

Superior Performance
Unbeatable Pricing
Pride in Workmanship
Energy Efficient
Rugged Construction



SA / SD Chemical Filter

Operation Manual



Please Read This Carefully Before Operating.

Table of Contents

1.Installing Precautions	2
2.Operating	3
3.Maintenance	
• Precautions.....	4
• Repair and Maintenance.....	4
4.Troubleshooting	6
5.Note	7
6.Appendix	
• SA Type B Cartridge Nut Diagram.....	8
• SD Type B Cartridge Nut Diagram.....	10
• SD Type C Cartridge Plate Fixture Diagram.....	11
• Part Reference Chart.....	12
• Product Warranty.....	13

1.Installation Precautions

1. Make Sure The Pipeline Are Fully Secure And Sealed.
2. Pipeline With Lots Of Bends Please Install A Water/Solution Inlet Pipe
3. Outdoor Use,It Is EssentialTo Provide Adequate Covering.
4. Base On The Chemical And Solution Temperature Please Select The Most Suitable Pipe Material. (Ex: PP Is Use For Solution Exceeding 60C)
5. Before Connecting Any Pipeline To The Pump,Pipe Should Be Washed To Remove Any Extraneous Matter There May Be Such As Welding Pellets, Cut-Offs From Gaskets, Etc.
6. Secure The Inlet Pipe To Keep It From Moving Or Bending If Using Soft Pipes. (We Recommend Stiff Pipes Inside The Tank.)
7. Place The Machine In An Upright Position And On A Sturdy Resting Place.
8. When The Pump In/Outlet Are Lower Than The Liquid Level Of The Tank, Install Valves On The In/Outlet Pipe To Prevent Siphoning.
9. Please Make Sure The In/Outlet Connection Flange Are Equal In Diameter With In/Outlet Flange. Please Make Sure All The Bolts And Nuts Are Adequately Tightened, Including The Wing Nuts On Top Cover.
- 10.The Wire Connection Diagram Could Be Found In The Connection Box For Various Voltage.
- 11.When Installing A Fuse Or A Motor Protection Device,Choose The One Which Allows Current Higher Than Rated.

(Please Refer To The Current Rating / Voltage On The Marking By 10 ~ 20 %.)

2.Operation

1. Make Sure The Pipeline Are Fully Secure And Sealed.
2. Fill The Pump With Water, Open Air Release Valve (19) & Water Injection Valve(10),Fill Tube (8) With Water,Open Tube Valve (10) Let Water Fill Up The Pump, Or Open Cover (7), Fill The Filter Barrel With Water. Make Sure The Inlet Is Filled With Water To Prevent Pump From Dry-Running.
3. Check The Voltage and Motor Junction Box For Any Miswire Before Starting The Motor.
4. Before Starting The Motor Close Tube Valve (10) Then Let Air Water Escape from Air Release Valve(19).
5. Before Turning The Power On Check the In/Outlet Are Connect Correctly.Example:Sign of Damage on Pipeline,In/Outlet Valve Are Open & ETC .
6. After Above Procedure.Turn On The Pump,Make Sure The Pump Is Turning At the Right Direction.If Not, There Won't Be Water Coming Out From The Outlet.Simply Switch the Direction From Motor Junction Box.
7. Make Sure Tube Valve(10) Is Close,And Tube (8) is Empty.Prevent Air From Entering The Pump And Cause Cavitation or Dry-Running.
8. Check The Pressure Gauge (15) Before Operating The Filter And Make Sure There Is Oil Inside The Gauge.
9. While Working In A Hostile Enviroment: Wear Protective Clothing (Gloves Boots & Etc.)
10. Check All The Safty/Protection Switch:For Example: Holding Tank Liquid Level, Power Protection Switch And Etc.

3.Maintenance and Repair

1. Turn The Power To OFF Position & Disconnect The Power
2. Drain AllThe Fluid From The Filter And Close The In/Outlet.
3. Service personnel Must Wear Protective Clothing.(Gloves Boots Goggle & Etc.)
4. Make Sure The Pump Is Not Siphoning From The Tank.

- Filter Part
- Judging By Visual- Check The Capacity Of Liquid Flowing Out From The Filter.
- Check By Pressure Guage.

※ Do Not Exceed 80% Of Its Pressure Range.Barrel Are Design To Withstand Maximum Of 3kg Of Pressure.

SA-1001	SA-2001	SA-1002	SA-2002	SD-1004	SD-2004
0.4 KG	0.5 KG	0.5 KG	0.6 KG	0.6 KG	0.9KG

Filter Maintenance

1. Put The Cartridges And Tamis Bags Into 5% HCl Solution. Soak Them For 3-5 Hours, And Then Clean Them With Water.
- * Please Do Not Scrub The Cartridge and Tamis bags

Judging On Cartridge Replacement

Put The Cleaned Cartridge Into The Filter And Start The Filter.If The Pressure Increases Quickly,It Means That The Cartridges Are Seriously Blocked.It Has Become Ineffective, And Must Be Replaced.

Maintenance Of Cartridge Nut Type Filter Medium

*Please Refer To The Diagram.

1. Turn The Cover Handles (26) Clockwise To Close, Counter Clockwise To Open.
2. Before Opening The Cover (7), Drain The Air Out By Opening Air Release Valve(19).
3. Open The Cover. Each Cartridge Is Enclosed By A Tamis Bag (29).
4. Untie The Tamis Bag. There Is One Nut(30) Inside. Turn The Nut Counterclockwise To Loosen It.
5. Take The Nut (30) Off The Filter And Pick Up The Tamis Bags (29). Clean Or Replace Them. Perform These Steps In Reverse To Reassemble The Filter.

Maintenance Of Cartridge Fixture Type Filter Medium

*Please Refer To The Diagram.

1. Turn The Cover Handles (26) Clockwise To Close, Counter Clockwise To Open.
2. Before Opening The Cover (7), Drain The Air Out By Opening Air Release Valve(19).
3. There Is One Nut(32) Inside. Turn It Counterclockwise To Loosen It.
4. Take The Stanchion Fastening Screw (32) Off The Filter, Pick Up The Fixture Plate (33).
5. Remove The Top Washer (35), Tamis Bag (29) And Spring (34) On Top Of Cartridge(20). Clean Or Replace The Tamis Bags (29) And Cartridges (20), Assemble The Medium In The Reversed Steps, Lock The Stanchion Fastening Screw (32) And Cover (7). The Filter Should Now Be Able To Function.

4.Troubleshooting

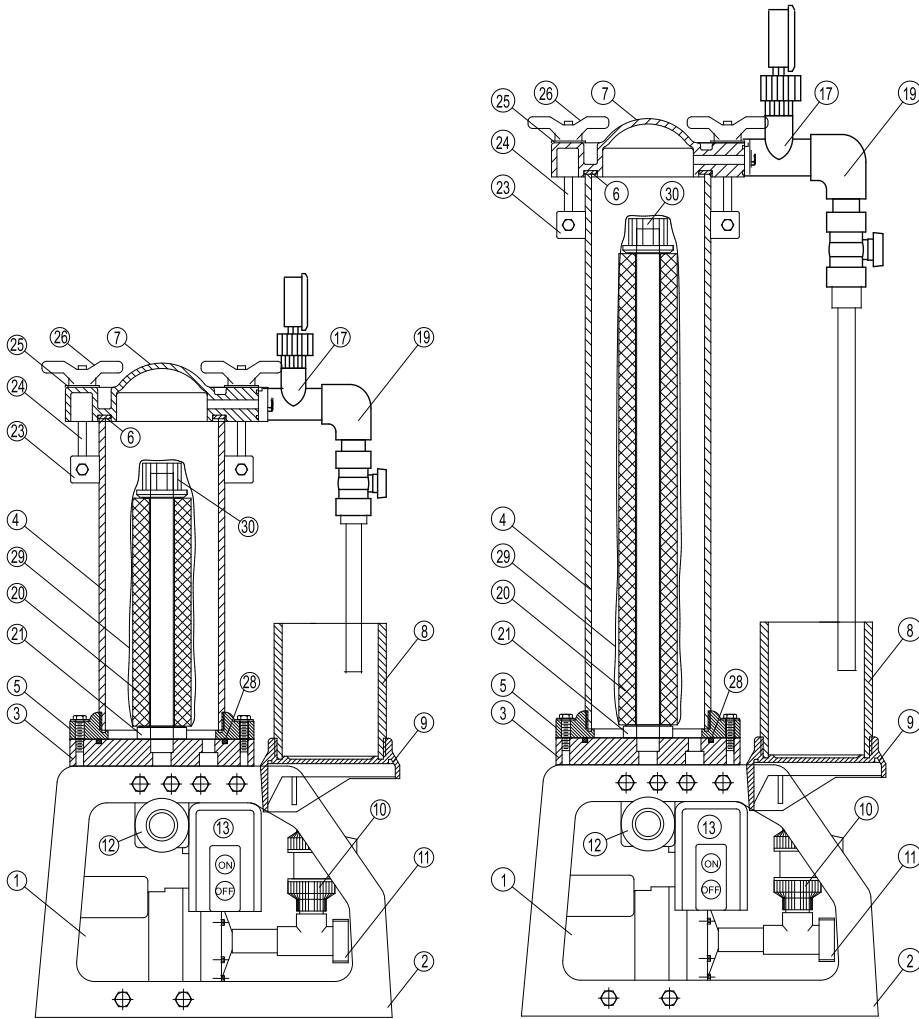
Failure scenarios	Cause Of Failure	Approach
Insufficient Filtrations	<ul style="list-style-type: none"> • Filter Bag Is Not Installed Properly. • Filter Bag Or Cartridge Is Clogged 	<ul style="list-style-type: none"> • Make Sure Parts Are Installed Properly. • Clean The Debris Or Residues That Might Cause The Clog
No Flow From Outlet, High Pressure	<ul style="list-style-type: none"> • Clogged Pipeline / Filter Or Valve Is Closed 	<ul style="list-style-type: none"> • Clean The Pipeline/Filter • Open The Valve
Cleaned Filter With High Pressure	<ul style="list-style-type: none"> • Cartridges / Filter Bag Are Seriously Blocked. It Has Become Ineffective 	<ul style="list-style-type: none"> • Cartridge / Filter Must Be Replace.
No Flow From Outlet, No Pressure	<ul style="list-style-type: none"> • Jammed Pump Impeller • Pump Failure • Clogged Inlet • Closed Inlet Valve 	<ul style="list-style-type: none"> • Clean/Free The Impeller • Repair or New Pump • Check The Inlet • Open Inlet Valve
Bubbles From Outlet	<ul style="list-style-type: none"> • Loose Pipeline, Or In-Tank Air Line Is Too Close To The Inlet. 	<ul style="list-style-type: none"> • Check For Leaking • Move The In-Tank Air Line • Secure Or Reseal Inlet PipeLine
Pump Leaking	<ul style="list-style-type: none"> • Damaged Seal • Damaged Pump Parts 	<ul style="list-style-type: none"> • Replace Damaged Part
Burnt Motor	<ul style="list-style-type: none"> • Jammed Impeller • Single-Phase Operatin 	<ul style="list-style-type: none"> • Install Overload Shut-Off Switch • Check Power Switch
Pressure Gauge Malfunction	<ul style="list-style-type: none"> • Bad Pressure Gauge Seat Seal • Damagd Pressure Gauge 	<ul style="list-style-type: none"> • Reseal And Reinstall Pressure Gauge • New Pressure Gauge
Inaccurate Pressure Gauge °	<ul style="list-style-type: none"> • Gauge Is Leaking Fluid • Damaged Diaphragm • Defected Pressure Gauge 	<ul style="list-style-type: none"> • Refill Guage With Water • New Diaphragm • New Pressure Gauge °
Filter Top Cover Is Leaking	<ul style="list-style-type: none"> • Debries Build Up On Cover Packing • Damaged Cover or Cover O-Ring 	<ul style="list-style-type: none"> • Clean The O-Ring & Cover Packing • New Cover/ O-Ring

5. Note

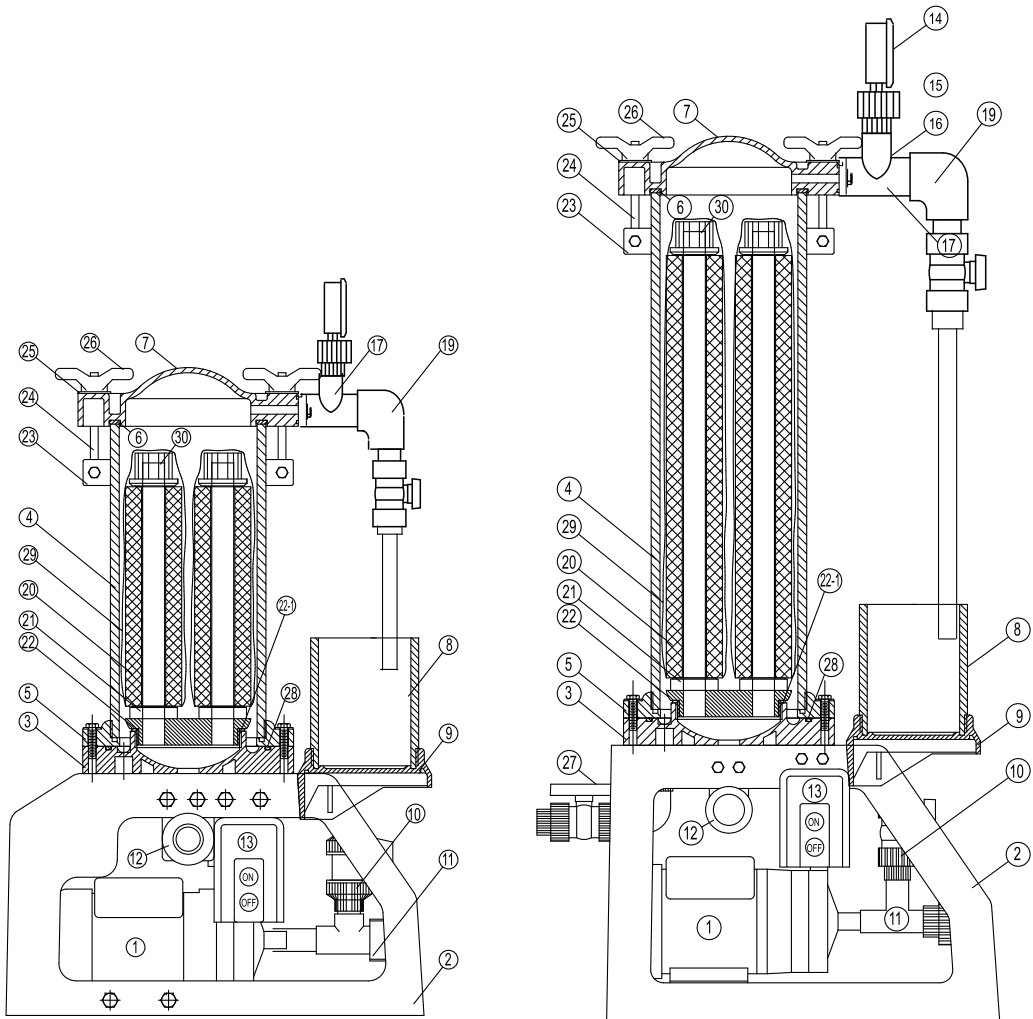
1. Place The Machine In An Upright Position And On A Sturdy Resting Place. Make Sure The PipeLine Are Fully Secure.
2. Read This Manual Carefully Before Operating.
3. Do Not Apply Different Chemical Solutions With The Same Machine. If Needed, Contact Our Technician.
5. Most Of The Electroplating Solution Contain Hydrogen. Released During Electrolysis, If The Filter Hasn't Been Used In Some Time, Pressure Will Build Up Inside The Barrel And May Cause An Explosion.
6. The Flow Rate Should Be Checked Periodically Make Sure It Is Normal. Clean The Medium On Schedule To Prevent Clogging. When The Pump Dry-Runs For A Long Time, The Liquid In The Pump Will Become Very Hot And Vaporize. Pressure Will Build Up Inside The Barrel And Can Potentially Explode. Make Sure In/Outlet Are Open.
7. Please Operate The Filter Only During Working Hours. Unplug The Machine When It Is Not Operating. To Prevent The Filter From Dry-Running, Never Have The Machine On Without An Operator.
8. Avoid Placing The Filter Outdoors. The Sunlight Will Weaken The Barrel Material.

6. Appendix

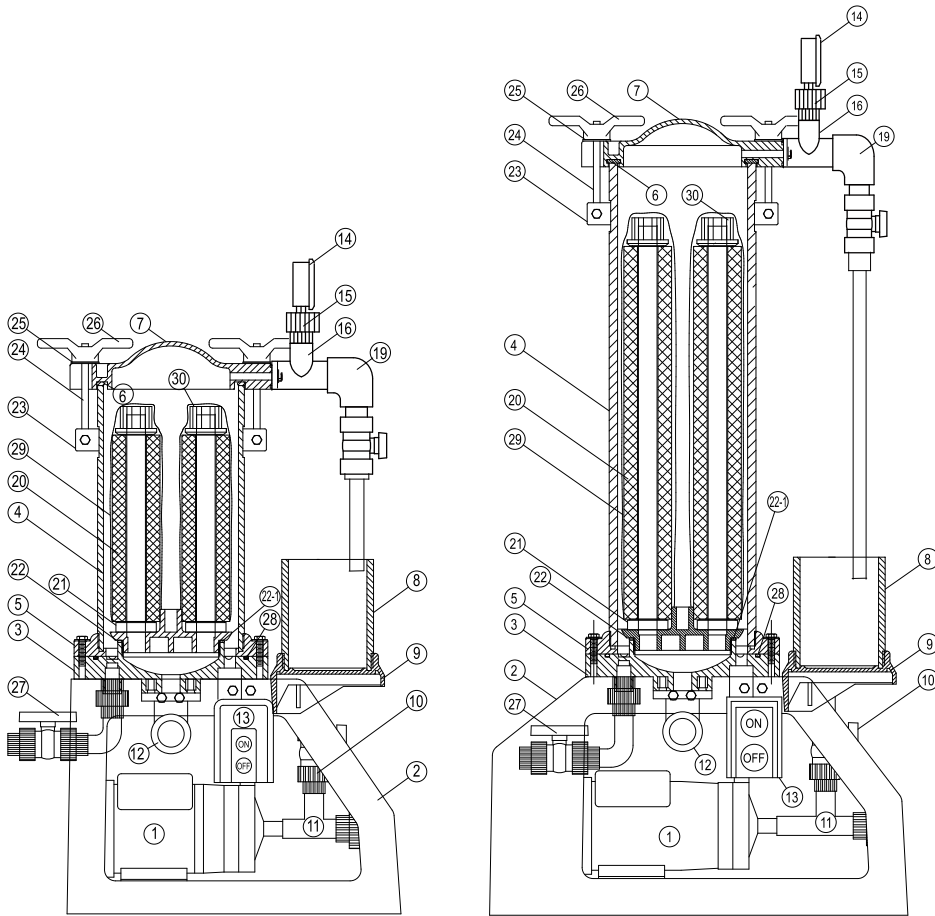
- SA Type B Cartridge Nut Diagram



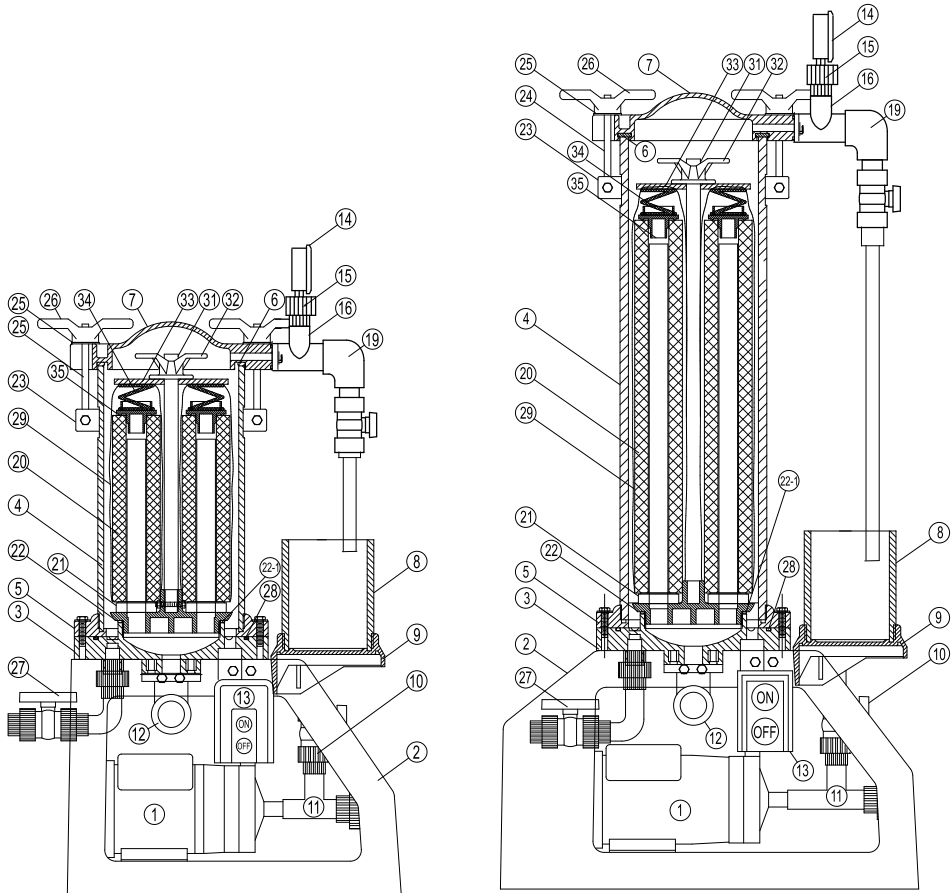
• SA Type B Cartridge Nut Diagram



• SD Type B Cartridge Nut Diagram



• SD Type C Cartridge Plate Fixture Diagram



Part Reference Chart

Part No.	Description	Material	Part No.	Description	Material
1	Pump		22-1	Cartridge Seat O-Ring	NBR/EPDM/VITON
2	Base	FRP	23	SUS Clamp	SUS304
3	Barrel Base	FRPP/PVDF	24	Cover Screw	SUS304
4	Barrel	PP	25	Cover Washer	SUS304
5	barrel Flange	FRPP	26	Cover Handle	FRPP
6	Cover Packing	NBR/EPDM/VITON	27	Drain Valve/w Union	PP
7	Cover	FRPP/PVDF	28	Barrel Base O-Ring	NBR/EPDM/VITON
8	Tube	PP	29	Cartridge Bag	PP
9	Tube Seat	FRPP	30	Cartridge Nut	FRPP/PVDF
10	Water Filling Valve	PP	31	Stanchion	SUS316
11	3-Way Inlet	FRPP	32	Stanchion Nut	SUS316
12	Outlet	FRPP	33	Cartridge Plate	FRPP
13	Power Switch Guard	FRPP	34	Cartridge Spring	SUS316/PVC
14	Pressure Guage		35	Cartridge Top Packing	FRPP/PVDF
15	Pressure Guage Seat	FRPP/PVDF			
16	Air Release Valve Set	FRPP/PVDF			
17	Air Release Valve Seat	FRPP/PVDF			
19	Air Release Valve Handle	FRPP			
20	Cartridge	PP			
21	Cartridge Bottom Packing	PVC/PP			
22	Cartridge Seat	FRPP/PVDF			

Product Warranty

ModelNumber:

Serial Number:

Thank You For Choosing **SUPER.SUPER**'s Product Have Passed Strict Quality Control And Fulfill The Filtration Standard Under Proper Operation And Good Maintenance.

Please Store This Warranty Properly And Show It When Necessary.

1. **SUPER Warrants** The Included Hardware Product Against Defects And Malfunctions.

• Warranty Period: 1 Year From Original Purchase Date.

2. **SUPER Does Not Warrant** Under The Following Conditions.

- The Damage Is Caused By Non-Permitted Repair, Improper Maintenance Or Operation.
- Damage that Is Caused By Natural Disasters. (Ex: Fire, Earthquake & Etc.)
- Normal Wear And Tear Parts And Accessories Are Not Covered In The Warranty.

*For Any Question Or Help Please Contact Our Dealer Or Super Giant Enterprise Directly.
Address:No.7 Lane 404 Chung Cheng South Road, Yen Hang, Yung Kang, Tainan, Taiwan, R.O.C.

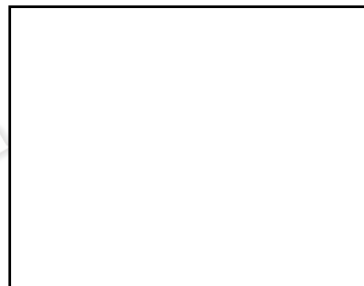
Website: <http://superpump.tw> <http://superpump.cn>
E-mail: super@superpump.tw taichang@superpump.cn
Telephone:(06)253-4546
Fax:(06)253-4226

Super Giant Enterprise CO LTD



Date:

Dealer or Place of Business



Date:



While placing your order...

Please kindly provide us the following information.

1. Chemical: Name/Concentration/Temperature/
Specific Gravity/Viscosity
2. Capacity needed: _____L/min
3. Head needed: _____M
4. Power: Voltage/Frequency

SUPER GIANT ENTERPRISE CO., LTD.

No.7, Lane 404, Chung Cheng South Road, Yen
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E-mail:super@superpump.tw

Website:<http://superpump.tw>

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