

## Supatuf ECO “7 Star Energy Rated” Multi Speed Pump Operating Guide

Equipped with the very latest 3 speed permanent magnet brushless DC motor, Supatuf ECO is capable of lowering its energy usage & reducing its operating noise levels.

### **Energy Saving**

Pool filtration does not require to be operated at a pump’s maximum water flow rate. In fact, your pool’s filtration efficiency improves at lower flow rates. As a pool’s filtration cycle occupies 99% of the run time of a pool pump, you can operate the Supatuf ECO on its low (ECO) speed setting for a majority of its running time, leading to significant energy savings.

### **Supatuf ECO’s 3 speed options**

Supatuf ECO’s 3 speed options cater for most pool functions. The Supatuf ECO Multi Speed Pump operates most economically and with the lowest noise level using the **Low (ECO)** speed option.

#### **Low (ECO):** Filtration – 99% of the time

Most economical speed for the purpose of operating the pool’s filtration system without any ancillary pool equipment attached to the re-circulation system. E.g. suction cleaners.

#### **Medium:** Automatic pool cleaners

This speed will enable the operation additional pool equipment for pool cleaning functions that require the use of suction cleaners and low pressure spa jets.

#### **High:** Vacuuming and backwash – 1% of the time

Power speed selection for use with backwashing granular media filters (e.g. sand filters), manual pool vacuuming and operating pool equipment with high water pressure requirements. E.g. water features and spa jets.

**Please Note:** That the **Low (ECO)** speed option is specifically designed to operate a standard pool filtration and recirculation system.

Please ensure that the correct pump speed is selected in accordance to the pool equipment and the pool’s water flow requirements.

### **Benefits of Slow Flow**

Lowering a pumps flow rate not only significantly decreases the pump’s energy requirements, but also reduces water flow resistance in your pool equipment and plumbing. Even though you may need to operate the Supatuf ECO longer, it is far more efficient pumping low water flow compared to high water flow.

A slow flow rate also has the added benefit of improving your pool’s filtration efficiency, enhancing the clarity of your swimming pool water. Plus your automatic chemical dosers and salt chlorinators are also more effective when the pool water is circulated longer.

### **Ultra Quiet**

Supatuf ECO operates most economically and with the lowest noise level at its low speed setting. Its low speed setting significantly reduces the pump’s vibration, motor noise and water turbulence to an ultra low 65.9 decibels (dBA).

### **Off-Peak Operation**

Its low noise levels enable it to be operated at times that are not allowable for conventional pool pumps. A Supatuf ECO allows you to take advantage of off-peak electrical tariff periods, without upsetting your neighbours.

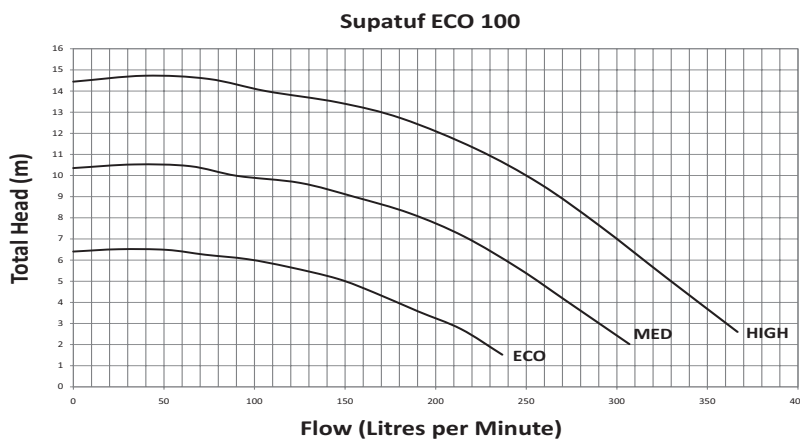
## Pump Start Up

The Supatuf ECO Multi Speed Pump is designed to operate on speed setting **High** when the pump is first turned on. This ensures the pump is properly primed and adequate flow through the pool's filtration and re-circulation system. The high speed start up will operate for 2 minutes then switch to the pre-selected speed setting.

During the initial start up period the light on the pre-selected speed setting button will start flashing.

**Please Note:** The above instructions are only a guide; each pool has individual water pressure and flow requirements. Supatuf ECO Multi Speed Pump has to be sized appropriately by a pool professional to ensure efficient operation of your pool.

The following charts provide the water flow characteristics of the Supatuf ECO Multi Speed Pump at 6, 8 & 10 metre of head loss with minimum pump operating hours.



Minimum Pump Operating Hours							
Pump Speed	Low	Medium			High		
Head Loss (m)	6m	6m	8m	10m	6m	8m	10m
Litre Per Hour	6,000	14,400	11,520	5,400	18,900	17,100	15,000
Pool Size (litres)							
25,000	4.2	1.7	2.2	4.6	1.3	1.5	1.7
30,000	5.0	2.1	2.6	5.6	1.6	1.8	2.0
40,000	6.7	2.8	3.5	7.4	2.1	2.3	2.7
50,000	8.3	3.5	4.3	9.3	2.6	2.9	3.3
60,000	10.0	4.2	5.2	11.1	3.2	3.5	4.0
70,000	11.7	4.9	6.1	14.8	3.7	4.1	4.7
80,000	13.3	5.6	6.9	14.8	4.2	4.7	5.3
90,000	15.0	6.3	7.8	16.7	4.8	5.3	6.0
100,000	16.7	6.9	8.7	18.5	5.3	5.8	6.7

< This chart is calculated using turnover of pool size (litres) once per day.

**Please Note:** During normal operation ensure your pool has sufficient circulation of water to ensure effective turnover of the pool. If there is insufficient flow of water from the pool's returns, increase the pump's operating speed till there is sufficient water flow.

**Note:** The Supatuf ECO Multi Speed Pump is "7 Star Energy Rated". This rating was achieved in low (ECO) speed (1900 RPM) and this is the recommended normal operating speed.



The Supatuf ECO Multi Speed Pump is equipped with the latest motor that utilises electronic PCB's & microchips for pump control & protection.

When the pump is turned off, it will be necessary to delay restarting the pump for a minimum of 10 seconds. This will ensure the pump electronics has totally reset.

However, in some situations electronically controlled Chlorinators may provide a small residual of power to the Supatuf ECO Multi Speed Pump preventing the resetting of the pumps electronics. In this case the power to the Chlorinator and pump must be totally disconnected to enable the electronics to reset.

It is recommended that you contact the supplier or manufacturer of your chlorinator to gain any further assistance or advice with this issue.