2 types of plug-and-play dosing solutions:

- Frame-mounted pump(s)
- Chemical injection package with storage tank

Compact, modular and selfcontained metering solutions. DosaSkid are ideal for preparing, storing and injecting chemical solutions

#### Tubing

• 316L stainless steel or C-PVC Storage tank

• 316L stainless steel or HDPE



### DosaSkid® Turnkey and ready-to-use device

- A turnkey and ready-to-use device manufactured by an expert in metering technology
- Modularity and Adaptability to process developments
- Reliability and Safety

#### **TYPICAL APPLICATIONS**

- Boiler water treatment: treatment of make up, boiler feed and waste waters (injection of limewash, corrosion inhibitor, biocide, antifoam, scale inhibitor, etc.)
- **Industrial water treatment:** coagulation / flocculation (injection of ferric chloride, aluminium sulphate, WAC, etc.), pH regulation (injection of acids and alkalis)
- **Refinerie:** injection of additives into fuels from refineries, conditioning of drinking water in utilities (injection of sodium hypochlorite)
- **Desalination:** cleaning and maintenance of reverse osmosis membranes (injection of hydrochloric acid, sodium hydroxyde, anti-scaling agents and anti-fouling agents)
- **Surface treatment:** pickling (injection of hydrochloric, sulphuric, nitric, phosphoric or hydrofluoric acid), neutralisation (injection of acids or alkalis), waste treatment (injection of sodium bisulphate, bleach, sodium hydroxide, etc.)
- Cleaning in place (injection of nitric acid in food industry for example)

#### FEATURES AND BENEFITS

- Easy and fast installation: only the hydraulic and electrical connections need to be made
- Modularity: 1, 2 or 3 dosing modules with or without tank; accumulation of DosaSkid<sup>®</sup> units possible; 2 piping and tank materials available
- **Process adaptability:** interchangeable pumps for easy adaptation to process changes
- Reliability and Safety: trade practices and NPSH respected; risks associated with piping connection errors avoided; metering equipment and piping protected
- Simple, rapid maintenance: easy access to components; modules 95 % identical
- A single supplier ensures proper installation operation: time savings (design, diagrams, negotiation, administrative operations), costs controlled
- **Recognised know-how:** pumps and accessories included in lists of approved suppliers to the largest companies
- Compact
- ATEX zone 2 upon request



Innovative Sustainability Together

# **Technical** features

#### **Dosing module**

- Tubing: 316L stainless steel or C-PVC
- Connections and tubing: OD 1/2"
- Suction line comprising for each pump:
  - > 1 isolating valve
  - > 1 Y-filter: protection and improvement of dosing pump lifespans
  - > 1 battery limit inlet connection
- Suction connection: connection of the suction line of the modules
- Discharge line comprising for each pump:
  - > 1 safety valve: protection of piping and dosing pumps
  - > 1 isolating valve: simplified maintenance without production stoppage
  - > 1 pulsation dampener: smoothing of the injection flow and cavitation prevention
  - > 1 manometer with manifold: operating pressure measurement and display of pulsation damper efficiency
  - > 1 back-pressure valve if required by the service pressure: cavitation prevention
- Accessories: characteristics determined based on the application

#### **Recommended dosing pumps**

- Flow rate: up to 400 I/h (standard)
- Maximum permissible pressure: up to 64 barg (standard)
- Electric motor-driven pumps: G<sup>TM</sup>M (mechanically actuated diaphragm), mROY<sup>®</sup> XA and XB (hydraulically actuated diaphragm) and MILROYAL<sup>®</sup>
   D (plunger or hydraulically actuated diaphragm). For further details, refer to the technical data sheets of each pump
- Liquid ends (according to models): 316L S. S., C-PVC, PVDF, PP, slurries. Other materials upon request
- Installation of frequency inverters and actuators possible

#### Storage tank module with inspection hatch

#### 316L S.S.

- 4 sizes: 200, 500, 1,000 and 1,500 litres
- Tubing: 316L stainless steel
- Filling: Ø 1" NPT
- Drain: Ø 1/2" NPT female with isolating valve
- Tank with sight flow indicator

#### HDPE

- 5 sizes: 60, 120, 250, 500 and 1,000 litres
- Tubing: 316L stainless steel or C-PVC
- Excellent resistance to corrosive chemicals, treated for UV protection
- Moulded graduation scale up to 500 litres
- $\bullet$  Filling: Ø 140 mm for 60 to 500-litre tanks / 185 mm for 1,000-litre tank
- Drain: Ø 1/2" Gas female
- Max. temperature: +60° C (precautions for corrosive products)

#### Installation and test

- Connections (inlet/outlet): 1/2" NPT female
- Leak tested assembly and connection of pump(s) and accessories
- Indoor or outdoor installation, not exposed to direct sunlight, for the plastic version

#### Options

- Suitable for use in an explosive atmosphere area: ATEX zone 2 (gas)
- Other configurations upon request

#### Options for dosing module:

- Drip pan (304L S.S.): for the safety of the environment and users
- Back pressure valve (standard if pressure < 5 bar): siphonage prevention
- Calibration pot: precise pump calibration according to real operating conditions
- ON/OFF control box with emergency stop per pump module: simplified control
- Flange connections: perfect adaptation within the installation

#### **Options for storage tank module:**

- High speed electric mixer: homogenisation, dissolving, preparation of reagents, neutralisation
- ON/OFF control box with emergency stop for mixer: simplified control
- Level detector (low and high): optimum flow management, securing of the process
- Connection to dosing module: turnkey solution

# Codification | Standard & options

#### Frame-mounted pump version

				pump (including accessories, dosing pump(s) to be coded separately)								
Number of dosing modules												
	1	1 mod										
		Tubin	g ma	terial								
		Р	C-P	VC tub	ing							
		S	316	6L stain	stainless steel tubing							
			/	OPTIONS								
				Frame	Frame option: Drip pan							
					Withou	t drip pa	an					
				RE	RE With 1 drip pan per pump module Dosing module option: Back pressure valve							
					—	Without back pressure valve on discharge line						
					R	With ba	With back pressure valve on discharge line - Mandatory if P < 5 bar Dosing module option: Control					
						Dosin						
						Without control box						
						BC	on on one of the one going out participants in a date					
							Dosing module option: Calibration pot					
							Without calibration pot			tion pot		
							P1			t per pump module. Stainless steel if stainless steel tubing/PVC if C-PVC tubing. ined automatically depending on associated dosing pump flow rate		
							Connection option: Inlet and outlet flanges  Standard inlet and outlet connections: 1/2" NPT female					
							R3 Inlet and outlet flange connection - Rating to be defined					
							Dosing module option: Explosive atmosphere area (ATEX)					
							— Non-explosive atmosphere area					
								AT Suitable for use in an explosive atmosphere area: ATEX zone 2 (gas)				
MPP	1	S	/	RE	R	BC	P1	R3				
• For n	ore tha	n one d	losino	n modi	ile, add	up the r	modules					

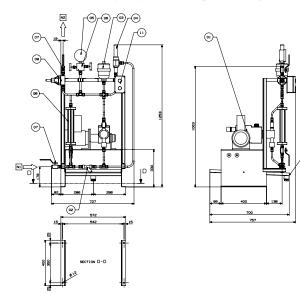
Cherr	emical injection package with storage tank version										
STORA	STORAGE TANK MODULE										
MT											
	Stora	ige tank mat	terial								
	Р	HDPE tank									
	S	316L stainle			with sig	ght flow	indicato	r			
		Storage tar	nk volu	ume							
						HDPE	tank	316L S.S. tank			
		60	60 litres			x NA					
		120	120 litres			x NA					
		200	200 litres		NA		X				
		250 500	250 litres 500 litres		X		NA				
		1,000	-			X					
		1,500		1,000 litres 1,500 litres		X NA		χ			
		1,000		/ OPTIONS							
						lule option: Level detector					
						Without level detector					
NB — With low level detector											
							igh level detector				
	NB NH With low and high level detectors				S						
	Tank module option: Mixer										
							Withou				
						VDA			ph-speed mixer (1,500 rpm)		
							lank n	nodule option: N			
								Without control			
							BC		box with emergency stop for Mixer option only ption: Hose for connection to pump module(s)		
									Without connecting hose		
			Hose for connection to C-PVC tubing/to 1 module								
								FP2	Hose for connection to C-PVC tubing/to 2 or more modules		
									Hose for connection to 316L S.S. tubing/to 1 module		
									Hose for connection to 316L S.S. tubing/to 2 or more modules		
MT	Р	120	1	NB		VDA	BC	FS2	, i i i i i i i i i i i i i i i i i i i		

#### DOSING MODULE (TANK TO BE CODED SEPARATELY - SEE CODING ABOVE) MPC Dosing unit for mounting with tank (including accessories, dosing pump(s) to be coded separately) Number of dosing modules 1 module 1 pump 1 2 2 modules 1 pump 3 modules 1 pump 3 Tubing material **HDPE** tank 316L S.S. tank **P** C-PVC tubing NA **S** 316L stainless steel tubing / OPTIONS Frame option: Drip pan Without drip pan With 1 drip pan per pump module RE Dosing module option: Back pressure valve Without back pressure valve on discharge line R With back pressure valve on discharge line - Mandatory if $\mathsf{P}<5$ bar Dosing module option: Control Without control box ON/OFF control box with emergency stop per pump module Dosing module option: Calibration pot BC Without calibration pot 1 calibration pot per pump module. Stainless steel if stainless steel tubing/PVC if C-PVC tubing. **P1** Volume determined automatically depending on associated dosing pump flow rate Connection option: Outlet flange Standard outlet connection: 1/2" NPT female Outlet flange connection - Rating to be defined Dosing module option: Explosive atmosphere area (ATEX) R3 ----- Non-explosive atmosphere area AT Suitable for use in an explosive atmosphere area: ATEX zone 2 (gas) **R3** 2 S BC **P1** MPC 1

# Dimensions

Dimensions (in mm)

• Frame-mounted pump - 1 dosing module (316L S.S.)



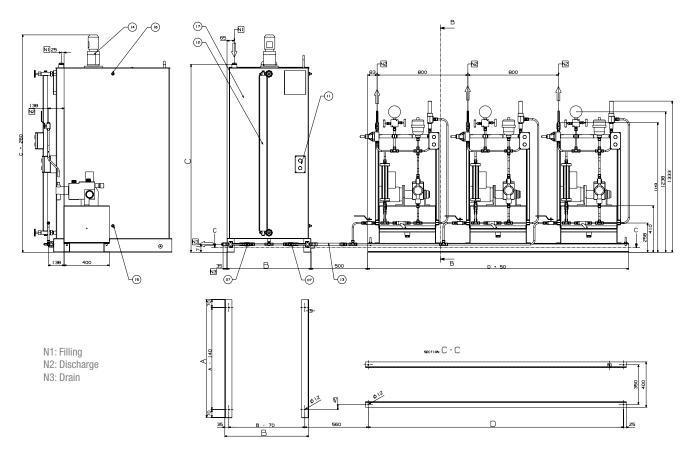
N1: Filling N2: Discharge

-(10)

ITEM	DESCRIPTION						
Standard arrangement							
1	Dosing pump						
2	Y-filter						
3	Pulsation dampener						
4	Safety valve						
5	Manometer						
6	2-way manifold						
7	Isolating valve						
12	Sight flow indicator (316L S.S. tank only)						
17	Storage tank (chemical injection package only)						
Options							
8	Calibration pot						
9	Back pressure valve (standard if $P < 5$ bar)						
10	Drip pan						
11	ON/OFF control box						
13	Connecting hose						
14	Electric mixer						
15	Low level detector						
16	High level detector						

STORAGE TANK Module	<b>A</b> (mm)	<b>B</b> (mm)	<b>C</b> (mm)	NET WEIGHT (excluding options) (kg) (*)			
316L S.S. version							
200 litres	490	490	1,156	66			
500 litres	790	790	1,156	116			
1,000 litres	1,040	740	1,656	173			
1,500 litres	1,040	1,040	1,656	209			
HDPE version							
60 litres	252	252	520	11			
120 litres	252	252	865	12.5			
250 litres	315	315	1,100	19			
500 litres	431	431	1,220	33			
1,000 litres	578	578	1,300	53			
(*) Approximately	") Approximately						

• Chemical injection package - 3 dosing modules (316L S.S.)



DOSING MODULE	<b>D</b> (mm)	NET WEIGHT (excluding pumps and options) (kg) (*)
1 dosing module	_	45
2 dosing modules	1 450	108
3 dosing modules	2250	160

(\*) Approximately

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#### An outstanding team of engineers and technicians:

- Guides you in selecting the turnkey solution that best suits your needs
- Provides you personalized project management
- Advises you on the optimum installation of your equipment
- Consults with your specialists to develop specific products and anticipate your future requirements

### VERDER

VERDER NV Kontichsesteenweg 17 B-2630 Aartselaar Belgium

TEL +32 3 877 11 12 FAX +32 3 877 05 75 MAIL info@verder.be WEB www.verder.be A network of over 100 distributors and sales and service offices. To find your local representative, visit our website:

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Conception 1 mad'line 1 02 35 50 04 04 1 www.madline.fr 1 madline@madline.fr







