

# WEIR CONCEPTS INC.

## PRODUCT GUIDE

### - WCM SUB-SURFACE CONTROL PANEL (WCMSSCP) -



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SCAN ME



**EXPECT QUALITY AND RELIABILITY**

using our brand name WCMSSCP



Manufactured at Weir Concepts Inc



Version 4.0

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**MADE IN ALBERTA, CANADA PRODUCTS**

Manufactured and assembled at our Edmonton based facility



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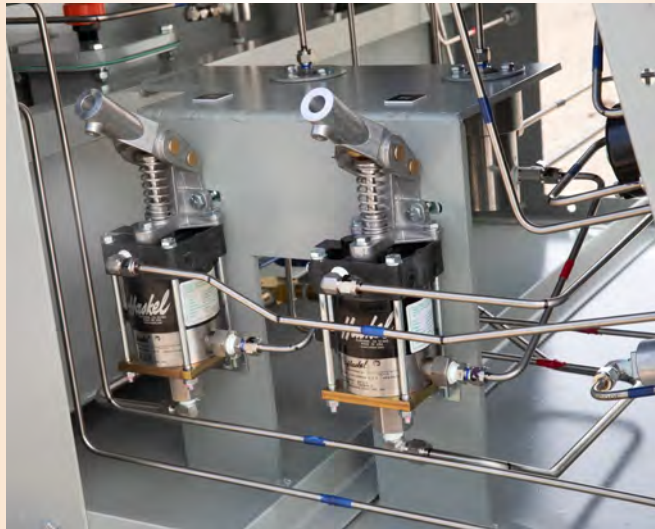
**DETAILS ARE THE DIFFERENCE BETWEEN ORDINARY AND EXCELLENCE**



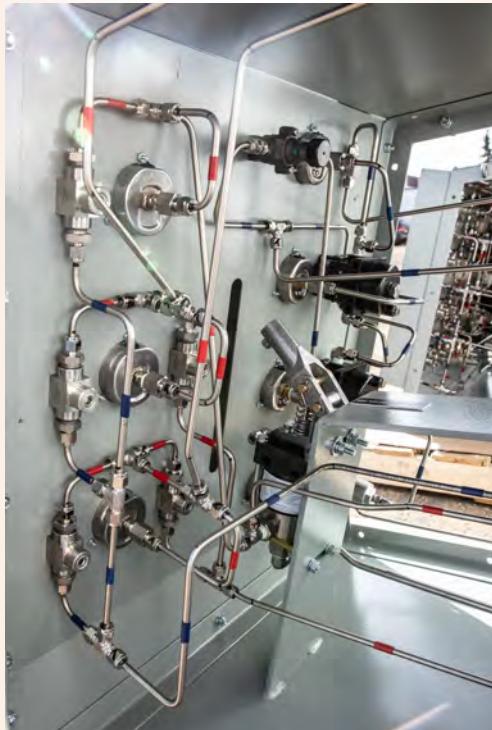
PROUDLY MANUFACTURED  
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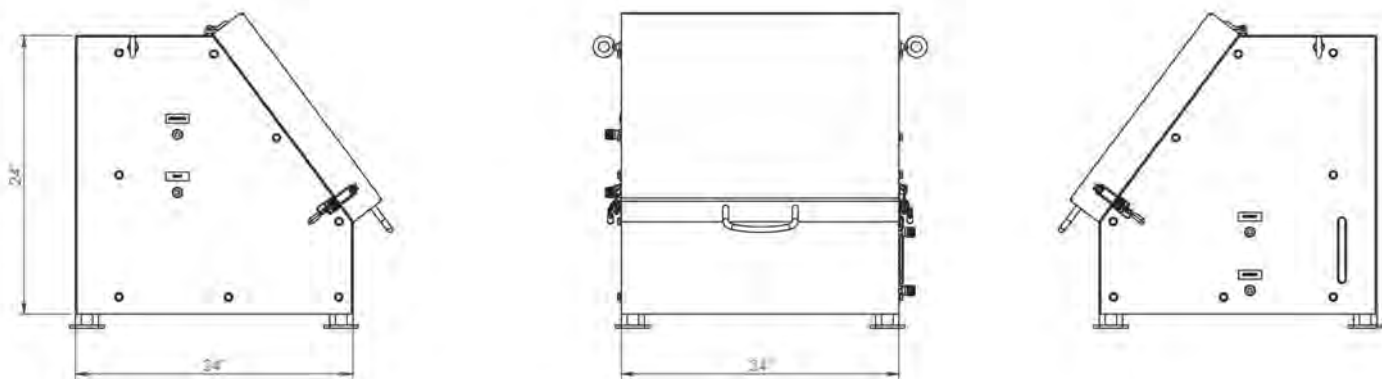
## Custom Orders



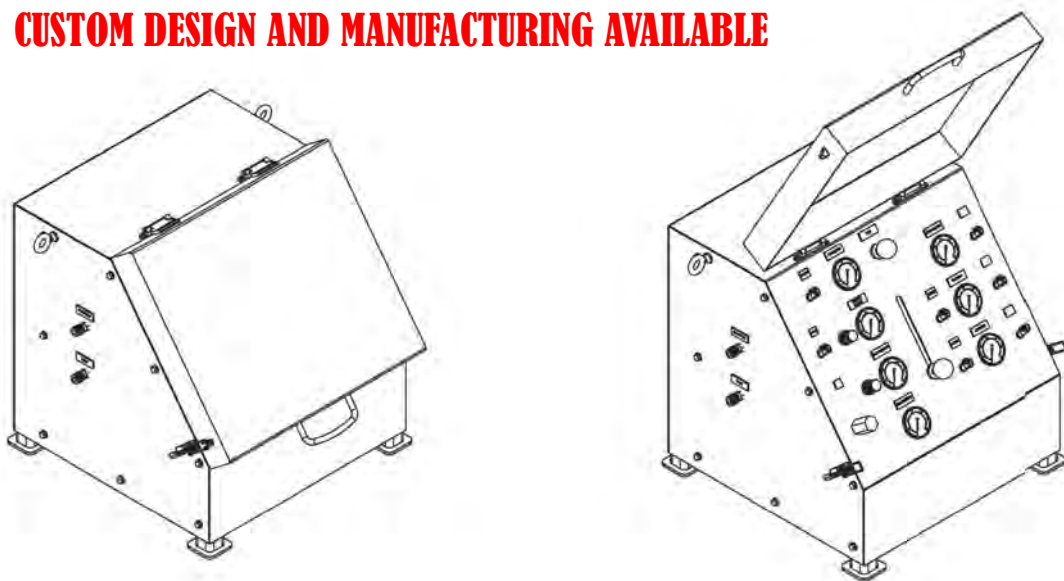
Operational Instructions Included



WCMSSCP SUB-SURFACE CONTROL PANEL



**CUSTOM DESIGN AND MANUFACTURING AVAILABLE**



## WCMSSCP - STANDARD CONFIGURATION

Max rated working pressure	10,000psi
Max rated input pressure	250psi
Input fluid	dry air
Input bulkhead connection size	1/4" tube
Pilot bulkhead connection size	1/4" tube
Number of pilots	1
Output fluid	Nuvi's HVI 13 or equivalent
Number of outputs	2
Output bulkhead connection size	1/4" tube
Failsafe function	loss of air, high pressure system relieves
Hydraulic reservoir nominal size	18.9 Litres / 6 U.S. gallons
Fluid level indicator	yes
Adjustable system pressure relief	1,000psi - 10,000psi
Backup hand pump	10,000psi
Approximate dry weight	340lbs



[illegible][illegible]

# OPERATIONAL INSTRUCTIONS WCMSSCP

The WCMSSP is a Sub Surface Control Panel designed to open and close the Sub Surface Safety Valve (SSSV) located below the surface on the wellhead.

Hydraulic fluid is pumped manually or automatically via the internal pneumatic pump. The SSSV can be closed remotely or locally by pushing the ESD button located on the front of the panel.

The system is controlled from the pneumatic signal.

## 1. Pneumatic signal pressure:

- A) Will allow user to operate the pump in MANUAL or AUTO.
- B) When pump is "auto" it will automatically pump up to the desired pressure if the pressure going to the actuator drops.

## 2. Loss of the pneumatic signal pressure will:

- A) Will cause the HI/LO Relay (HLR) to switch position, and bleed the hydraulic fluid from the SSSV back to the reservoir.
- B) Cuts off the air supply to the hydraulic pump. The pump is capable of output pressure in excess of 10,000 PSI. A Pressure Relief Valve, with a setpoint of 9500 PSI is located to protect the system from over pressure.
- C) The supply lines to the actuators are designed so that you can isolate each line without affecting the other. There are check valves on each discharge line so that if there are issues with one it will not affect the other.

**Isolations have been installed on the actuator supply so the user can perform maintenance on the pump with out bleeding down the system.**

## TROUBLE SHOOTING

### PUMP WILL NOT FUNCTION

- check air supply, valve is **ON**
- check system supply, valve is **ON**
- check pump supply, speed control is **OPEN**
- check pilot signal, speed control is **OPEN**
- check ESD button is **PULLED OUT**

### PUMP RUNNING, NO OUTPUT

- ensure drain valves are **CLOSED**
- ensure output valves are **OPEN**
- check hydraulic oil level
- check for blockage in lines
- check for air in lines
- ensure pump suction valve is **OPEN**  
(located outside the cabinet)

**The WCMSSP has several selector valves, and pressure indicating gauges. Below is the purpose:**

<b>AIR SUPPLY</b>	air supply pressure BEFORE onboard pressure regulator
<b>SYSTEM SUPPLY</b>	air supply pressure AFTER onboard pressure regulator
<b>SPEED CONTROL</b>	pneumatic pump speed control
<b>PUMP SUPPLY</b>	pump supply air pressure
<b>PILOT SIGNAL</b>	pneumatic signal from external control system (solenoid)
<b>PUMP OUTPUT</b>	pump output hydraulic pressure
<b>OUTPUT 1</b>	hydraulic pressure to SSSV 1
<b>OUTPUT 2</b>	hydraulic pressure to SSSV 2

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## WCMSSCP SUBSURFACE CONTROL PANEL



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