

ACID DILUTION SYSTEMS (ADS)



Shown: ADS-H2SO4-100-DC-IM-4-N4-RMP-RDP.
100 Gallon sulfuric acid dilution system with redundant discharge pumps, redundant metering pumps, PVDF dilution tank, 460 VAC control panel, IDEC PLC, and Maple HMI.

Wastech Acid Dilution Systems (ADS) are designed for diluting chemicals to a lower concentration required for process use. These systems start with water and add chemical until the desired concentration is achieved. The lower concentration chemical is then pumped to a holding tank for storage and use. The Wastech ADS includes all plastic wetted components for corrosion resistance and a fully automated control system. Custom configurations are available, call or e-mail Sales.

Specifications

- 100 to 500 gallon systems available
- All plastic wetted components for corrosion resistance
- Skid-mounted design, ready to install
- Factory-piped, wired and tested before shipment
- Integrated or remote control panel
- Indoor installation

Standard Features

- UL-Listed control panel
- NEMA 4 powder coated steel control panel
- PLC-based control system with color touchscreen HMI
- Metering pump for concentrated chemical dosing
- Immersion type heat exchanger for handling exothermic chemical reactions
- Run permissive for remote enable/disable
- Conductivity sensor installed in dilution tank
- Pumped re-circulation using eductors for tank mixing
- Pumped discharge
- Seismic tie-down brackets

Utility Requirements

- Power: See power requirement options on page 2
- CDA: 1 SCFM @ 100 PSIG
- Cooling water: TBD at time of order
- DI water: TBD at time of order

Optional Features

- Double containment
- Redundant chemical metering pump
- Redundant discharge pump
- Holding tank for reduced concentration chemical storage
- Discharge flow meter with totalizer

ORDERING INFORMATION								
ADS	Acid Dilution System							
	Process Chemical (Choose One)							
	-H3PO4	Phosphorous Acid (0-40%)						
	-HCl	Hydrochloric Acid (0-18% or 22-36%)						
	-NaOH	Sodium Hydroxide (0-16%)						
	-CaCl2	Calcium Chloride (0-22%)						
	-HNO3	Nitric Acid (0-28% or 36-96%)						
	-H2SO4	Sulfuric Acid (0-30%, 40-80%, or 93-99%)						
	-HF	Hydrofluoric Acid (0-30%)						
	-NaCl	Sodium Chloride (0-26%)						
	-HBr	Hydrobromic Acid (0-35%)						
	-KOH	Potassium Hydroxide (0-45%)						
	Dilution Tank Operating Volume (Choose One)							
	-100	100 Gallons						
	-200	200 Gallons						
	-300	300 Gallons						
	-400	400 Gallons						
	-500	500 Gallons						
	System Containment (Choose One)							
	-SC	Single Containment						
	-DC	Double Containment; Includes Leak Switch and Drain Valve						
	Control Option (Choose One)							
	-IM	IDEC PLC with 7" Maple HMI						
	-AM	Allen-Bradley MicroLogix PLC with 7" Maple HMI						
	-AB	Allen-Bradley MicroLogix PLC with 10" PanelView Plus HMI						
	-AX	Allen-Bradley CompactLogix PLC with 10" PanelView Plus HMI						
	Power Requirements (Choose One)							
	-1	115 VAC / 1 / 60 Hz						
	-2A	208 VAC / 1 / 60 Hz						
	-2B	230 VAC / 1 / 60 Hz						
	-3A	208 VAC / 3 / 60 Hz						
	-3B	230 VAC / 3 / 60 Hz						
	-4	460 VAC / 3 / 60 Hz						
	Enclosure Rating (Choose One)							
	-N4	NEMA4 – Powder Coated Carbon Steel						
	-N4XS	NEMA4X – 304 Stainless Steel						
	Options (Choose Any)							
	-HT-XXX	Holding Tank (Specify Volume)						
	-FL	Discharge Line Flow Meter w/ Totalizer						
	-RMP	Redundant Chemical Metering Pump (Installed Spare)						
	-RDP	Redundant Discharge Pump (Installed Spare)						
Example Part Number								
ADS	H2SO4	-100	-DC	-IM	-4	-N4	-HT-300	ADS-H2SO4-100-DC-IM-4-N4-HT-300