

WEIR CONCEPTS INC.

PRODUCT GUIDE

- WCM SUB-SURFACE CONTROL PANEL (WCMSSCP) -



EXPECT QUALITY AND RELIABILITY

using our brand name WCMSSCP



Manufactured at Weir Concepts Inc



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MADE IN ALBERTA, CANADA PRODUCTS

Manufactured and assembled at our Edmonton based facility

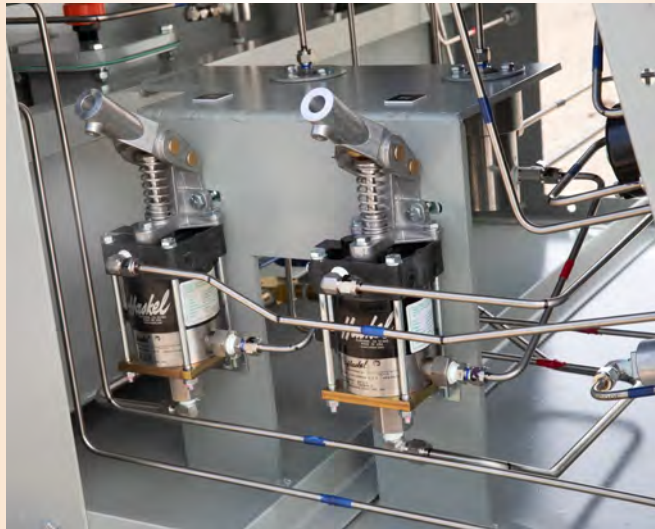
DETAILS ARE THE DIFFERENCE BETWEEN ORDINARY AND EXCELLENCE



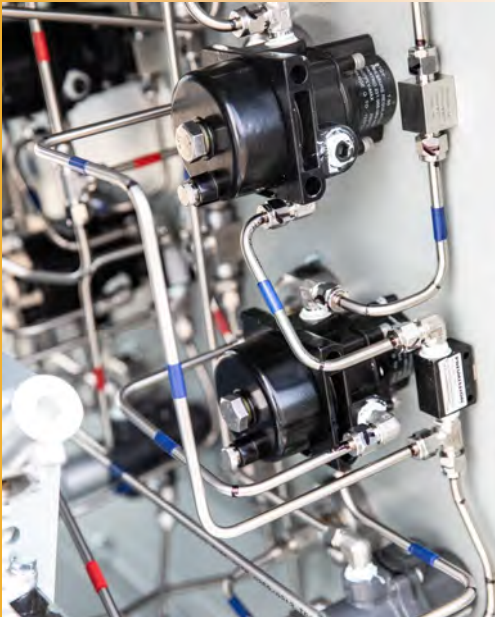
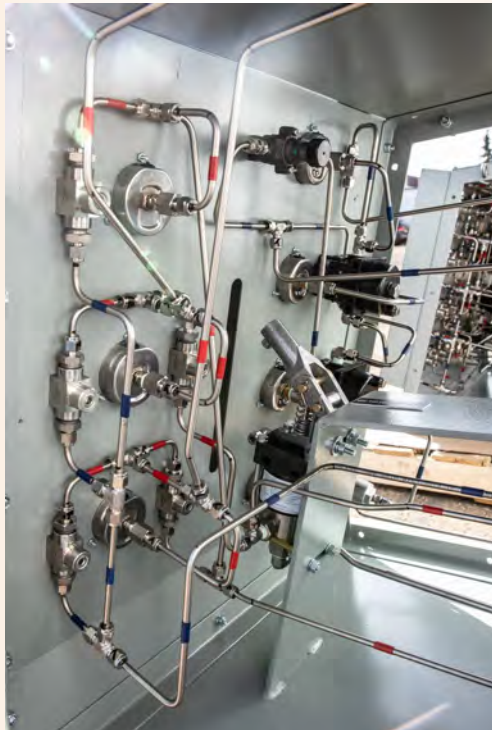
**PROUDLY MANUFACTURED
AT OUR EDMONTON
BASED FACILITY**

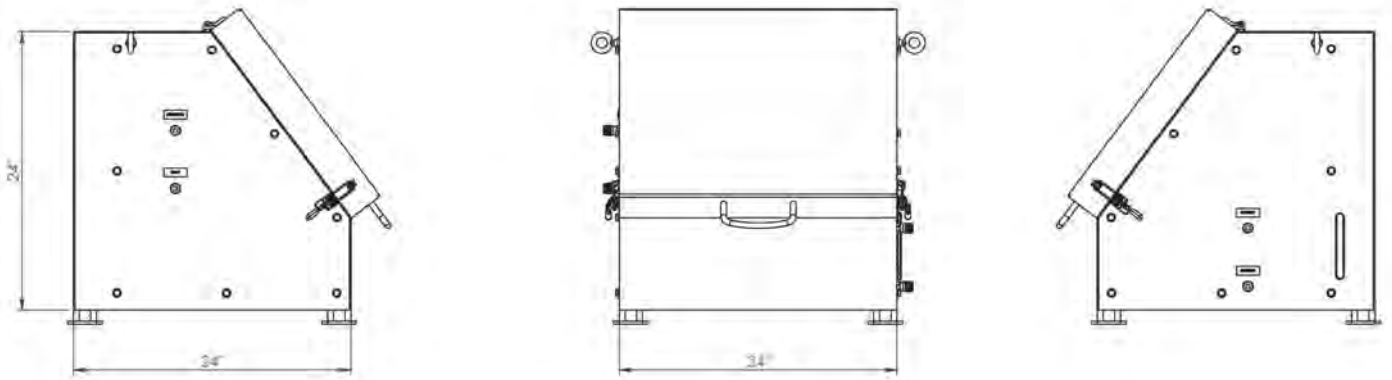


Custom Orders

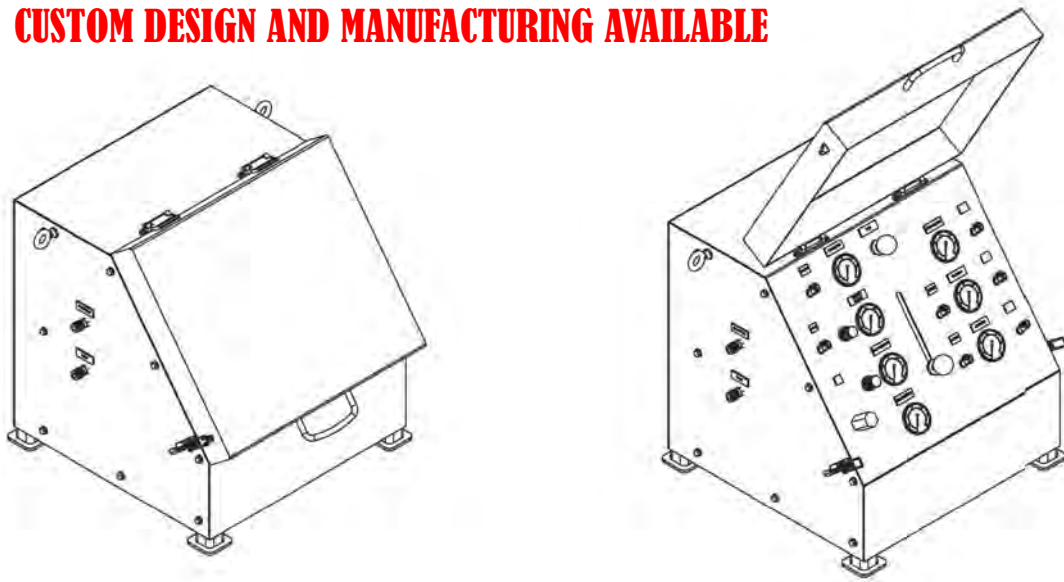


Operational Instructions Included





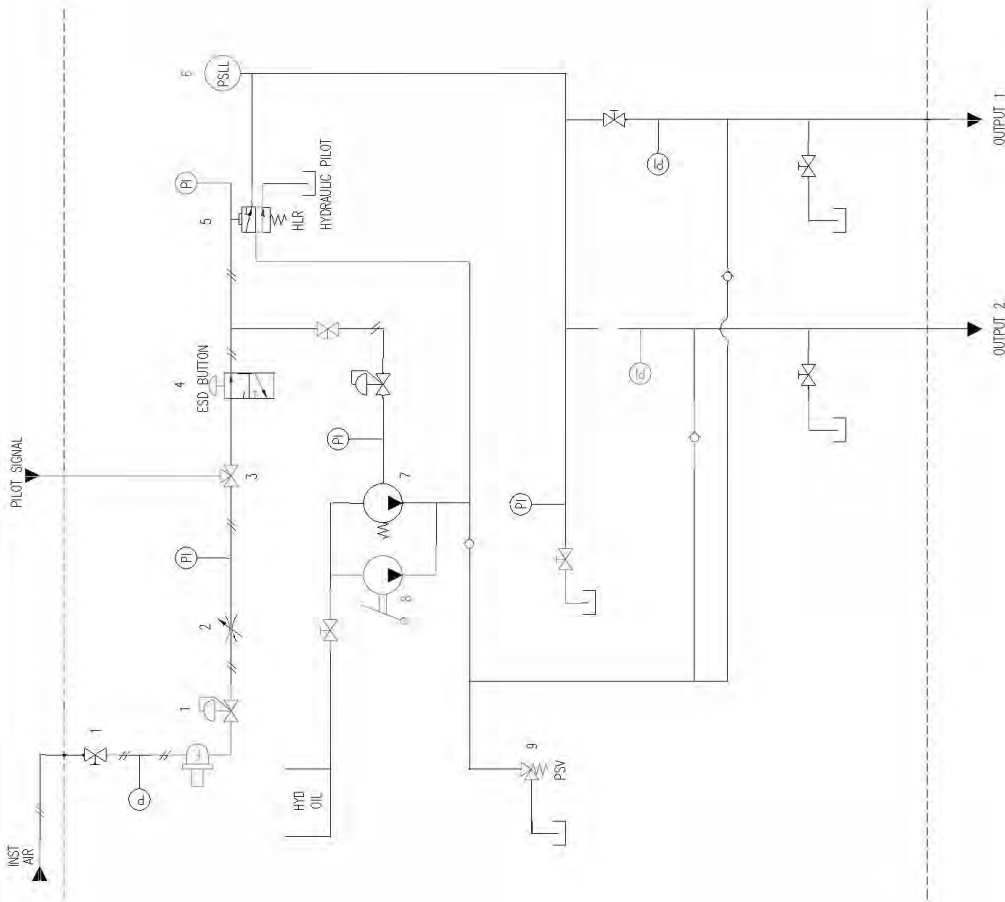
CUSTOM DESIGN AND MANUFACTURING AVAILABLE




WCMSSCP - STANDARD CONFIGURATION

<u>Max rated working pressure</u>	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

WCMSSCP PARTS LIST			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Air Regulator 0-125psi	WCT50
2	1	Speed Control Flow Valve	WC RE-02 8A
3	1	Fisher 3-Way Valve 0-20psi	167DA
4	1	ESD Button Amot (no spring)	CB 4057D020F1
5	1	HLR Hydraulic Interface Valve	N/C 7950-A 10Kpsi
6	1	Pressure Switch CCS	6900GZE22
7	1	Haskel Pump Airdriven SS110	MS-110
8	1	Haskel Kit, Hand Pump, Handle	26220-2
9	1	Haskel 10Kpsi SS Relief Valve	27741-2





DATE	1/29/2022	PROJECT NO.	T08	CLIENT	
FILE NUMBER		CON NO.		TITLE	
DATE		SHEET	1 OF 1	SCALE	
ENGINEER AND POINT STAMPS		DESIGNER		CHECKER	
DATE		REV		DESCRIPTION	
REV		REFERENCE DRAWINGS			
DRAWING NUMBER					

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:

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

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WCMSSCP SUBSURFACE CONTROL PANEL



Weir Concepts provides technical consulting services & delivers

SOLUTIONS FOR YOUR COMPANY NEEDS

- HELP DESK -

FOR YOUR SUPPORT AND SERVICE

24 hours a day, 7 days a week

NO CHARGE ON CALLS SERVICE

We offer technical assistance, product knowledge, and reliable trouble shooting

Brochures/Maintenance info available online www.weirconcepts.com

HELP DESK EXPERTISE PROVIDED AT WEIR CONCEPTS

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Version 3.0

