Global Pumps

HOW TO GET

THE BEST PERFORMANCE FROM YOUR PUMP

INTRODUCTION

CONCERNED YOU'RE NOT GETTING THE BEST PERFORMANCE FROM YOUR PUMP? BELOW ARE SOME GENERAL TIPS FOR ANY PUMP, REGARDLESS OF AGE.

Be proactive with your pump's performance. If these seven steps do not resolve things, don't be afraid to ask an expert. We are here to help if you encounter pump performance issues.

To ensure you are extending the life of your pump, monitor these points on a frequent basis. This should be your cheat sheet that you refer to regularly.

Share this document with your team to educate them on what to look out for. It can be a messy and costly business if things go pear-shaped with your pump .

7 STEPS TO BETTER PUMP PERFORMANCE

01. CHECK FLOW AND HEAD PRESSURE.

CHECK YOU'RE GETTING THE FLOW AND HEAD PRESSURE ACCORDING TO THE MANUFACTURERS PUMP CURVE.

This is to figure out if your existing pump is achieving its correct performance. If you don't have this graph, ask us for one. We have access to all the manufacturer's pump curves.

If you check the flow and head against your pump manufacturer's curve and it is exactly the same – then you won't be able to get better performance from that particular pump. An upgrade to your pump may be needed.

However, if your pump is not performing to the flow and head pressure expected, then we can check a few things to find ways to increase performance. The first suggestion is to confirm the pump's power source, which leads us to point two.

02. TEST YOUR POWER SOURCE.

MAKE SURE THE VOLTAGE TO YOUR MOTOR IS CORRECT. IF AN ELECTRIC PUMP IS NOT PRODUCING THE RIGHT FLOW, MAKE SURE IT HAS A STABLE ELECTRICITY SUPPLY.

You need to ensure you're not getting induced brownouts, as you may be unaware that your electricity supply may be unpredictable, unstable or inconsistent. Brownouts are a reduction or restriction on available electrical power, so it's possible they could be going unnoticed.

For an air operated pump, be sure that you have a stable and clean air supply. Any humidity in the air line will promote moisture or condensation. If there is any condensation or foreign matter in the air line, it will reduce the performance of the pump.

03. PIPE WORK AND PIPE FITTINGS.

ENSURE THAT THE PIPE WORK AND PIPE FITTINGS ARE SIZED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

You get more from your pump by increasing the suction line size. Typically, the suction line would be a size or two larger than the pump's inlet size.

04. REDUCE FRICTION.

REDUCE THE FRICTION IN THE DISCHARGE LINE AND REMOVE ANY VALVES THAT ARE NOT REQUIRED.

Minimise the number of elbows. Use sweeping elbows where possible instead of hard 90 degree elbows.

Remove any excess valves or unused instrumentation on the discharge line. Remove unnecessary flow meters or paddle switches as they can hinder or effect the flow.

05. REGULARLY SERVICE YOUR PUMPS.

HAS YOUR PUMP BEEN SERVICED RECENTLY?

We recommend servicing pumps regularly to clear out any debris. It's important to inspect the impeller routinely for damage from cavitation, which can eventually cause pump failure. Service schedules and audits not only extend the pump's lifespan, but also assure its effective ongoing performance.

06. LISTEN TO YOUR PUMP.

IS YOUR PUMP MAKING ANY UNUSUAL RATTLING NOISES?

Does it sound like there are nuts and bolts rattling around the pump? Pumps shouldn't rattle! Pumps should be fairly quiet and humming along.

If it's making popping sounds, that's a clear indication that your pump is experiencing cavitation. Cavitation is the formation of vapor cavities in a liquid, or small liquid free zones. These bubbles or voids are the consequence of forces acting on the liquid (or your product).

Cavitation will reduce your pump's performance and life cycle. It is a sign your pump is trying to deliver more fluid than it's capable of drawing. It is pushing liquid, but the liquid is not flowing into the pump, which instead puts air in there. Basically, the force and pressure makes your liquid or substance boil, creating these air bubbles. This can cause the liquid to implode and this process can start chipping away at the impeller. Left unaddressed, cavitation can wreck your pump. Act early on any signs, otherwise it may be costly. Another tip is to move your pump closer to the liquid source to reduce the suction head pressure.

07. CHECK FOR UPGRADES AND ADVANCES.

IS YOUR PUMP GETTING OLD? CONSIDER AN UPGRADE.

Newer technology brings improvements in efficiency and performance. A pump produced today may be a lot more efficient than your 15 year old pump.

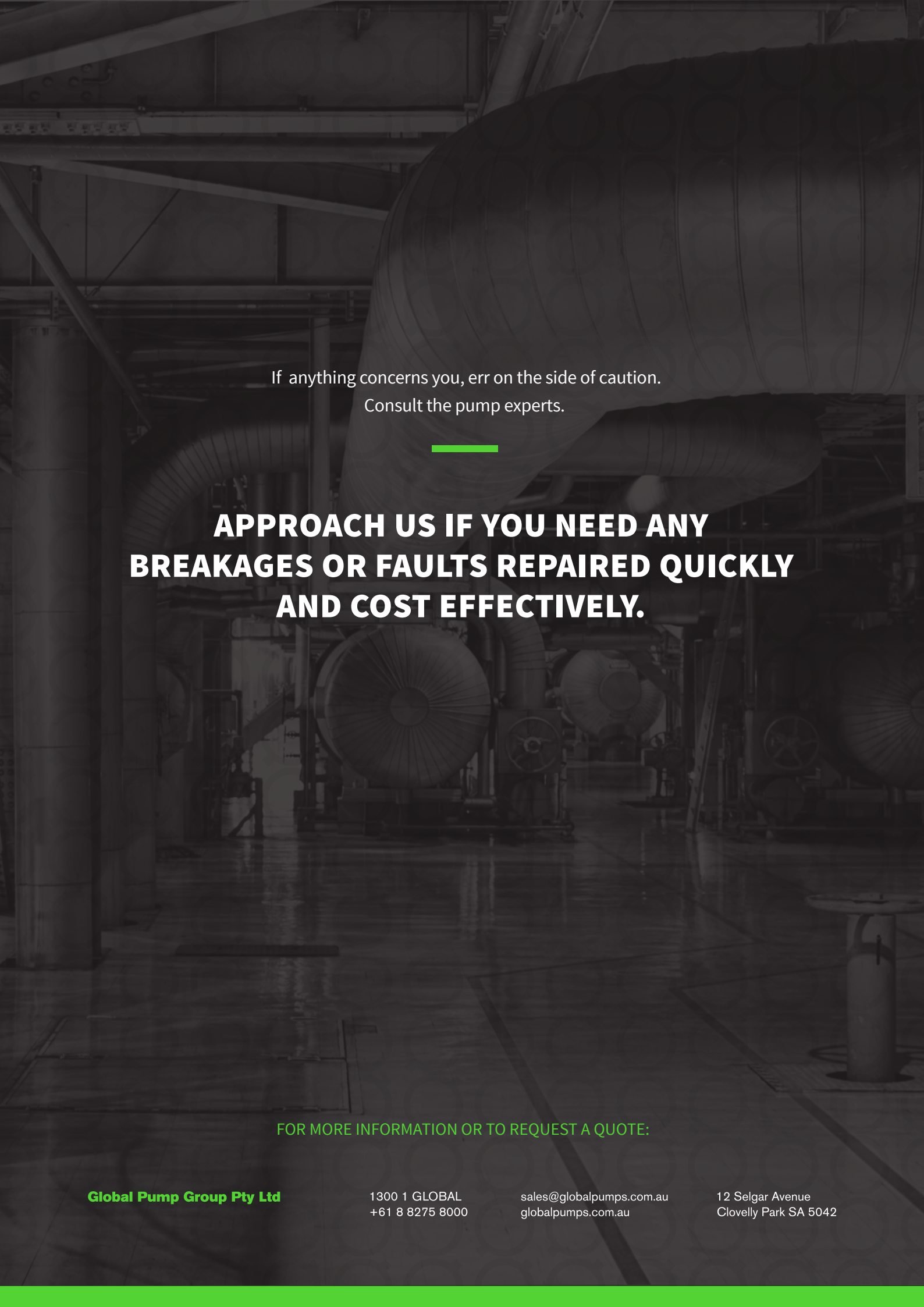
If your pump was installed in the last decade, it may only be minor improvements like adjustments to impeller shapes. But if your pump is more than 10 to 15 years old, industry and efficiency standards do change. Consistently compare your pump to ensure it's performing to current regulatory requirements and expected performance standards.

When getting serviced, you may find ongoing repairs and maintenance on older pumps end up costing you more than an upgrade. Check to see if it's actually cheaper to buy a new pump.

These seven simple steps will help reduce the overall pump costs for your organisation.

If you and your team follow these steps, your pump should keep on pumping for many years to come. Following our advice will help increase your pump's performance and lifetime.

Keep your equipment running to its optimum efficiency and save.



If anything concerns you, err on the side of caution.
Consult the pump experts.

APPROACH US IF YOU NEED ANY BREAKAGES OR FAULTS REPAIRED QUICKLY AND COST EFFECTIVELY.

FOR MORE INFORMATION OR TO REQUEST A QUOTE:

Global Pump Group Pty Ltd

1300 1 GLOBAL
+61 8 8275 8000

sales@globalpumps.com.au
globalpumps.com.au

12 Selgar Avenue
Clovelly Park SA 5042