hydraulic 2 1/2" Gauges for Rig Air and Hydraulic Pressure
Rig Air: 0-200 psi
Hydraulic: 0-1,000 psi

HDI provides options and solutions for a variety of gauge, choke, and pump configurations.

HPU/SUB-SYSTEM

- Directional Control Valves
- Ball Valve
- Speed Adjust Control
- Hydraulic Reservoir Tank
- Pneumatic Air Regulator/Filter
- Hydraulic Regulating Valve
- Air Driven Hydraulic Pump
- Manual Hydraulic Pump
- Accumulator Bottle

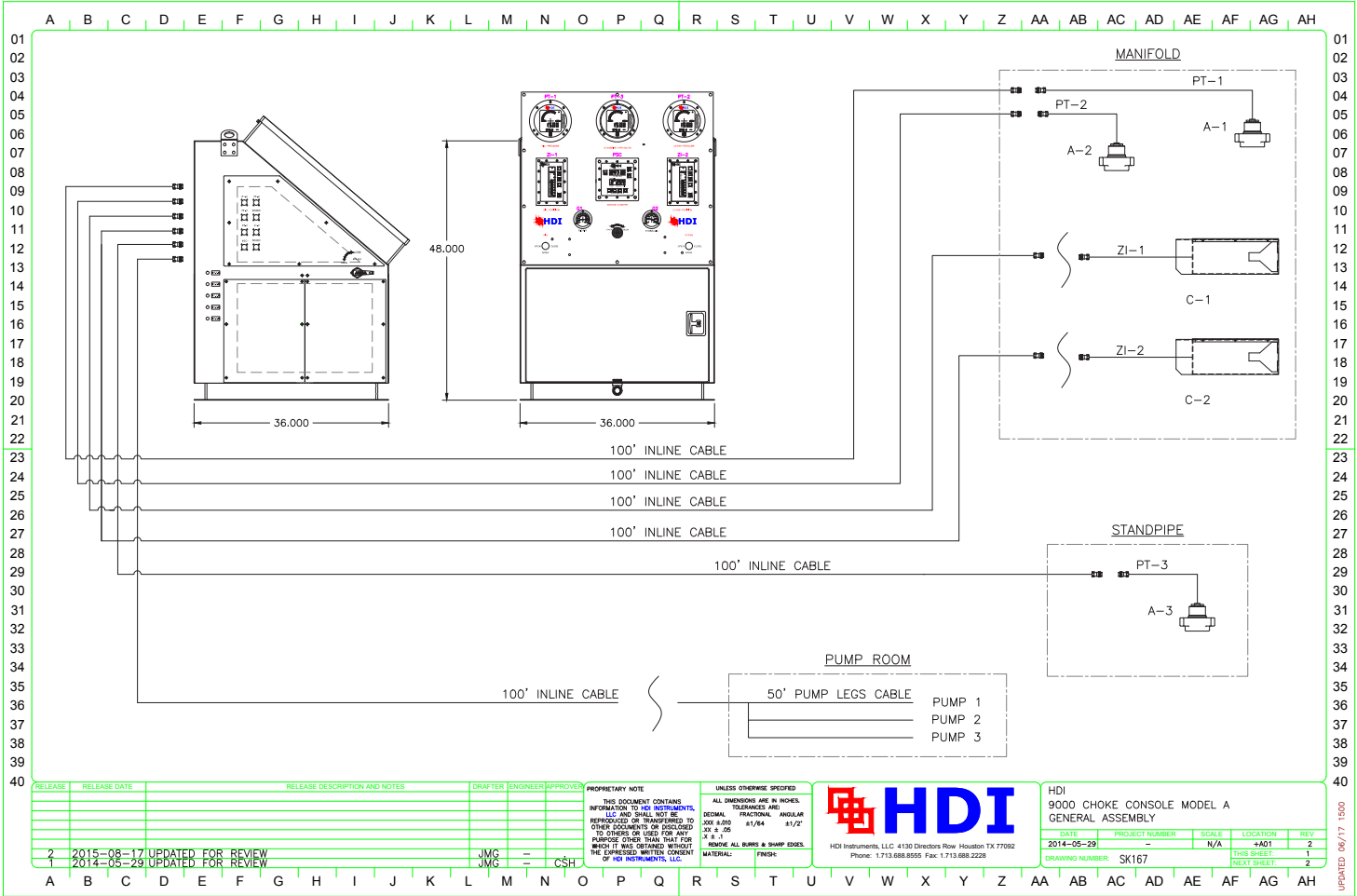
HDI provides options and solutions for a variety of choke working pressures and swept volumes.

AVAILABLE ADD-ONS

- Additional Local Indication (Master/Slave Gauges)
- Transducer and Flange Connections Available
- 4-20mA Output

**SAFETY
PRECISION
INNOVATION**

WELL CONTROL MONITORING AT ITS FINEST



RELEASE	RELEASE DATE	RELEASE DESCRIPTION AND NOTES	DRAFTER	ENGINEER	APPROVER
7	2015-08-17	UPDATED FOR REVIEW	JMG		
1	2014-05-29	UPDATED FOR REVIEW	JMG		CSH

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION TO THE INSTRUMENTS, LOGS AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESS WRITTEN CONSENT OF HDI INSTRUMENTS, LLC.

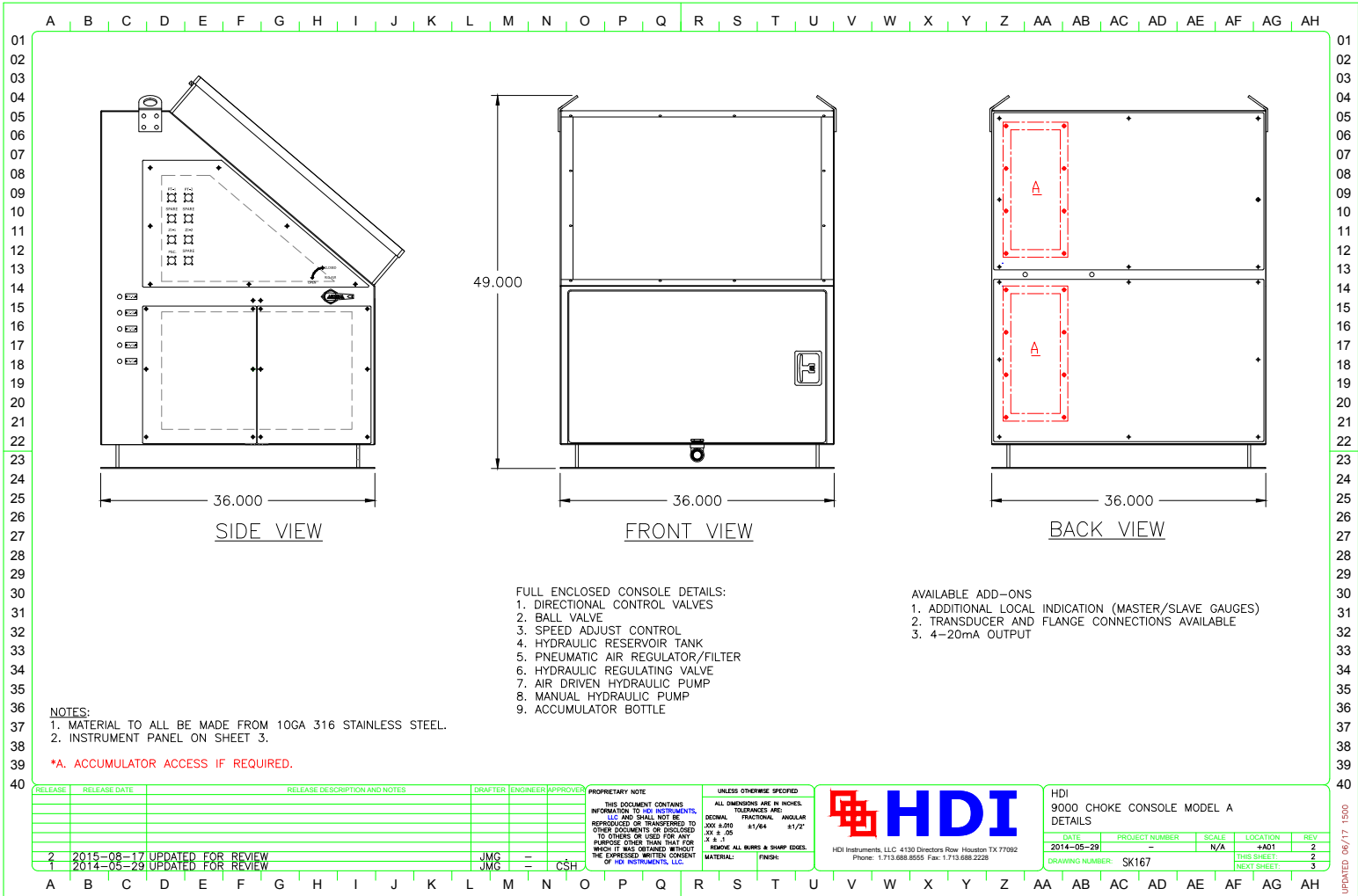
UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
 DECIMAL: .005
 FRACTIONAL: 1/64
 ANGULAR: 1/2°
 HOLE: ±.005
 FINISH: UNLESS OTHERWISE SPECIFIED, ALL SURFACES SHALL BE FINISHED TO A 32-RMS SURFACE.



DATE	PROJECT NUMBER	SCALE	LOCATION	REV
2014-05-29		N/A	+A01	2
				1
				2

HDI
 9000 CHOKE CONSOLE MODEL A
 GENERAL ASSEMBLY
 DRAWING NUMBER: SK167

UPDATED 08/17/1500



- FULL ENCLOSED CONSOLE DETAILS:
1. DIRECTIONAL CONTROL VALVES
 2. BALL VALVE
 3. SPEED ADJUST CONTROL
 4. HYDRAULIC RESERVOIR TANK
 5. PNEUMATIC AIR REGULATOR/FILTER
 6. HYDRAULIC REGULATING VALVE
 7. AIR DRIVEN HYDRAULIC PUMP
 8. MANUAL HYDRAULIC PUMP
 9. ACCUMULATOR BOTTLE

- AVAILABLE ADD-ONS
1. ADDITIONAL LOCAL INDICATION (MASTER/SLAVE GAUGES)
 2. TRANSDUCER AND FLANGE CONNECTIONS AVAILABLE
 3. 4-20mA OUTPUT

NOTES:
 1. MATERIAL TO ALL BE MADE FROM 10GA 316 STAINLESS STEEL.
 2. INSTRUMENT PANEL ON SHEET 3.

*A. ACCUMULATOR ACCESS IF REQUIRED.

RELEASE	RELEASE DATE	RELEASE DESCRIPTION AND NOTES	DRAFTER	ENGINEER	APPROVER
2	2015-08-17	UPDATED FOR REVIEW	JMC	-	CSH
1	2014-05-29	UPDATED FOR REVIEW	JMC	-	CSH

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION TO HDI INSTRUMENTS, LLC AND SHALL NOT BE REPRODUCED OR TRANSMITTED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HDI INSTRUMENTS, LLC.

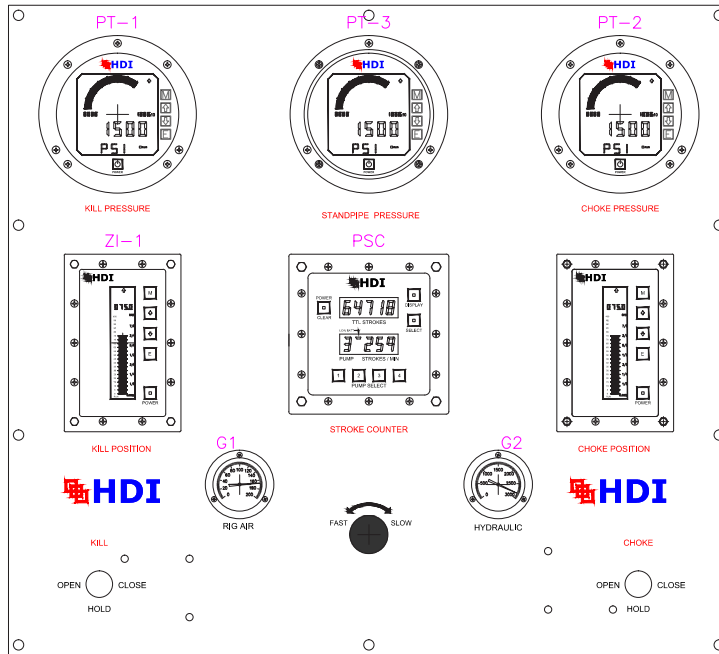
UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
 DECIMAL: .005 - .250 ±1/64" .251 - .499 ±.001" .500 - .999 ±.002" 1.000 - 4.999 ±.005" 5.000 - 9.999 ±.010" 10.000 - 49.999 ±.015" 50.000 - 99.999 ±.020" 100.000 - 499.999 ±.030" 500.000 - 999.999 ±.050" 1000.000 ±.075"
 FRACTIONAL: 1/16" ±.0006" 1/8" ±.0012" 3/16" ±.0018" 1/4" ±.0024" 3/8" ±.0036" 1/2" ±.0054" 5/8" ±.0081" 3/4" ±.0121" 1" ±.0180"
 ANGULAR: ±.0044" ±1/64"
 HOLE: ±.0015"
 REPAIR: ALL BURRS & SHARP EDGES.
 MATERIAL: FINISH: SHAMP EDGES



HDI Instruments, LLC 4130 Directors Row Houston TX 77092
 Phone: 1-713-688-8555 Fax: 1-713-688-2228

HDI 9000 CHOKE CONSOLE MODEL A DETAILS					
DATE	PROJECT NUMBER	SCALE	LOCATION	REV	
2014-05-29	-	N/A	+A01	2	
DRAWING NUMBER: SK167				THIS SHEET: 2	NEXT SHEET: 3

UPDATED: 06/17/1500



NOTES:

1. MATERIAL TO BE MADE FROM 12GA STAINLESS STEEL.
2. CONFIRM DEVICE NONMENCLATURE FOR TEXT SHOWN IN RED

RELEASE	RELEASE DATE	RELEASE DESCRIPTION AND NOTES	DRAFTER	ENGINEER	APPROVER
2	2015-08-17	UPDATED FOR REVIEW	JMG		
1	2014-05-29	UPDATED FOR REVIEW	JMG		CSH

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION TO HDI INSTRUMENTS, LLC AND SHALL NOT BE REPRODUCED OR TRANSMITTED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HDI INSTRUMENTS, LLC.

UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
 DECIMAL FRACTIONAL ANGULAR
 .000 ±.005 .01/.04 .1/2°
 .01 ±.005 .1/16 .1/2°
 X .1 ±.1 REMOVE ALL BURRS & SHARP EDGES.
 MATERIAL: FINISH:



HDI Instruments, LLC 4130 Directors Row Houston TX 77092
 Phone: 1.713.688.8555 Fax: 1.713.688.2228

HDI
 9000 CHOKE CONSOLE MODEL A
 INSTRUMENT PANEL

DATE	PROJECT NUMBER	SCALE	LOCATION	REV
2014-05-29		N/A	+A01	2
				3
				END

DRAWING NUMBER: SK167

UPDATED 06/17 1500



9000 DUAL CHOKE CONSOLE QUESTIONNAIRE

Client: _____ Project Name: _____ Delivery Target: _____

9000 Dual Choke Console Series - Instrumentation

Pressure Gauges

Choke/Kill Pressure Range: _____ psi

Standpipe Pressure Range: _____ psi

Output Option: None 4-20mA
 Slave Gauge(s) (for redundant display)

Sensor Connection: 2" 1502 2" 2202 9/16" Autoclave
 Other: _____

Inline Cable (Length from Pressure Sensor to Gauge Display in Console):

Choke: _____ ft.

Kill: _____ ft.

Standpipe: _____ ft.

If using Slave Output for redundant display:

(Slave Cable Length from Gauge Display to Slave Display):

Choke: _____ ft.

Kill: _____ ft.

Standpipe: _____ ft.

Pump Stroke Counter

Number of Pumps: 1 2 3 4

Sensors: Micro-switch Proximity

Inline Cable: Gauge Display to Common Point (in Pump Room) _____ ft.
Common Point to each Pump _____ ft.

Choke Position Indicator

Sensor: Linear Retractable Rotary

Output Option: None 4-20mA

Inline Cable (Length from Sensor to Gauge Display):
_____ ft.

Remote Monitoring/Control: See V9000 Questionnaire

9000 Dual Choke Console Series - HPU

Nominal Choke Working Pressure: _____ psi

Swept/Choke Volume: _____ cubic inches

Choke Model: Cameron Expro Shaffer Swaco
 Other: _____

Back-Up Systems: None Accumulator Bottle

Minimum Choke Working Pressure: _____ psi

Installation Dimensions: _____ in. x _____ in.

External Hydraulic Connections: 1/2" Hard Pipe Hose

Specify Type of Hose Connection: _____

Specify Length (if part of HDI supply): _____ ft.

Hazardous Location Specification:

Third Party Testing: ABS DNV Other: _____

Notes, Exceptions, and Additional Information:

