



## Overview of the WaterMark Certification Scheme (WaterMark™) and Water Efficiency Labelling and Standards (WELS)

### IAPMO R&T Oceana

IAPMO R&T Oceana Pty Ltd is part of The IAPMO Group, an international plumbing industry based association that tests and certifies products and develops codes and standards that protect more than half the world's population. IAPMO R&T Oceana certifies plumbing and drainage products to use the WaterMark™ symbol and welcomes the Australian Government introduction of the Water Efficiency Labelling Scheme (WELS), an important initiative affecting manufacturers of plumbing products, sanitary ware and white goods.

### About WaterMark



The WaterMark Certification Scheme (WaterMark™) is a certification trademark, owned by Standards Australia, used for plumbing, water supply, sewerage and drainage products in Australia.

The aim of the scheme is to:

- ensure products meet specific specifications and standards; and
- assist Australian consumers to identify quality products produced both in Australia and overseas.

IAPMO R&T Oceana is an Approved Certifier for the WaterMark™ Certification Scheme. It has a strong reputation within the global plumbing industry and a thorough knowledge of the Australian regulatory environment for water and gas sectors. IAPMO R&T's industry standing of several decades of certification experience and staff commitment ensures that manufacturers and importers have access to a professional certification process in the shortest possible time frame.

### Certification Standards

Products certified by IAPMO R&T Oceana are required to meet the minimum certification standards, which are set out in detail in the [WaterMark™ Governance Rules](#). In summary, the WaterMark™ can only be used on plumbing and draining products that comply with relevant specifications including:

- MP52 - Manual of Authorisation Procedures for Plumbing and Drainage Products;
- AS 5200 - Technical specification for plumbing and drainage products; and/or
- The Plumbing Code of Australia.

To apply for a WaterMark™ certification and trademark license you can download IAPMO R&T Oceana's application from at our Website: [www.iapmooceana.org](http://www.iapmooceana.org)

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Labelling

Once products are certified by IAPMO R&T Oceana, they can be labelled with a WaterMark™ certification label.



The Standard Marking applies to the following Australian certification trade mark registrations

Trademark Registration Number	Product Class	Plumbing Products
454762	6	Goods composed of common metals and their alloys used in the provision of water supply, sewerage or drainage
591319	11	Sanitary apparatus and installations
591320	20	Water pipe valves and fittings of plastic



The Special Engraved Marking applies to the following Australian certification trade mark registrations

Trademark Registration Number	Product Class	Plumbing Products
586567	11	Plumbing and drainage fixtures and fittings in this class

**About WELS**

The Water Efficiency Labelling and Standards (WELS) Scheme provides for mandatory water efficiency labelling and minimum water efficiency standards for specified water-using products.

The scheme is intended to encourage domestic and commercial consumers to buy more water efficient products and appliances, with the intention of reducing water consumption.



Consumers now have access to nationally consistent information that helps them compare the water consumption and water efficiency of certain products, enabling them to factor this into their purchasing decisions. By choosing the more efficient products, consumers can reduce their water and energy consumption, save money and encourage manufacturers to produce more water efficient products. This will help Australia reduce its unnecessary use of water.

### Star Ratings

All WELS products must be registered with the Australian Government and rated and labelled according to the requirements of the WELS Standard AS/NZS6400:2005 *Water-efficient products-Rating and labelling*. Ratings are based on a six star system; the more stars a product has, the more efficient it is. For whitegoods, the star rating index allows the determination of a Star Rating to the nearest 1/2 star; a star rating index of less than 1 receives a 0 star.

### WELS Products

The following products are currently covered by the WELS Scheme:

- Plumbing products such as showers and tap equipment;
- Sanitary ware such as toilet (lavatory) equipment and urinal equipment; and
- White goods such as clothes washing machines and dishwashers.

Flow controllers are also covered by the WELS scheme; however, registration and labelling of these are voluntary.

To find and compare products covered by the WELS scheme, consumers can use the [product search database](#).

The WELS and WaterMark Certification Schemes both require that registered products meet specific requirements and standards. In many cases, products that meet the WaterMark Certification criteria will also meet the requirements of the WELS Scheme. Although IAMPO R&T Oceania can certify users for WaterMark, registration for the WELS scheme is done separately at the Australian Government's WELS scheme Website: [www.waterrating.gov.au](http://www.waterrating.gov.au)

The following table provides an overview of how the two schemes interact.

Product type	WELS Scheme applies to:	Standard outlining the relevant products	Star Allocation	WaterMark Certification Level	Water Saving Information
Showers	Showers intended solely for personal bathing Does not apply to emergency deluge or safety showers. A rating is given to the showerhead and any additional components (e.g. pivoting arm, flexible hose or flow controller) supplied with the showerhead.	AS/NZS 3662:2005 - <i>Performance of showers for bathing</i>	Showers must meet performance criteria, such as the mean spray spread angle and temperature drop, while operating at lower flow rates. The rating is based on the 'average flow rate' as follows: <ul style="list-style-type: none"> <li>more than 16L/min. or failing the performance requirement are nominated 0 star</li> <li>more than 12L/min. but not more than 16L/min. are nominated 1 star</li> <li>more than 9L/min. but not more than 12L/min. are nominated 2 star</li> <li>more than 7.5L/min. but not more than 9L/min. are nominated 3 star</li> </ul> <p>4,5 and 6 star ratings are not yet available.</p>	WMCS WaterMark Level 2 applies	Installing a water-efficient showerhead may save up to 14,500 litres per household each year.
Tap equipment	Any tap or tap outlet for use over a basin, ablution trough, kitchen sink or laundry tub It does not apply to a tap that is used solely over a bath.	AS/NZS 3718:2005, <i>Water supply-Tap ware.</i>	Taps are rated based on the 'average flow rate' as follows: <ul style="list-style-type: none"> <li>more than 16L/min. or failing the performance requirement are nominated 0 star</li> <li>more than 12L/min. but not more than 16L/min. are nominated 1 star</li> <li>more than 9L/min. but not more than 12L/min. are nominated 2 star</li> <li>more than 7.5L/min. but not more than 9L/min. are nominated 3 star</li> <li>more than 6L/min. but not more than 7.5L/min. are nominated 4 star</li> <li>more than 4.5L/min. but not more than 6L/min. are nominated 5 star</li> <li>not more than 4.5L/min. are nominated 6 star</li> </ul>	WMCS WaterMark Level 1 applies	Low-flow and aerating model taps use as little as 2 litres per minute.  Taps with an aerator or flow restrictor may reduce flow to less than a third of standard taps.

## WELS & WaterMark: How They Interact



Product type	WELS Scheme applies to:	Standard outlining the relevant products	Star Allocation	WaterMark Certification Level	Water Saving Information
Flow controllers	<p>Flow controllers that are installed either end of line or in line. They generally support single fixtures or appliances.</p> <p>Flow controllers cannot be rated if used directly with a shower.</p> <p>Note: Registration is voluntary.</p>	<p><i>ATS 5200.037.2-2005-Technical Specification for plumbing and drainage products, Part 037.2: Flow controllers-For use in heated or cold water plumbing systems.</i></p>	<p>Flow controllers are rated based on the nominal flow rate and must satisfy basic material and design requirements:</p> <ul style="list-style-type: none"> <li>more than 16L/min. or failing the performance requirement are nominated 0 star</li> <li>more than 12L/min. but not more than 16L/min. are nominated 1 star</li> <li>more than 9L/min. but not more than 12L/min. are nominated 2 star</li> <li>more than 7.5L/min. but not more than 9L/min. are nominated 3 star</li> <li>more than 6L/min. but not more than 7.5L/min. are nominated 4 star</li> <li>more than 4.5L/min. but not more than 6L/min. are nominated 5 star</li> <li>not more than 4.5L/min. are nominated 6 star</li> </ul>	WMCS WaterMark Level 1 applies	
Toilet (lavatory equipment)	Toilet suites, pans, cisterns, flushing devices and combinations of these products.	<p><i>AS 1172.1-2005, Water closets (WC), Part 1: Pans</i></p> <p><i>AS 1172.2-1999, Water closet (WC) pans of 6/3 L capacity or proven equivalent, Part 2: Cistern</i></p> <p><i>ATS 5200.021-2004, Technical Specification for plumbing and drainage products, Part 021: Flushing valves for water closets and urinals-For use with break tank supply</i></p> <p><i>ATS 5200.020-2004, Technical Specification for plumbing and drainage products, Part 020: Flushing valves for water closets and urinals-For use with mains supply and</i></p> <p><i>ATS 5200.030-2004, Technical Specification for plumbing and drainage products, Part 030: Solenoid valves.</i></p>	<p>Toilets are rated based on discharge flush volume, and a minimum water efficiency standard applies. The average water consumption must not exceed 5.5 litres per flush. The average water consumption of a dual flush cistern is taken to be the average of one full flush and four half flushes. This means dual flush cisterns of 9 litre full flush/4.5 litre half flush are the least efficient products that can be sold.</p> <p>The star ratings are nominated as follows:</p> <ul style="list-style-type: none"> <li>Not more than 9/4.5L with an average flush of no more than 5.5L are nominated 1 star</li> <li>Not more than 9/4.5L with a 4.5L average flush volume are nominated 2 star</li> <li>Not more than 6.5/3.5L with an average flush of not more than 4L are nominated 3 star</li> <li>Not more than 4.7/3.2L with an average flush of not more than 3.5L are nominated 4 star</li> <li>Not more than 4.7 full flush with an average flush of no more than 3.0L are nominated 5 star</li> <li>not more than 4.7 litres full flush with an average of no more than 2.5L are nominated 6 star</li> </ul>	WMCS WaterMark Level 1 applies	<p>Replacing a traditional single flush toilet with a water efficient dual flush toilet can save up to 51 litres per person per day.</p> <p>Using a water efficient dual flush toilet can reduce household water use by up to 30,000 to 40,000 litres per household per year.</p>
Urinal	Urinal suites, urinals,	<i>AS/NZS 3982:1996, Urinals</i>	Products are rated based on the flush volume and the type	WMCS WaterMark	The most efficient

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equipment	urinal flushing control mechanisms and combinations of these products. The WELS Standard does not include waterless urinals.	<i>ATS 5200.004-2005, Technical Specification for plumbing and drainage products - Urinal flushing cisterns.</i>	and complexity of the operating mechanism.  Products can be rated as follows: <ul style="list-style-type: none"> <li>• more than 2.5L/single stall or 4L two stalls or equivalent width of continuous wall are nominated 0 star</li> <li>• not more than 4L two stalls or equivalent width of continuous wall and conscious demand driven or smart demand operation are nominated 1 star</li> <li>• not more than 2.5L single stall or equivalent width of continuous wall and conscious demand driven or smart demand operation are nominated 2 star</li> <li>• not more than 2L single stall or equivalent width of continuous wall and conscious demand driven or smart driven operation are nominated 3 star</li> <li>• not more than 1.5L single stall or equivalent width of continuous wall and smart demand operation are nominated 4 star</li> <li>• not more than 1L single stall or equivalent width of continuous wall and smart demand operation are nominated 5 star</li> <li>• not more than 1L single stall or equivalent width of continuous wall and smart demand operation with urine sensing device are nominated 6 star.</li> </ul>	Level 2 applies	urinals combined with smart controls can reduce water use by up to 40-50 per cent.
Clothes washers	Electric washing machines intended for household or similar use e.g. <ul style="list-style-type: none"> <li>• Top loading non drum (impeller or agitator);</li> <li>• Front and top loading drum type; or</li> <li>• Washer function of combination washer/dryer.</li> </ul>	<i>AS/NZS 2040.2:2005 - Performance of household electrical appliances-Clothes washing machines, Part 2: Energy labelling requirements.</i>	Washing machines are rated based on their water consumption.  Calculations are based on testing to AS 2040.2 using the higher claimed total water consumption for warm or cold washes.	WMCS WaterMark Level 2 applies  There is no technical relationship between WELS and the WaterMark schemes.	A water efficient clothes washer may use one-third the water of an older, less efficient model.

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Product type	WELS Scheme applies to:	Standard outlining the relevant products	Star Allocation	WaterMark Certification Level	Water Saving Information
Dishwashers	Dishwashers	<i>AS/NZS 2007.2:2005 - Performance of household electrical appliances- Dishwashers, Part 2: Energy labelling requirements.</i>	<p>Water efficiency is evaluated under the same testing requirements that are required to establish the energy efficiency.</p> <p>Dishwashers are differentiated based on water consumption per equivalent types (utilising place settings).</p>	<p>WMCS WaterMark Level 2 applies</p> <p>There is no technical relationship between WELS and the WaterMark schemes.</p>	<p>The most efficient dishwashers may use half the water of average models.</p>

### More information

For more information on the WELS and WaterMark Schemes contact IAPMO R&T Oceana:

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