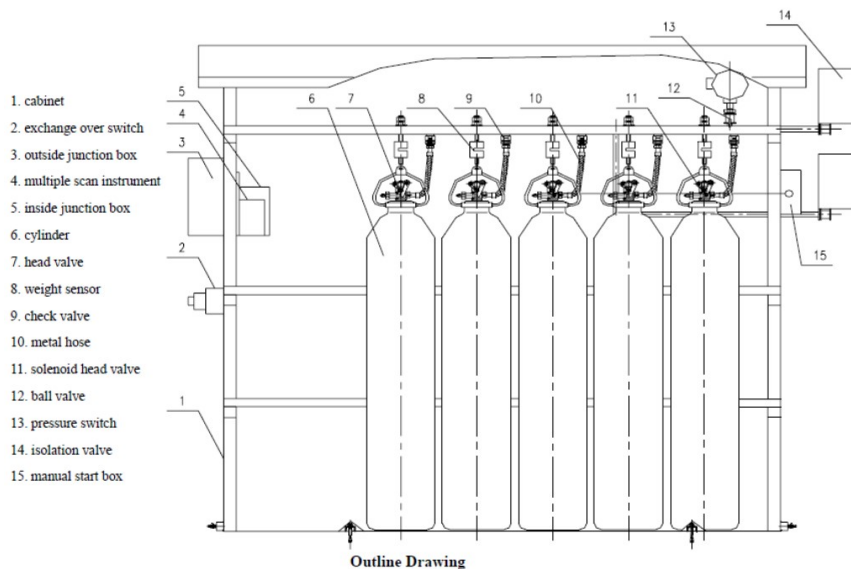
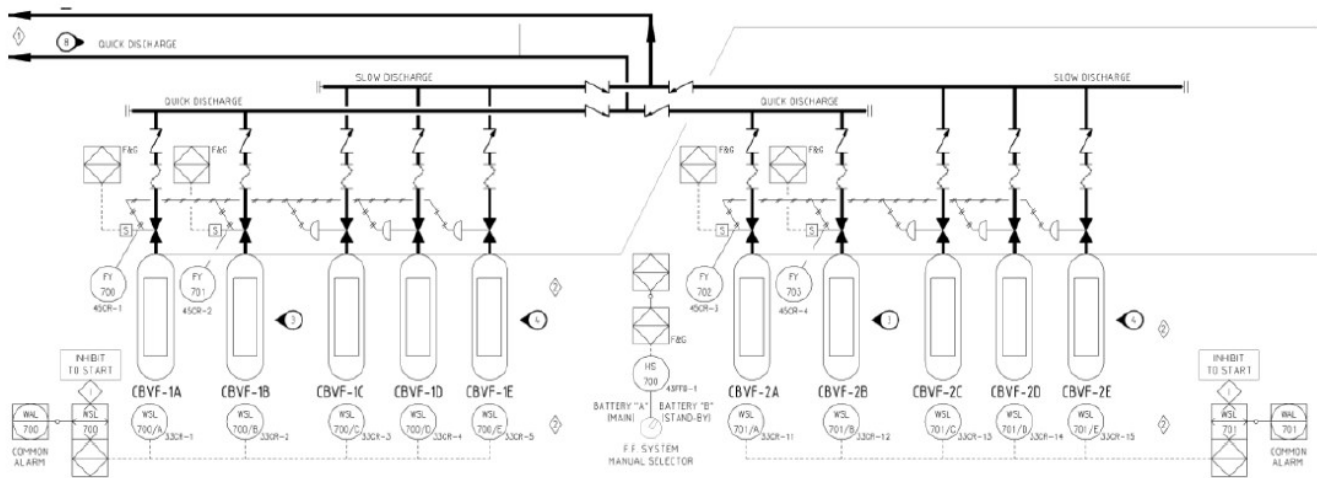


GTC (Gas Turbine driven Compressor Unit) unit CO2 cylinder weighing system

Description:

Each GTC unit having total 10 CO2 cylinders weight of 200 KG which is divided into two bank "A" is main & "B" is secondary bank. Each Cylinder have Load cell installation. These load Cells are connected in our make **GM-MI16-FLP** model multiple scan instrument of 16 Channel. It has output relay for each bank low pressure indication to GTC controller. All these Cylinders arrangement are inside a Container. The Container installed in Zone 2 hazardous area.

General arrangement scheme is as below:



Multi-Channel Weight Controller: GM-MI16-FLP

Flame-proof multiple scan instrument is used for displaying the cylinder weight acquired by Ex-proof weight sensors. It can monitor the cylinder weight automatically. If gas leaks, and the cylinder weight is lower than the pre-set lower limiting value, the multiple scan instrument will output switching value signal to alarm. Besides, if the whole scanning system has faults such as power down, circuit break, input signal beyond range, it will also output switching value alarm signal.

MAKE	MOKAL CORPORATION (Presently installed at Compressor stations)
Model	GM-MI16-FLP
Fundamental Error	0.1%FS
Display Method	LED
Channel No.	1~16
Discriminability	16 A/D converter
Relay Capacity	AC220V/1A
Alarm Output	Lower value, switching value
Power Supply	DC24V
System Accuracy	0.50%
Power Waste	10AV
Communication	RS486
Ambient TEMP	-15~50°C
Ambient Humidity	≤95%RH
Degree of Protection	IP65
Type of Protection	Ex d IIB T5 IP65

Terminal Details of a Multi-Channel Weight Controller:

CH1 VCC	CH1 IN-	CH1 IN+	CH1 GND	CH2 VCC	CH2 IN-	CH2 IN+	CH2 GND	CH3 VCC	CH3 IN-	CH3 IN+	CH3 GND	CH4 VCC	CH4 IN-	CH4 IN+	CH4 GND
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
weigh sensor 1				weigh sensor 2				weigh sensor 3				weigh sensor 4			

CH5 VCC	CH5 IN-	CH5 IN+	CH5 GND	CH6 VCC	CH6 IN-	CH6 IN+	CH6 GND	CH7 VCC	CH7 IN-	CH7 IN+	CH7 GND	CH8 VCC	CH8 IN-	CH8 IN+	CH8 GND
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
weigh sensor 5				weigh sensor 6				weigh sensor 7				weigh sensor 8			

CH9 VCC	CH9 IN-	CH9 IN+	CH9 GND	CH10 VCC	CH10 IN-	CH10 IN+	CH10 GND	CH11 VCC	CH11 IN-	CH11 IN+	CH11 GND	CH12 VCC	CH12 IN-	CH12 IN+	CH12 GND
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
weigh sensor 9				weigh sensor 10				weigh sensor 11				weigh sensor 12			

CH13 VCC	CH13 IN-	CH13 IN+	CH13 GND	CH14 VCC	CH1 4 IN-	CH1 4 IN+	CH1 4 GND	CH1 5 VCC	CH1 5 IN-	CH1 5 IN+	CH1 5 GND	CH1 6 VCC	CH1 6 IN-	CH1 6 IN+	CH1 6 GND
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
weigh sensor 13				weigh sensor 14				weigh sensor 15				weigh sensor 16			
OUT1 A	OUT1 B	OUT2 A	OUT2 B	PS -	PS+										
65	66	67	68	69	70										

Load Cell Details:



S type load cell

Max. supporting load: 250kg

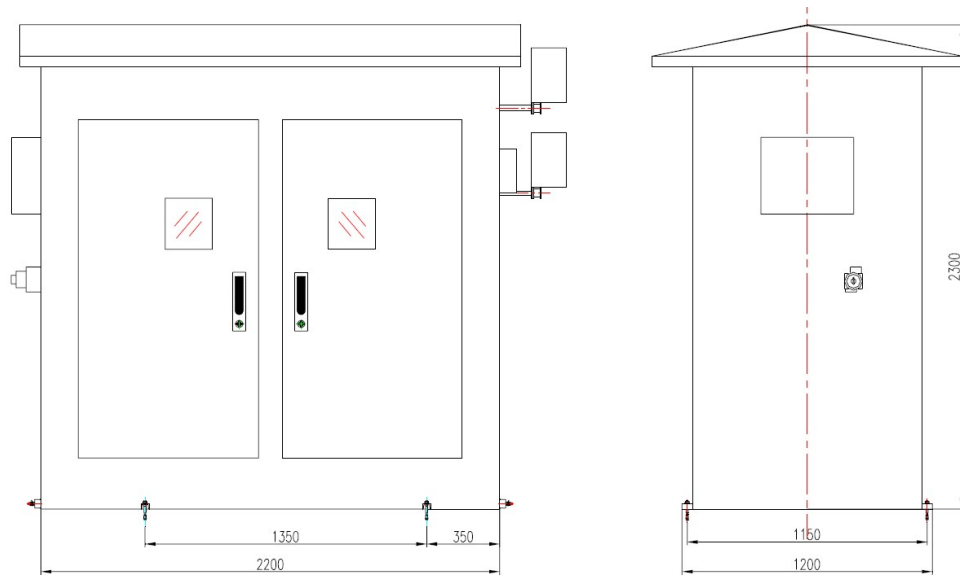
Elastic material: Stainless steel

Level of explosion proof: Ex nL II CT4

Connection: M12×1.75 (female)

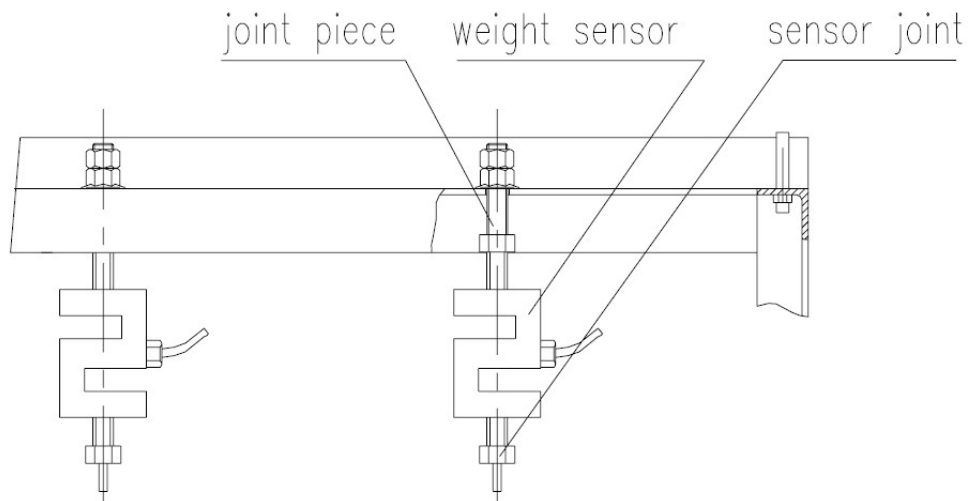
INSTALLATION:

1. Cabinet Installation



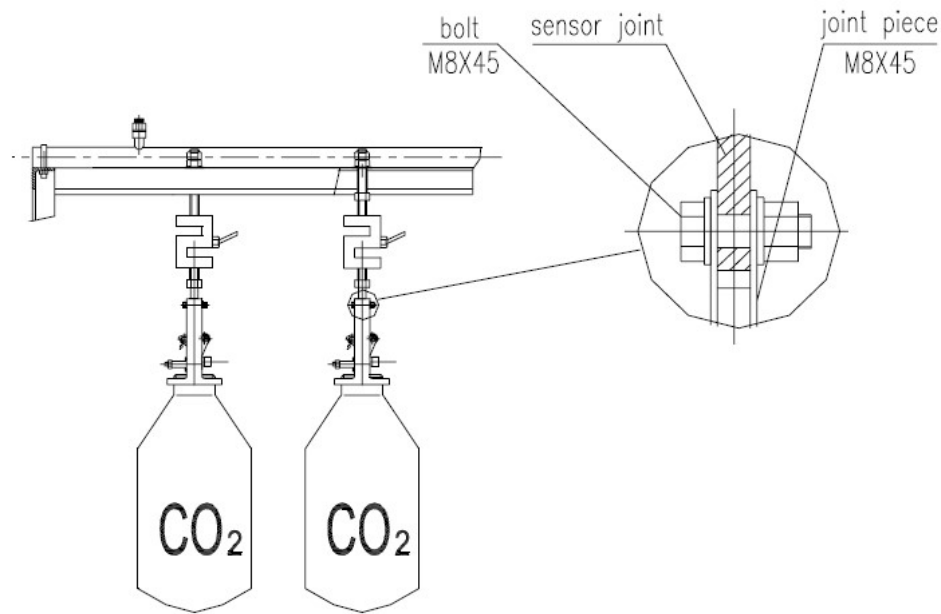
Lay the cabinet on site, drill 4 holes about 200mm deep on foundation ground according to pre-engineered foundation bolt dimension of cabinet. Lay the foundation bolt and screw down nut.

2. Weight Sensor Installation



- Connect the upper joint of weight sensor to frame joint piece with bolts and nuts.
- Adjust nuts to make sure all the weight sensors at a same height.
- Be sure the signal lines no damage and fix it on the frame in time.

3. Bottle Installation



- a) Screw the joint piece on neck of the bottle, be sure the directions of manual start device on head valve are same.
- b) Hang the bottle on weight sensor and fix it with screw. Be sure the operation side of manual start device on head valve faces to operator, and adjust height of bottles to the same.

Warning: Operate carefully to avoid head valve opening accidentally.

Photos:

