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<b>Client</b>	Spa World Melbourne	<b>Report No</b>	30P-11-0003-TRP-591629-0 - Report

<b>TEST REPORT</b>	
ITEM TESTED:	Spa bath
TESTED FOR:	Spa World Melbourne 310 – 312 South Gippsland Hwy Dandenong South, VIC, 3164
TESTED TO:	Clause 5.6 of AS 1926.3:2010 and Clause 22.102 of AS/NZS 3350.2.60:2000.
PRODUCT:	Spaworld, O2 Spectrum model spa bath.
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### 1. DOCUMENT CONTROL

The following details pertain to the test report with document number 30P-11-0003-TRP-591629-0 - Report

Issue Date	Revision No.	Revision Description
21 January 2011	00	Initial Issue

### 2. INTRODUCTION

The Vipac Plumbing Products Laboratory a subsidiary of Vipac Engineers & Scientists Ltd., performed testing on a spa bath skimming system to the test methods detailed in AS 1926.3:1010, and AS/NZS 3350.2.60:2000. The testing was performed at Spa World Melbourne, 310 – 312 South Gippsland Highway, Dandenong South, 3164. Testing was performed on a spa bath selected and supplied by Spa World Melbourne.

### 3. APPLICABLE DOCUMENTS

The tests and data analysis were carried out in accordance with the following standards.

AS 1926.3:2010	Swimming pool safety. Part 3: Water recirculation systems
AS 3350.2.60:2000	Safety of household and similar electrical appliances - Particular requirements - Whirlpool baths (IEC 60335-2-60:1997, MOD)

#### 4. SPECIMEN DESCRIPTION

The specimen is designated in this report as follows:

Sample Code	Description
Spa bath	Spa World Melbourne, O2 Spectrum Spa bath, fitted with an "alternative skimming device" as specified in Clause 5.6 of AS 1926.3:2010 Spa is supplied with 2 x 2.5 hp SpaNet spa pumps. Product code: XS30 Spa was tested with a Davey 3 hp spa pump in replacing one of the SpaNet pumps above.

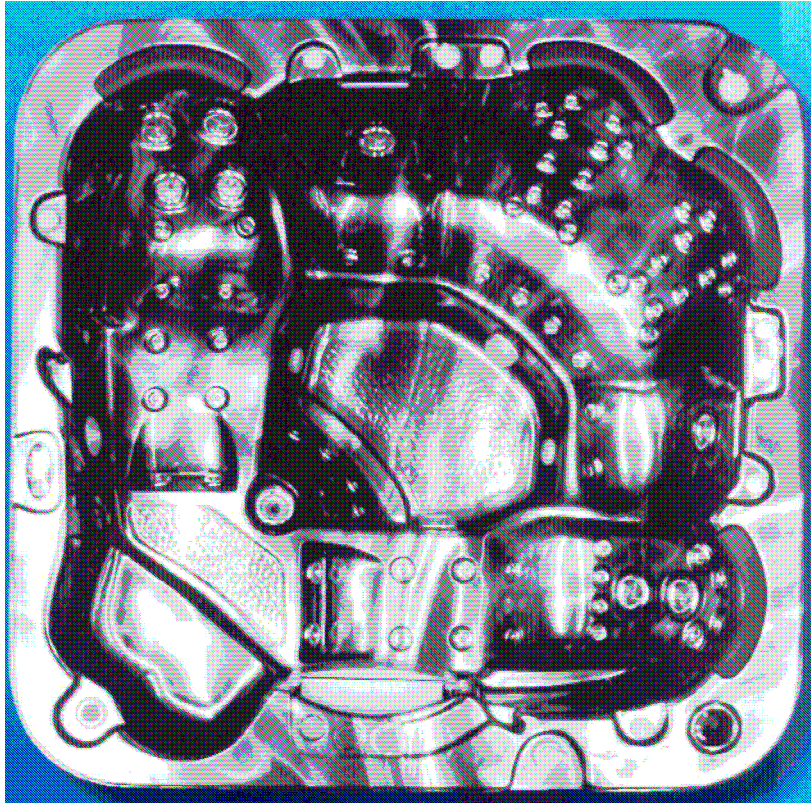


Figure 4.1 – Tested Spa

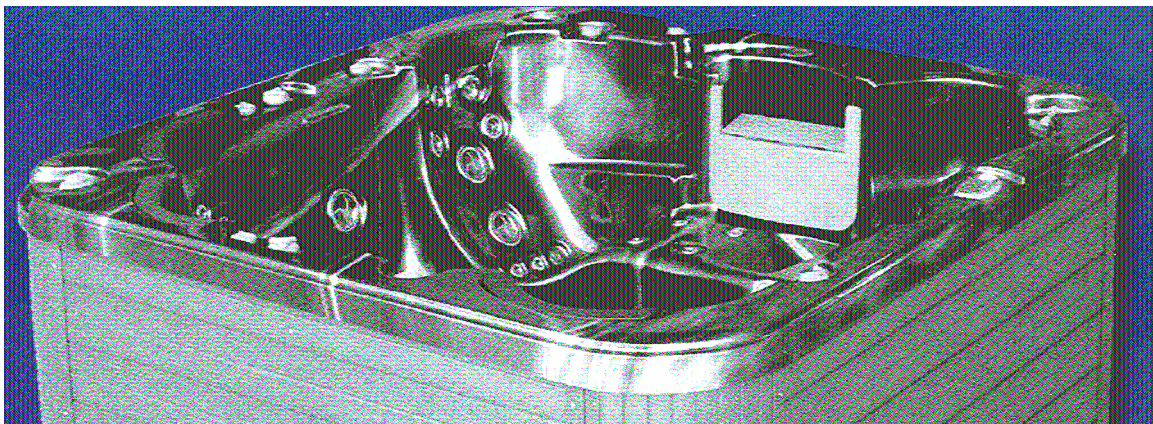


Figure 4.2 – Alternative Skimming Device

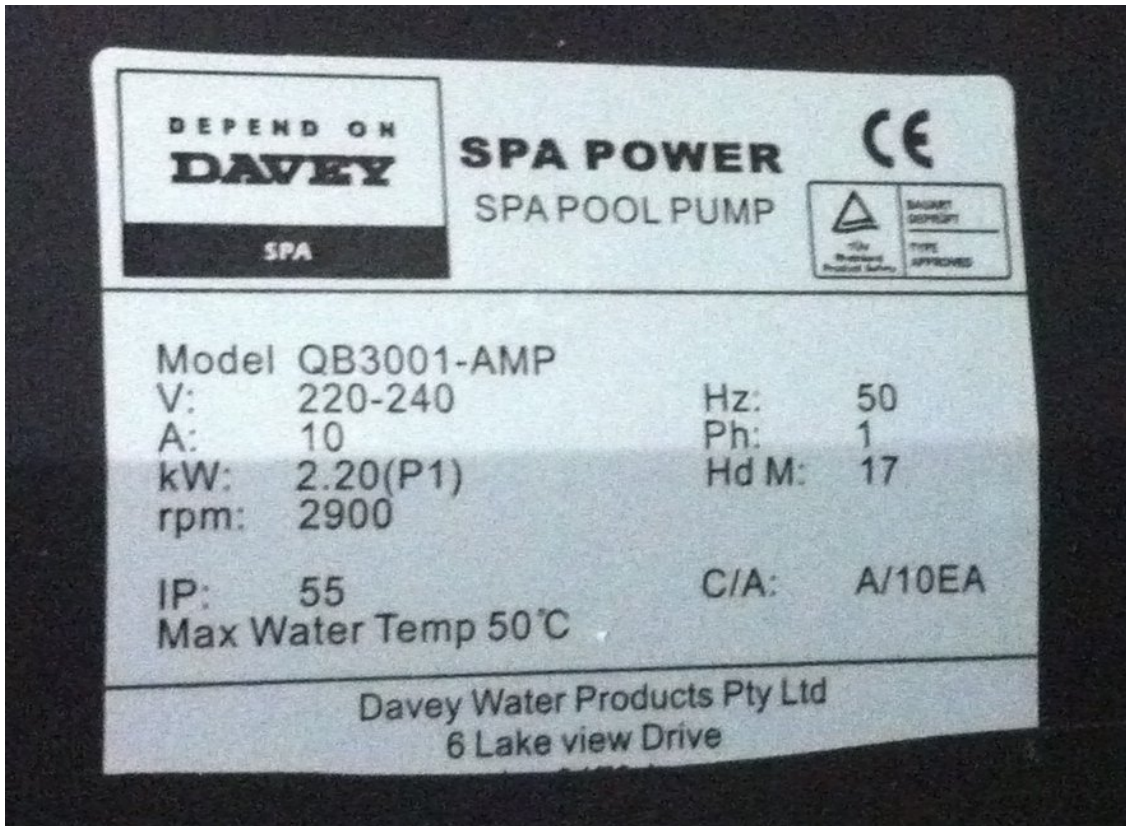


Figure 4.3 – Installed Spa Pump

5. RESULTS

Clause 5.6.2 – Alternative skimming system - Requirements

Clause 5.6.2 (a) of AS 1926.3:2010

Clause	Requirements	Result	Conformity to Clause 5.6.2(a) of AS 1926.3:2010
5.6.2 (a)	Spa shall be tested to Appendix B of AS 1926.3:2010	Spa tested with one supplied pump and one Davey 3 hp pump operating at maximum flow rate	Conforms*
	Suction shall not measure 12kPa during test.	Suction measured through skimming device was 0kPa until the pump cut out due to the safety cut off approximately 20 seconds into the test. (See below)	
	Force to remove blocking element shall not be greater than 50 N.	Force to remove body blocking element was 0 N.	

\*Note: The tested spa bath is sold with two 2.5 hp pumps provided. For testing, a Davey 3 hp (QB3001-AMP) pump was installed in the suction line. This spa pump, which is not supplied with the spa, has the highest flow rate commercially available, and can be considered to achieve the 20% greater flow rate, as required by the Standard. During testing, the measured suction pressure through the skimming device was 0 kPa. At a point approximately 15 seconds after the body-blocking element was placed over the skimming device, the pump safety cut out was activated momentarily as designed, to warn of a permanent shutdown of the pump. Approximately 20 seconds into the test the safety cut out was activated and all pumps stopped. Once this has occurred manual resetting of the power supply must occur before the pumps can be restarted. No force was required to remove the body-blocking element. The results obtained through testing may therefore suggest that the design of the spa satisfies the intent of the Standard in preventing any suction pressure, or suction force through the skimming device.



### Clause 22.102 of AS/NZS 3350.2.60:2000 – Hair entrapment test for whirlpool baths

Test is carried out as details below.

The appliance is installed in accordance with the instructions for installation and filled as specified for normal operation.

50 g of medium or fine natural human hair are attached to a wooden rod, 25 mm in diameter and 300 mm in length, the free length of the hair being 400 mm. The hair is saturated for at least 2 min in the bath water. The free end of the hair is placed over the suction opening. The appliance is supplied at rated voltage. During operation, the hair is moved from side to side for up to 2,5 min in an attempt to get it sucked completely into the pipe. The rod is pulled in order to withdraw the hair from the water and the pull force is measured with

- the rod pulled vertically;
- the rod pulled at an angle of approximately 40° to the vertical.

If the bath is provided with a detachable cover for the suction opening, the test is also carried out with the cover in place. During the test, the cover may be displaced when it is swept by the hair.

The test is carried out five times. The force shall not exceed 20 N.

Extract from AS/NZS 3350.2.60:2000 Test in Clause 22.102

Clause	Requirements	Result	Conformity to Clause 22.102 of AS/NZS 3350.2.60:2000
22.102	Whirlpool baths shall meet the requirements of Clause 22.102.  Force in all tests shall not exceed 20N.	Test was performed five times, in directions of both vertical and 40° from vertical.  The maximum amount of force required to pull the test piece from the spa was 3.5 N.	<b>Conforms</b>


**Appendix A – List of spa baths sold by Spa World Melbourne**

Model Number	Model Name
	Neon Classic
	Mercury Classic
	Cerium Classic
	Cobalt Classic
	Cobalt Hydro Classic
	Iridium Classic
	Iridium Hydro Plus
	Xenon Classic
	Nitro Classic
	Nitro Hydro Plus
	Spectrum Hydro Plus
	Palladium Hydro Plus
	Aquagym Plunge
	Aquagym Pro
	Aquagym Extreme
	Aquagym Max Plunge
	Aquagym Max Pro
	Aquagym Max Extreme
	HydroZone Plunge
	HydroZone Pro
	HydroZone Extreme

\*NOTE – Indicates tested spa