# dioxide PACIFIC



**Chemical Dosing Systems** 



### **Chemical Dosing Systems**

#### SYSTEM IDENT CODE SELECTION

Use the data sheets on pages 3-8 to select ident codes for:

- DS (Dosing Skid)
- DP (Dosing Pumps)
- DI (Dosing Components)
- DT (Dosing Tank)
- DC (Dosing Control)
- TS (Transfer Station)

Once the codes are selected, we can quickly provide a quotation. If you need assistance with selection of the codes, please contact us.

#### INTEGRATION AND INSTALLATION

All systems are provided with documentation for integration of the dosing system into your process: GA (General Arrangement) drawings; 3D Model; Electrical Wiring Diagram, and Operation Manual.

All systems are tested and pre-commissioned prior to delivery to ensure quick start-up without faults. Installation and commissioning can be done by your staff using the documentation provided. If you would like Dioxide Pacific to install and commission, we are happy to help.

#### **HIGHEST QUALITY COMPONENTS**

Dioxide Pacific use high quality, industrial grade components for lowest life cycle cost.

#### MAINTENANCE AND SPARE PARTS

All systems are provided with a comprehensive spare parts list and Dioxide Pacific maintains a large spare parts inventory.

# **Dosing Skid**

DS	Dos	sing S	kid									
		Pum	ps									
	1	Duty										
	2			Standby								
	3	Duty		Duty/Standby								
				lowrate								
		15		20 L/hr (0 – 5 GPH)								
		20			/hr (5 -		/					
		25					25 GPH)					
		40	500				– 250 GPH)					
						vork material						
			U		/C Sch							
			С		/C Sch	80						
			P	PVI								
			<u> </u>		TFE							
			F	Car		on steel, PFA lined						
				_		astomer						
				E	EPDM EPAMERA							
				F		FPM/FKM PTFE						
				Р	PIFE							
					LID	Mounting						
					HB HC	HDPE backboard HDPE cabinet						
					FF		erstrut frame					
					SF		frame					
					SC		cabinet					
					30	33	Splash protection					
						0	No splash protection – mounted directly on backboard					
						1	Localised splash protection for pumps only					
						2	Removable splash protection					
						3	Hinged splash protection (doors)					
							Leak detection					
							No leak detection					
							Leak detection switch in sump – HC model only					
							Leak detection switch in additional trip tray					
	•	1	•	•	1	•						
DS	2	15	U	F	HC	2	0					

# **Dosing Pumps**

DP	Dos	ing p	umps								
		Man	ufactı	ırer							
	Р	Pron	ninent								
	G	Grur	Grundfos								
	M	Milto	n Roy								
	F		Issue								
	0	Othe									
			Type								
		D	Diaph								
			Perist								
		0	Other	•							
				Flow	rate						
				Spec	ify m	ax flov	vrate	in L/	hr or	GPH	
					Pre	ssure					
					Spe	cify ma	ax pr	essu	re in	bar or psi	
						Elast					
					ш	EPDI					
					IL.	FPM/					
					Р	PTFE					
									nd n	naterial	
						PV	PVI				
						PC	PV	<u> </u>			
						PP	PP				
						TT	PTI				
						SS	Sta		s Ste	el	
								Inp			
							0		nual ı		
							1	As	0 + P	Pulse input	
							2	As		-20mA input	
										puts	
								0		outputs	
								1		ılt relay	
								2		1 + 4-20mA calculated flow output	
								3	As '	1 + 2	
										Diaphragm rupture output	
									0	No output or not applicable	
									1	Diaphragm rupture output	
										Degassing solenoid	
										0 No solenoid	
						1				1 Solenoid 24VDC	
DP	Р	D			F	PV	2	1	1	0	

# **Dosing Components**

DI Do	sina c	ompo	onent	s									
	osing components  Calibration cylinder												
0		No calibration cylinder											
1			ration cylinder sized for 1.5 min of drop test										
	Carrie		ssure gauge with gauge guard										
	G0			auge									
				non gauge									
	G2			e per pump									
		Ouu		Pressure load									
		10	No pressure load valve										
				Common pressure load valve									
					load								
			1 100		essur			pun	<u>'P</u>				
			P0		press			valv	е —				
			P1						ef valv	/ <del>C</del>			
			P2						er pur				
					Puls					<u>··r</u>			
				0					oener				
				1					n dam	pen	er		
				2					er pei				
											sure relief		
					0		flow						
					1	Flo	w sw	itch	on ea	ch p	ressure relief		
									onito				
						0	No	flow	monit	orin	g		
				1 Common flow monitoring									
					2 Flow monitoring per pump								
						Flow Monitoring Type							
						0 None							
						1 Magnetic flow					v meter		
							2		w swit				
							3	Flo			ulse output		
									Flus				
											ng points		
								1			points on pumps		
								2	As 1		ushing points on skid		
									-		rier/Dilution Water		
											carrier/dilution water		
									1		rier water line on skid		
											1 + rotameter and diaphragm valve		
									3		2 + solenoid with bypass		
									4		2 + low flow switch		
									5		3 + low flow switch		
									6	AS	1 + Option 5 mounted in external cabinet		
										^	Strainer		
	III									0	No strainer		
	1									2	1 x strainer		
			l	I	I	l	I			Z	2 x strainer		
DI 1	G1	L1	P1	1_	10	Δ.	1_	2	5	1			
	O I	- N	A.		10	0			<b>J</b>				

## **Dosing Tank**

Volume   Specify nominal volume in L or GAL   Material   M0   HDPE   M1   HDPE   M1   HDPE   M2   Rotomoulded MDPE   M3   Fiberglass   M4   Steel   M5   Stainless Steel   M6   BC/Tote with spill pallet   M8   BC/Tote with iberglass bund   M9   BC/Tote with iberglass bund	DT	Dosii	ng tank	(									
Specify nominal volume in L or GAL   Material													
Material   MO   HDPE   M1   HDPE double skinned   M2   Rotomoulded MDPE   M3   Fiberglass   M4   Steel   M5   Stainless Steel   M6   IBC/Tote with spill pallet   M8   IBC/Tote with fiberglass bund   M9   IBC/Tote with HDPE bund   Colour   B   Black   Natural (opaque)   W   White   P   Painted   Visual level indication   NVI   No level indication (opaque tanks visual possible)   STO   Site gauge   STI   Site gauge with isolation   MLI   Magnetic level indicator   Discrete level measurement (capacitive measurement)   L0   No discrete level measurement (capacitive measurement)   L1   1   x switch: low level   L2   2   x switch: low low, low and high level   L4   3   x switch: low low, low, high and high high level   L4   3   x switch: low low, low, high and high high level   Continuous level measurement   C1   4-20mA from tank mounted ultrasonic   C2   4-20mA from pressure transducer (gauge guard mounted)   Inlet and overflow sizing   Not applicable   15   0.5° inlet, 3° overflow   2° inlet, 3° overflow   3° inlet, 3° overf					ninal vol	ume in	L or G	AL					
M0 HDPE M1 HDPE double skinned M2 Rotomoulded MDPE M3 Fiberglass M4 Steel M5 Stainless Steel M6 IBC/Tote M7 IBC/Tote with spill pallet M8 IBC/Tote with fiberglass bund M9 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) L0 No discrete level measurement (capacitive measurement) L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low low, low, and high level L4 3 x switch: low low, low, and high level L5 4 x switch: low low, low, high and high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from standpipe mounted ultrasonic C4 4-20mA from standpipe mounted ultrasonic C5 4-20mA from standpipe mounted ultrasonic C6 4-20mA from standpipe mounted ultrasonic C7 4-20mA from standpipe mounted ultrasonic C8 4-20mA from standpipe mounted ultrasonic C9 4-20mA from standpipe mounted ultra													
M1 HDPE double skinned M2 Rotomoulded MDPE M3 Fiberglass M4 Steel M5 Stainless Steel M6 IBC/Tote with spill pallet M8 IBC/Tote with spill pallet M8 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low low, low and high level L2 2 x switch: low low, low and high level L3 3 x switch: low, high and high high level L4 3 x switch: low, high and high high level Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing N0 Not applicable 15 0.5° inlet, 1° overflow Q1 1.5° inlet, 1° overflow Q2 1° inlet, 3° overflow Q1 1.5° outlet Q2 1° inlet, 3° overflow Q1 1.5° outlet Q2 1° inlet, 3° overflow Q1 1.5° outlet Q2 1° outlet Weight Cells No weight cell Weight Cells No weight cell			MO										
M2 Riberglass M4 Steel M5 Stainless Steel M6 IBC/Tote with spill pallet M8 IBC/Tote with fiberglass bund M9 IBC/Tote with HDPE bund Colour B B Black N Natural (opaque) W White P Painted  Visual level indication NI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) No discrete level measurement L1 1 x switch: low level L2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low low, low and high level L5 4 x switch: low low, low and high level Continuous level measurement Con No continuous level measurement Con No continuous level measurement Con No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing Not applicable 15 0.5' outlet 15 1' inlet, 1.5' overflow Outlet valve sizing 15 0.5' outlet 40 1.5' inlet, 3' overflow Outlet valve sizing 15 0.5' outlet Weight Cells No weight cell			M1	HDP									
M3 Fiberglass M4 Steel M5 Stainless Steel M6 IBC/Tote with spill pallet M7 IBC/Tote with fiberglass bund M8 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) Sto Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low level L2 2 x switch: low low, low and high level L3 3 x switch: low low, low and high high level L4 3 x switch: low low, low, high and high high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from magnetic level indicator C4 4-20mA from magnetic level indicator C5 4-20mA from magnetic level indicator C6 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing 15 0.5" inlet, 1" overflow 25 1" inlet, 1" overflow 26 1" inlet, 3" overflow 27 inlet, 3" overflow 28 1" inlet, 1" overflow 29 1" inlet, 3" overflow C0 Utulet valve sizing 15 0.5" outlet Weight cell Weight cell Weight cell			M2	Roto	moulded	d MDP	E						
M4 Steel M5 Stainless Steel M6 IBC/Tote with spill pallet M8 IBC/Tote with fiberglass bund M9 IBC/Tote with fiberglass bund M9 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low low, low and high level L2 2 x switch: low and high level L3 3 x switch: low low, low and high high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from magnetic level indicator C4 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing 0 Not applicable 15 0.5' inlet, 1' overflow 10 1.5' inlet, 1' overflow 10 2' inlet, 3' overflow 10 2' outlet 11 Weight Cells 0 No weight cell			М3										
MS Stainless Steel M6 IBC/Tote with spill pallet M7 IBC/Tote with fiberglass bund M9 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) L1 1 x switch: low low, low and high level L2 2 x switch: low and high level L3 3 x switch: low, loid, and high high level L4 3 x switch: low, low, high and high high level L5 4 x switch: low, low, low, ligh and high high level Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C3 4-20mA from tank mounted ultrasonic C4 4-20mA from magnetic level indicator C5 3-20mA from magnetic level indicator C6 4-20mA from magnetic level indicator C9 1 -20mA from magnetic level C9													
M6 IBC/Tote with fiberglass bund M7 IBC/Tote with fiberglass bund M8 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) 1. No discrete level measurement 1. 1 x switch: low level 1. 2 x switch: low and high level 1. 3 x switch: low low, low, high and high high level 1. 4 3x switch: low low, low, high and high high level 1. 5 4 x switch: low low, low, high and high high level 1. 6 Continuous level measurement 1. 1 4-20mA from tank mounted ultrasonic 1. 2 4-20mA from standpipe mounted ultrasonic 1. 3 4-20mA from standpipe mounted ultrasonic 1. 4-20mA from magnetic level indicator 1. 4-20mA from standpipe mounted ultrasonic 1. 4-20mA from magnetic level indicator 1. 4-20mA from pressure transducer (gauge guard mounted) 1. Inlet and overflow 2. 1 "inlet, 1.5" overflow 2. 2 "inlet, 3" overflow 3. 1.5" inlet, 1" overflow 4. 1.5" outlet 4. 1.5" outlet 4. 1.5" outlet 4. 20 tutlet 4. 3 "Weight Cells 4. Weight Cells 4. Weight Cell						el							
M8 IBC/Tote with spill pallet IBC/Tote with fiberglass bund M9 IBC/Tote with HDPE bund Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low level L2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low low, low, high and high level L5 4 x switch: low low, low, high and high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator O4 4-20mA from magnetic level indicator O5 No continuous level measurement C1 4-20mA from magnetic level indicator O6 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow Inlet and overflow S50 2" inlet, 1" overflow Outlet valve sizing 15 0.5" outlet 25 1" outlet Weight Cells Weight Cells O No weight cell 1 Weight Cell													
BBC/Tote with HbPE bund   Colour						n spill r	pallet						
BC/Tote with HDPE bund   Colour								und					
Colour B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) L No discrete level measurement L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low ow, low and high level L4 3 x switch: low, low, low and high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing Not applicable I5 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 25 1" inlet, 1.5" overflow 25 1" inlet, 3" overflow 25 1" outlet 25 1" outlet 26 1-5" outlet 27 outlet 28 1" outlet 29 2" outlet 20 No weight cell Veight cell Veight cell													
B Black N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low low, low, and high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from tank mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing Not applicable 15 0.5" inlet, 1" overflow 10.5" inlet, 3" overflow 10.5" outlet 15 0.5" outlet 25 1" outlet 25 1" outlet 25 1" outlet 26 2" outlet Weight Cells No weight cell Weight Cell													
N Natural (opaque) W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) L0 No discrete level measurement L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low, low, low and high level L4 3 x switch: low, low, low, high and high high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from standpipe mounted ultrasonic C4 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing 00 Not applicable 15 0.5" inlet, 1.5" overflow 15 0.5" inlet, 1.5" overflow 2" inlet, 3" overflow 0 Outlet valve sizing 15 0.5" outlet 40 1.5" outlet 40 No weight cell 40 No weight cell				В									
W White P Painted  Visual level indication NVI No level indication (opaque tanks visual possible) STO Site gauge STI Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement) Lo No discrete level measurement L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low low, low, high and high high level L5 4 x switch: low low, low, high and high high level Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted) Inlet and overflow sizing ON Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 26 11 inlet, 1.5" overflow 27 inlet, 3" overflow Cuttlet valve sizing 15 0.5" outlet 10 1.5" outlet 10 1.5" outlet 11 0 1.5" outlet 11 0 1.5" outlet 12 0 1.5" outlet 13 0 1.5" outlet 14 0 1.5" outlet 15 0 1.5" outlet 16 0 1.5" outlet 17 on weight cells 18 0 1.5" outlet 19 0 1.5" outlet 19 0 1.5" outlet 10 0 1.5" outlet 11 0 1.5" outlet 11 0 1.5" outlet 12 0 1.5" outlet 13 0 1.5" outlet 14 0 1.5" outlet 15 0 1.5" outlet 16 0 1.5" outlet 17 0 1.5" outlet 18 0 1.5" outlet 19 0 1.5" outlet						l (opac	iue)						
Painted   Visual level indication   NVI   No level indication (opaque tanks visual possible)   STO   Site gauge   STI   Site gauge with isolation   MLI   Magnetic level indicator   Discrete level measurement (capacitive measurement)   L0   No discrete level measurement   L1   1 x switch: low level   L2   2 x switch: low and high level   L3   3 x switch: low low, low wand high level   L4   3 x switch: low low, low, low high and high high level   L5   4 x switch: low low, low, low, lay hand high high level   Continuous level measurement   C1   4-20mA from tank mounted ultrasonic   C2   4-20mA from standpipe mounted ultrasonic   C3   4-20mA from pressure transducer (gauge guard mounted)   Inlet and overflow sizing   00   Not applicable   15   0.5" inlet, 1" overflow   2" inlet, 3" overflow   2" outlet valve sizing   15   0.5" outlet   40   1.5" outlet						\ .  - S. 6	<u> / </u>						
Visual level indication						t							
NVI No level indication (opaque tanks visual possible)  STO Site gauge STI Site gauge with isolation  MLI Magnetic level indicator  Discrete level measurement (capacitive measurement)  L0 No discrete level measurement  L1 1 x switch: low level  L2 2 x switch: low and high level  L3 3 x switch: low low, low and high level  L4 3 x switch: low low, low and high level  L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C0 No continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  20 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  25 1" outlet  40 1.5" outlet  40 1.5" outlet  50 2" outlet  Weight Cells  No weight cell  Weight cell							al leve	indica	ation				
STO Site gauge with isolation MLI Magnetic level indicator  Discrete level measurement (capacitive measurement)  L0 No discrete level measurement  L1 1 x switch: low level  L2 2 x switch: low and high level  L3 3 x switch: low low, low and high level  L4 3 x switch: low low, low, and high high level  L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  00 Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  40 1.5" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  25 1" outlet  40 1.5" outlet  50 2" outlet  Weight Cells  0 No weight cell  Weight cell					NVI								
STI Site gauge with isolation  Magnetic level indicator  Discrete level measurement (capacitive measurement)  L0 No discrete level measurement  L1 1 x switch: low level  L2 2 x switch: low and high level  L3 3 x switch: low, low, low, and high level  L4 3 x switch: low, low, high and high high level  L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C0 No continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from magnetic level indicator  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  40 1.5" inlet, 3" overflow  50 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  25 1" outlet  40 1.5" outlet  50 2" outlet  Weight Cells  No No weight cell  1 Weight cell									(-)				
MLI Magnetic level indicator  Discrete level measurement (capacitive measurement)  L0 No discrete level measurement  L1 1 x switch: low level  L2 2 x switch: low and high level  L3 3 x switch: low low, low and high level  L4 3 x switch: low low, high and high high level  L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C0 No continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  25 1" inlet, 3" overflow  50 2" inlet, 3" overflow  50 2" inlet, 3" overflow  25 1" outlet  40 1.5" outlet  50 2" outlet  Weight Cells  No No weight cell  1 Weight cell					STI			with isc	plation				
Discrete level measurement (capacitive measurement)  L0 No discrete level measurement  L1 1 x switch: low level  L2 2 x switch: low and high level  L3 3 x switch: low low, low and high level  L4 3 x switch: low, high and high high level  L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  1.5" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  20 1.5" outlet  21 1" outlet  Weight Cells  No weight cell  Weight cell					MLI								
L0 No discrete level measurement L1 1 x switch: low level L2 2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low low, low, high and high high level L5 4 x switch: low low, low, high and high high level  Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 25 1" inlet, 3" overflow 26 2" inlet, 3" overflow 27 inlet, 3" overflow 28 10 0.5" outlet 29 1" outlet 20 1.5" outlet 20 1.5" outlet 21 1.5" outlet 22 1" outlet 23 1" outlet 34 1.5" outlet 45 0.5" outlet 46 1.5" outlet 47 1.5" outlet 48 1.5" outlet 49 1.5" outlet 40 1.5" outlet 40 1.5" outlet						J							
L2 2 x switch: low and high level L3 3 x switch: low low, low and high level L4 3 x switch: low, high and high high level L5 4 x switch: low low, low, high and high high level  Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow  Outlet valve sizing  Outlet valve sizing 15 0.5" outlet 25 1" outlet 40 1.5" outlet 40 1.5" outlet 50 2" outlet Ueight Cells 0 No weight cell 1 Weight cell						LO							
L2 2 x switch: low and high level L3 3 x switch: low, low, low and high level L4 3 x switch: low, high and high high level L5 4 x switch: low low, low, high and high high level  Continuous level measurement C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow 50 2" inlet, 3" overflow 50 2" inlet valve sizing 15 0.5" outlet 25 1" outlet 40 1.5" outlet 50 2" outlet 50 2" outlet 15 0.5" outlet 16 0 No weight cell 17 Weight Cells 18 0 No weight cell 18 0 No weight cell						L1	1 x s\	vitch: Id	ow level				
L3 3 x switch: low low, low and high level L4 3 x switch: low, high and high high level L5 4 x switch: low low, low, high and high high level  Continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow 50 2" inlet valve sizing  15 0.5" outlet 40 1.5" outlet						L2	2 x s\	vitch: lo	ow and high level				
L4 3 x switch: low, high and high high level  Continuous level measurement  C0 No continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  00 Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  20 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  20 1" outlet  20 1" outlet  21 0.5" outlet  22 0.5" outlet  23 0.5" outlet  25 0.5" outlet  26 0.5" outlet  27 0.5" outlet  28 0.5" outlet  29 0.5" outlet  20 0.5" outlet  20 0.5" outlet						L3							
L5 4 x switch: low low, low, high and high high level  Continuous level measurement  C1 4-20mA from tank mounted ultrasonic  C2 4-20mA from standpipe mounted ultrasonic  C3 4-20mA from magnetic level indicator  C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  00 Not applicable  15 0.5" inlet, 1" overflow  25 1" inlet, 1.5" overflow  40 1.5" inlet, 3" overflow  50 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  25 1" outlet  40 1.5" outlet  27 outlet  Weight Cells  0 No weight cell  1 Weight cell						L4							
C0 No continuous level measurement C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing O0 Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet 25 1" outlet 40 1.5" outlet						L5							
C1 4-20mA from tank mounted ultrasonic C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing 00 Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet 25 1" outlet 40 1.5" outlet								Conti	inuous level measurement				
C2 4-20mA from standpipe mounted ultrasonic C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  00 Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow  Outlet valve sizing 15 0.5" outlet 25 1" outlet 40 1.5" outlet 40 1.5" outlet 50 2" outlet  Weight Cells 0 No weight cell 1 Weight cell							C0	No co	ontinuous level measurement				
C3 4-20mA from magnetic level indicator C4 4-20mA from pressure transducer (gauge guard mounted)  Inlet and overflow sizing  00 Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 1.5" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow  Outlet valve sizing 15 0.5" outlet 25 1" outlet 40 1.5" outlet							C1	4-20n	mA from tank mounted ultrasonic				
Inlet and overflow sizing  On Not applicable 15 0.5" inlet, 1" overflow 25 1" inlet, 3" overflow 40 1.5" inlet, 3" overflow 50 2" inlet, 3" overflow  Outlet valve sizing 15 0.5" outlet 25 1" outlet 40 1.5" outlet							C2	4-20n	mA from standpipe mounted ultrasonic				
Inlet and overflow sizing   00							C3	4-20n	mA from magnetic level indicator				
Not applicable   15							C4	4-20n	mA from pressure transducer (gauge guard mounted)				
15													
25								00					
40 1.5" inlet, 3" overflow  50 2" inlet, 3" overflow  Outlet valve sizing  15 0.5" outlet  25 1" outlet  40 1.5" outlet  50 2" outlet  Weight Cells  No weight cell  Weight cell													
Dutlet valve sizing   15								25					
Outlet valve sizing   15								40					
15								50					
25 1" outlet 40 1.5" outlet 50 2" outlet  Weight Cells 0 No weight cell 1 Weight cell													
40 1.5" outlet  50 2" outlet  Weight Cells  0 No weight cell  1 Weight cell													
2" outlet  Weight Cells  No weight cell  Weight cell													
Weight Cells  O No weight cell  Weight cell													
0 No weight cell 1 Weight cell													
1 Weight cell		1											
			111										
			111										
			1						Actuated valve				
0 No actuated valves				1									
1 Actuated valve on tank outlet	1			1					1 Actuated valve on tank outlet				
				4	A								
DT M0 B STI L4 C2 25 25 0 1	DT		MO	В	STI	L4	C2	25	25 0 1				

# **Dosing Control**

DC	Dos	ing Cont	rol									
		Enclos	ure									
	Т	Thermo	plas	plastic IP66								
	S	Stainles	ss ste	s steel 316, IP65								
	F	FRP IP	66	·								
	S	Powder	coa	ted ste	l, IP56							
			PL	PLC								
		MIC	Alle	Allen Bradley MicroLogix 1400								
			Alle	en Brac	ey Control	Logix 1756						
		COM				ctLogix 1769						
		PAN		nasoni								
		SCH	Sch	neidei	M340							
		SIE		mens :								
		KO6		/o DL0	<u> </u>							
		K45	Koy	<u>/o 450</u>								
				НМІ								
			0			and switches only						
			1			7.5 inch TFT colour						
			2			anelview Plus 700 - 6.5 inch TFT colour						
			3			nelview Plus 1250 - 12 inch TFT colour						
			4			GT 12 inch TFT colour						
			5	Utico		C 10 inch TFT colour						
					Form							
				1F	Form 1							
				2A	Form 2a							
				2B	Form 2b							
				3A	Form 3a							
				3B	Form 3b							
						/ELV Separation						
						t applicable						
						voltages in one panel (24VDC, 220-240VAC, 415-480VAC)						
					SV LV	and ELV separate panels (24VDC separate to 220-480VAC)						
					0	Mounting						
					0	Wall mount						
					1	Floor mount Entry						
						0 Bottom cable entry						
						1 Side cable entry						
						2 Top cable entry						
	Ī	I	I	I	I	1 op cable entry						
DC	F	CON	1	1F	AV 0	0						
- DC		CON		TI.	AV U	V						

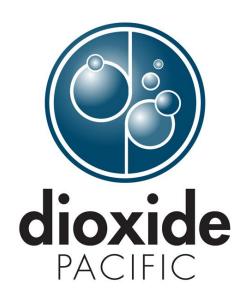
## **Transfer Station**

TS	Tra	nsfer S	Statio	n						
		Tank	ank feeds							
	1	1 tank	k fed							
	2	2 tanl	ks fe	b						
	3	3 tanl	ks fe	b						
			Iso	lation v	valves on feeds					
		M	Mar	nual						
		Α	Act	uated						
				Tank level indication						
			1	Display of level switches						
			2	Display of tank volumes						
			3	1+2						
					Transfer power supply					
				SF	1 phase, 240VAC plug with isolator					
				TF	3 phase, 415VAC plug with isolator					
			DF SF+TF							
				AD	Solenoid for air driven transfer					
	•	•	•							
TS	1	MO	1	TF						

## **Features and Benefits**

FEATURE	BENEFIT	WHAT THIS MEANS FOR YOU
All systems manufactured by Dioxide Pacific personnel with more than 20 years' experience in chemical dosing systems	High quality manufacture produces long term reliability and low probability of failure	Lowest lifetime cost of ownership and minimum downtime over equipment life
3D CAD used to model all systems	Systems are consistent so you can confidently use the data we provide to integrate into your plant	When you receive the plant, it will be exactly the same as the 3D model we provide at time of order.  No surprises
High quality, commonly used components	Probability of component failure is low, spare parts and replacement are available worldwide	You won't be stuck waiting for replacement parts with the system offline
Duty/standby operation based on time and fault	If the duty dosing pump goes into fault, swap over occurs automatically to the standby dosing pump. Duty and standby dosing pumps will swap on an adjustable time basis if no faults present.	You will always have continuity of dosing. If dosing of the chemical is critical then this duty/standby option should be selected.
Duty/duty/standby operation based on time and fault. In this case, you have two separate dosing points with one common standby pump.	If either duty dosing pump goes into fault, swap over occurs automatically to the standby dosing pump. Duty and standby dosing pumps will swap on an adjustable time basis if no faults present.	You will always have continuity of dosing. If dosing of the chemical is critical then this duty/standby option should be selected.
Choice of pipe materials to suit the chemical.  UPVC, CPVC, PVDF or Carbon Steel – PFA Lined.	These common materials will suit most chemicals and the correct materials will be selected to suit your chemical	You can have full confidence in the chemical resistance of the pipe materials
Choice of seal materials to suit the chemical.  EPDM, FKM (Viton), PTFE	These common materials will suit most chemicals and the correct materials will be selected to suit your chemical	You can have full confidence in the chemical resistance of the seal materials
Safety is a high priority in design. You can choose to have the dosing equipment mounted in a HDPE or SS cabinet with splash protection	All the equipment in contact with chemical is fully enclosed. If a leak occurs, it will be contained and will not come into contact with the operator	You can safely work around and maintain the equipment without fear of chemical splashes

FEATURE	BENEFIT	WHAT THIS MEANS FOR YOU
Major reputable brands of dosing pump can be used on our systems	If you have a preference for a particular brand we can accommodate it	You can minimize spare parts kept at your site and you will be familiar with the dosing pump you have selected
Dosing skids can be customized with only the components you need for your application e.g. for long dosing lines and smooth flow a pulsation dampener can be selected	No need to pay for unnecessary features that never get used.	Your capital (purchase) cost is kept as low as possible while still maintaining highest quality and system integrity
Bulk chemical storage can be perfectly integrated with the chemical dosing system by your choice of the tank and tank options	Single source supply for chemical tank, instrumentation and dosing system keeps the responsibility for performance with Dioxide Pacific.	Your plant will fit together like a glove and work seamlessly as all components including tank, instrumentation and dosing equipment are designed to work together
The TS Transfer Station is a HDPE cabinet with inlet manifold suited to the chemical. Controls for start/stop and run/fault for transfer pump and level switch display optional	Bulk chemical transfer using the Dioxide Pacific TS transfer station makes power supply and chemical transfer from tanker to tank easy	Your safety is maintained during transfer of chemical from tanker to bulk tank
The dosing system can be supplied with an electrical control panel which operates all of the electrical devices, monitors instrumentation inputs and is remotely accessible via the internet	The dosing plant comes to you fully assembled, wired and tested including all of the plant logic operated by PLC and HMI. You don't need to do any customization or fault finding on site	Having the ability to control the system easily from one HMI location, including manual operation of individual items for testing or calibration is provided to make your life easier. Remote internet access with email alarms, allows for simple and quick troubleshooting without the need for a site visit – reducing your service costs.



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