



# U L

## Operator Manual

**WASHTECH**



**WASHTECH**



**WASHTECH®**  
PROFESSIONAL WASH SYSTEMS



**WARNING**

Before installation and commissioning, you must read the safety instructions and warnings carefully and all the warning labels attached to the equipment.



**IMPORTANT**

Failure to comply (even partially) with the instructions given in this manual will invalidate the product warranty and relieves the manufacturer of any responsibility



**IMPORTANT**

The alteration of machine operation, design or the replacement of parts not approved by the manufacturer may void warranties and approvals.

**CONTENTS**

Safety Instructions.....3

Installation.....4

Installation Diagram.....5

Operating Procedures.....6

Troubleshooting.....8

Wiring Diagram.....10

We have checked that the contents of this document correspond to the model described. There may be discrepancies nevertheless, and no guarantee can be given that they are completely identical. The information contained in this document is reviewed regularly and any necessary changes will be included in the next edition. We welcome suggestions for improvement.

Specifications and document subject to change without prior notice.

Information supplied in this manual is copyright. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical without the express permission of the author / publisher.

**Service    1 800 622 216**  
**Parts        1 800 337 963**



Distributed in Australia by Moffat Pty Limited  
740 Springvale Road, Mulgrave, Victoria  
Tel 09 9518 3888        |        Fax 03 9518 3818

# Safety Instructions



## **WARNING**

Equipment contains dangerous voltages and can be hazardous if installed or operated incorrectly. Non-compliance with warnings or failure to follow the instructions contained in this manual can result in loss of life, severe personal injury or serious damage to property.

## **Installation**

- Use qualified, skilled personnel
- Follow installation instructions
- Connect to correct voltage and supply current
- Provide fully accessible electrical Isolation Switch & water supply valves

## **Training and Supervision**

- Read and understand the Operating instructions and train all staff
- This appliance must not be operated by children or infirm persons
- Machine panels must only be removed by suitably qualified and trained personnel – internal hazards include live electrics and very hot surfaces
- This appliance is not intended for use as a stepladder

## **Hot Surfaces**

- Some surfaces may be hot or very hot

## **Chemicals**

- Commercial dishwashing detergents are hazardous – handle with care
- Read and follow the safety information found on the labels of detergent containers and Material Safety Data Sheets
- Use protective eyewear and clothing if decanting containers

## **Hot Water**

- Do not put hands in wash water which may be over 60°C and contain hazardous caustic detergent
- Rinse water can be over 90°C
- Door safety switches are designed for emergency use only

## **Cleaning**

- Do not hose down the machine or splash water over the exterior
- Watch for broken glass etc when cleaning the inside of the machine

## **Service/repair**

- Under no circumstances the user should attempt to carry out repairs
- All service/repair work must be carried out by qualified personnel only

## **Power Cord Replacement**

- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard

# Installation Checklist



## **WARNING**

Installer must be suitably qualified and ensure compliance with all codes and standards including AS/NZS3500.1.

## **Unpack**

- Unpack the machine, check for damage and complete delivery.

## **Positioning**

- Place machine on sound waterproof self draining floor and adjust feet to level
- Allow room for adjacent chemical containers

## **Water**

- Flush supply lines before connection
- Connect hose supplied to adjacent accessible isolator valve - 20 mm 3/4 male
- Flow rate required - 15 litres per minute
- Temperature - 65°C
- Consumption per cycle - 2.6 litres
- Pressure required - 200-350 kPa - fit limiter above this pressure
- Back Flow - Dual Check Valve (DCV) supplied with the machine
- Potable water quality is required - filter or soften if necessary

## **Power**

- Machine shipped with cordset for 15 A 240V 50Hz via adjacent switched outlet.
- Easily upgradeable to single phase 25 A 240V 50Hz or three phase 15 A per phase 415V 50Hz

## **Waste**

- Connect drain pump hose supplied to upstand or sink waste connection

## **Detergent**

- Note that detergent is hazardous - read instructions and handle with care
- Insert hose into container of commercial dishwasher low foam detergent
- Pump will prime as machine fills and then come up to strength with use

## **Rinse Fluid**

- Insert hose into adjacent container of commercial dishwasher rinse fluid
- Injector accessible via front panel. Factory setting is middle of half turn adjustment range from 0 to 1.3ml per litre of rinse water. A fine screw driver is required to adjust dosage.

## **Operation**

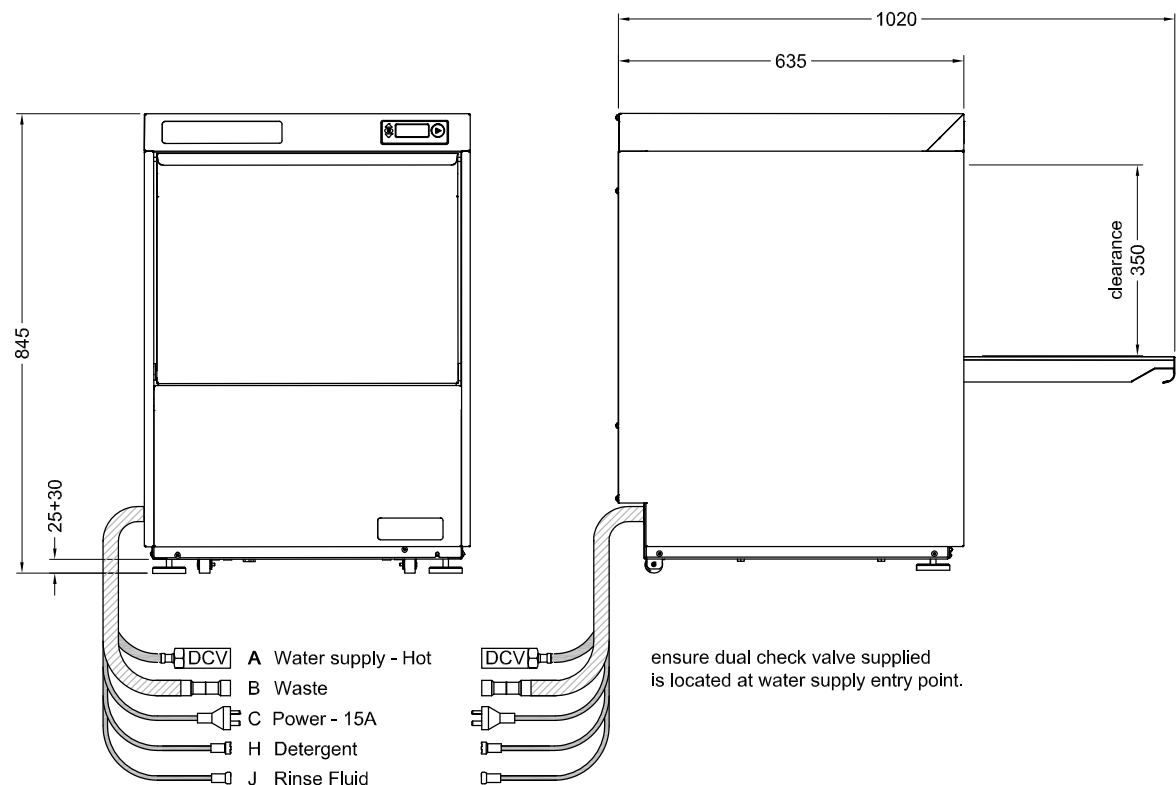
- Run several cycles, ensure that operator has read and understands instructions

## **Troubleshooting Installation**

- If machine doesn't fill after switching on power, check & ensure that hot water supply tap is open, water supply pressure is not below specification and DCV is correctly installed as per arrow on DCV body.

# UL Installation Diagram

UL-S INST 16-10-14 3C





## Keypad Operation

Turn machine on at wall, Fit wash filter, scrap tray, filter basket and shut door. Press On/Off Key for 3 Seconds



Start key glows white as machine fills. If door is open then the start key glows purple



Once full, rinse heating starts. Start key glows orange while heating. Machine can be started when machine is heating. NOTE: If rinse temperature is not sufficient cycle countdown will stop at 22 seconds.. Washing continues until rinse reaches temperature required for sanitization and countdown then resumes.



Start key glows green when machine is fully heated. For different cycles press the UP and DOWN arrows: Light, Medium, Heavy, Manual or Drain.



Close door, press start key to start cycle. When manual cycle is selected machine will continue washing until START button is pressed. Rinsing and draining follow washing to complete cycle.



Start key glows red during cycle. Pressing Start key again terminates cycle without rinse. Timer counts down to double zero and flashes 00 at cycle end until door is opened.



### SHUT DOWN - EVERY NIGHT

Press UP or DOWN keys to select Drain cycle. Shut the door. Press START key to start Drain cycle. Machine drains for 100 seconds with a cleaning rinse mid-cycle. When Draining is complete machine goes into Standby mode. Remove filter basket, scrap tray and wash filter; rinse clean and replace.



**Service 1 800 622 216**  
**Parts 1 800 337 963**

## Operating Procedures

### PRE-RINSING

Pre-scraping of dishes is required. The best method is to pre-rinse with water. Pre-rinse Unit - or alternatively by hand.

Cutlery should be pre-soaked in water. Cutlery pre-soak compound - refer to your chemical supplier.

### RACKING PROCEDURES

Do not overload racks or cutlery compartments. Wash cutlery unsorted.

Cycle times are short and water consumption is low. There is no advantage in overloading.

### CYCLE TIMES

The UL has a 1, 2, 3 minute cycle.

### CHEMICAL

Correct type and quantity of detergent is essential. Use good quality chemicals and refer to the use of drying agent and cutlery chemical supplier. Detergent concentration is adjustable (dispensing time on the keypad Programming). Rinse Fluid is factory set. It will take many cycles to prime. The adjusting screw on the front cover.

### DRYING

Single tank commercial dishwashers. However, the machines do rinse and dry. This promotes fast drying particularly with the use of drying agent.

At the end of the cycle promptly remove the machine - leave the rack on the bench. Emptying. This time will be reduced by the use of drying agent (rinse fluid) which reduces water to drain quickly from wash racks and injectors refer to your chemical supplier.

**WASH**



# WASHTECH®

## Procedures

by Food Hygiene Regulations. The  
warm water with a Fisher  
/ scraping or dunking in water.

Warm water, preferably containing  
your chemical supplier.

containers, minimise the overlap  
and, handles down.

consumption per cycle low – so  
long racks.

urgent is essential for good results.  
regularly check containers. Discuss  
ry pre soak solution with your  
centration can be changed by  
keypad (refer to page 8 User  
ory set to a low injection rate, and  
the operator can adjust this via the  
r (refer service manual)

ers do not have a drying cycle.  
t high temperatures which  
when drying agents are used.

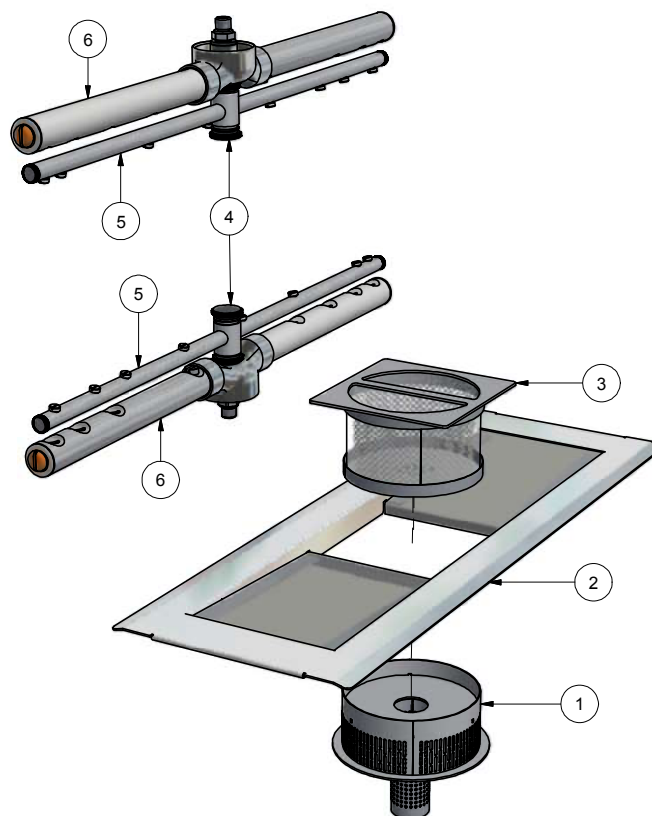
remove the rack from the  
ench for 2 to 3 minutes before  
ed with correct use of drying  
water surface tension and allows  
ware. For advice on drying agents  
al supplier.

## Care

### DAILY CLEANING

It is essential that the machine is drained and cleaned at the end of each day. Drain the machine as per the shut down instructions. Remove, clean and replace filters. Regularly check the wash and rinse jets and clean if necessary – see below

**REGULAR CLEANING** – at least once a week remove filter basket (3), scrap tray (2) and wash filter (1). Remove wash (6) and rinse arms (5) by undoing the central thumbscrews (4). Inspect all jets – use toothpick or paperclip and remove arm end-caps if necessary to flush and clear. Clean and then replace all items.



### MAINTENANCE

Regular servicing of the dishwasher is essential for high performance, efficient operation and long machine life.

Contact us for information on maintenance contracts.

# WASHTECH®

Distributed in Australia by Moffat Pty Limited  
740 Springvale Road, Mulgrave 3170 Victoria  
Tel (03) 9518 3888 | Fax (03) 9518 3818  
Web [www.moffat.com.au](http://www.moffat.com.au)

# User Programming

The **User Settings** menu is accessed for programming by pressing the UP and DOWN keys simultaneously for a few seconds.

The programming options are specified in the table below:

| User Settings            | Default | Selection   |
|--------------------------|---------|-------------|
| Power Save               | ON      | ON/OFF      |
| Detergent Injection Time | 12      | 5 - 30 secs |
| Display Contrast         | 27      | 10 - 40     |

**Power Save** function reduces the rinse temperature setting by 10°C when the machine is idle for 5 minutes or more. The temperature settings return to the set value when door is opened or START/STOP key is pressed.

## Troubleshooting

If an error message appears on the control display first try turning the machine OFF for 30 seconds and then back ON. If the error message remains then call for service with the exception of the following:

| Display Code  | Cause                           | Remedy                   |
|---|---------------------------------|--------------------------|
| 7. Fill Failure - wash tank not full after fill timeout | Check flow rate of water supply | Check water supply       |
| 8. Drain Failure  | Drain hose jammed/blocked       | Check/unblock drain hose |



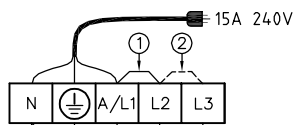
# Troubleshooting

| <b>Fault</b>          | <b>Cause</b>                      | <b>Remedy</b>                              |
|-----------------------|-----------------------------------|--|
| <b>Filling</b>        |                                   |  |
| Not filling           | Water supply valve shut           | Check Water supply valve                   |
|                       | Door Switch not operating         | Check Door is closed                       |
| <b>Heat ing</b>       |                                   |  |
| Dishes not hot enough | Rinsing but not hot               | Check arms spinning freely                 |
| <b>Cycle st art</b>   |                                   |  |
| Does not start        | Door switch                       | Check door is closed                       |
| <b>Cycle Finish</b>   |                                   |  |
| Wash too long         | Water supply cold                 | Check water temperature                    |
| <b>Performance</b>    |                                   |  |
| Poor wash result      | Detergent not used                | Use quality low foam product               |
|                       | Overloading racks                 | Do not overload racks                      |
|                       | Not pre-rinsing                   | Use Fisher pre-rinse                       |
|                       | Wash arms not rotating            | Remove and clean arms/check bushes         |
|                       | Wash jets blocked                 | Remove arms and clean jets                 |
|                       | Excessive soiling                 | Pre-rinse/use long cycle                   |
|                       | Unrealistic expectation           | E.g. baked on soiling requires pre-soaking |
| Poor rinse results    | Rinse jets blocked                | Remove arms and clean jets                 |
|                       | Rinse arms not turning            | Remove arms, clean jets, check bushes      |
|                       | Poor racking procedures           | Do not overload racks                      |
|                       | Excessive wash tank soil build up | Pre-rinse, change wash water regularly     |
| Not drying            | Poor wash/rinse performance       | Refer above                                |
|                       | Low temperatures                  | Check heating systems                      |
|                       | Drying agent not used             | Use quality drying agent/rinse fluid       |
| Foaming Wash          | Excessive Rinse Fluid             | Adjust Rinse Fluid Injector                |

# UL Wiring Diagram

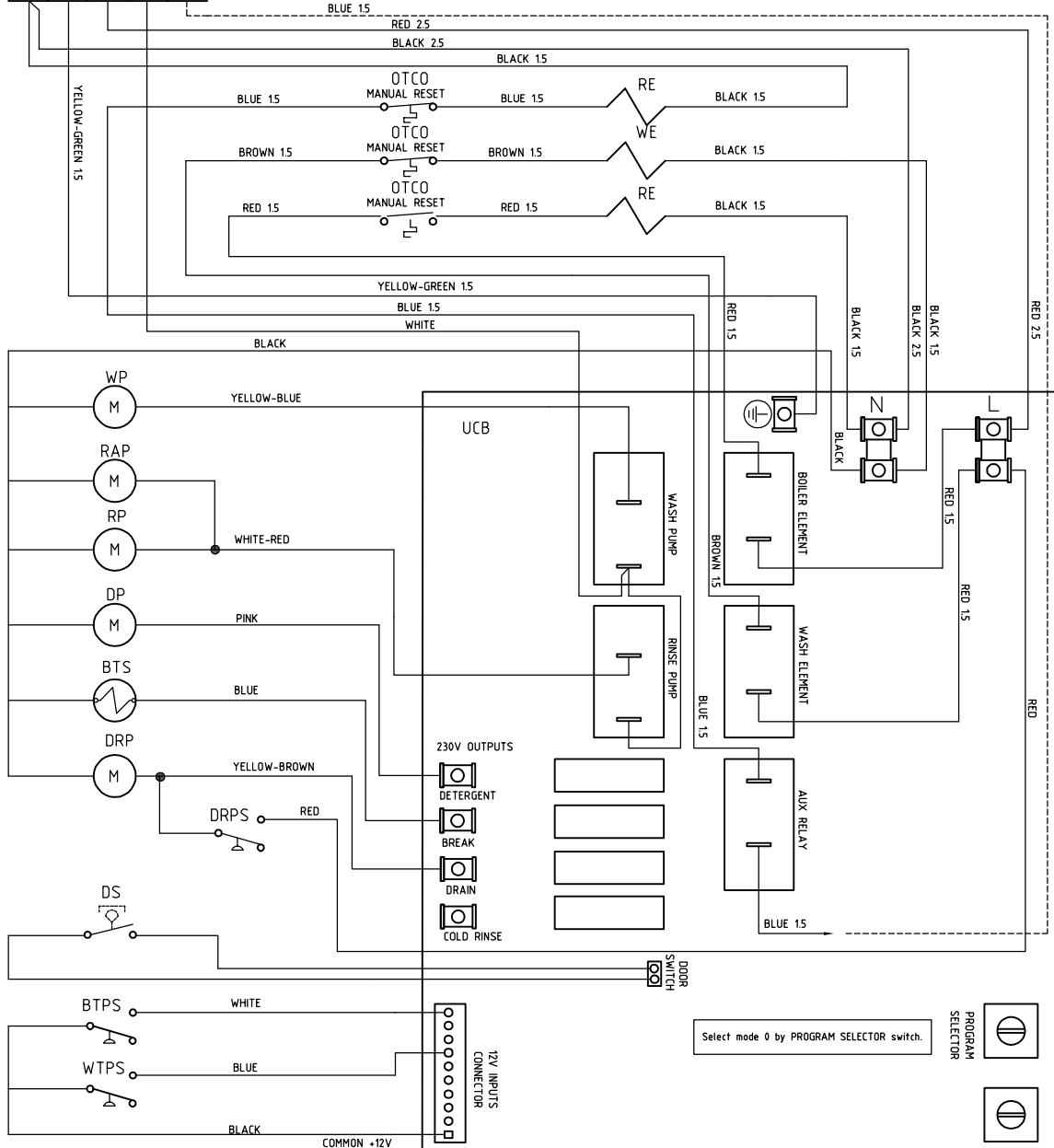
030314 06/11/14 1D

## POWER SUPPLY TERMINAL

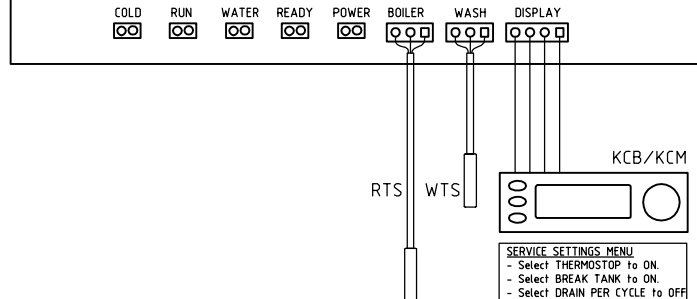


## IMPORTANT

- 1P 240V 15A - 3kW RINSE HEATING, STANDARD AS SHIPPED WITH 15A CORDSET AND LINK 1 FITTED.
- 1P 240V 25A - 6kW RINSE HEATING - REPLACE CORDSET WITH PROPER RATED CABLE FROM 25A SUPPLY CIRCUIT, FIT LINK 2 BETWEEN L2 & L3, THEN CONNECT BLUE 15MM WIRE (SUPPLIED) FROM AUX RELAY.
- 3P+N+E 415V 15A - 6kW RINSE HEATING - REPLACE CORDSET WITH PROPER RATED CABLE, REMOVE ALL LINKS, THEN CONNECT BLUE 15MM WIRE (SUPPLIED) FROM AUX RELAY.



| ITEM | CODE      | DESCRIPTION                           | QTY |
|------|-----------|---------------------------------------|-----|
| BTPS | 600 30214 | BREAK TANK PRESSURE SWITCH            | 1   |
| BTS  | 3342      | BREAK TANK SOLENOID VALVE             | 1   |
| DP   | 600 30094 | DETERGENT PUMP PERISTALTIC 15L/H      | 1   |
| DRP  | 600 60102 | DRAIN PUMP B20-6 220-240V 50HZ        | 1   |
| DRPS | 600 30214 | DRAIN PRESSURE SWITCH                 | 1   |
| DS   | 600 30183 | DOOR SWITCH REED STEM                 | 1   |
| KCB  | 600 30420 | KEYPAD CONTROLLER BOARD               | 1   |
| KCM  | 400 70160 | KEYPAD CONTROLLER MEMBRANE            | 1   |
| OTCO | 600 30088 | THERMOSTAT TY60/6-110C                | 2   |
| RAP  | 600 30480 | RINSE AID PUMP PERISTALTIC ADJUSTABLE | 1   |
| RE   | 3007      | ELEMENT 2 x 3000W 240V                | 1   |
| RP   | 600 30327 | RINSE PUMP 0.24kW                     | 1   |
| RTS  | 600 30430 | RINSE TEMPERATURE SENSOR              | 1   |
| WE   | 600 30226 | ELEMENT 2500W 240V WASH               | 1   |
| WP   | 3888      | WASH PUMP 0.5HP                       | 1   |
| WTPS | 400 10211 | WASH TANK PRESSURE SWITCH             | 1   |
| WTS  | 600 30429 | WASH TEMPERATURE SENSOR               | 1   |
| UCB  | 600 40081 | UNIVERSAL CONTROLLER BOARD            | 1   |



# Accessories

|   | Code      | Description         |
|---|-----------|---------------------|
|  | 600 70029 | Cuprack 500mm       |
|  | 600 70028 | Dishrack 500mm      |
|  | C660503   | G Cutlery Container |

Information supplied in this manual is copyright.  
No part of this work may be reproduced or copied  
in any form or by any means, electronic or  
mechanical without the express permission of the  
author/publisher

Distributed in Australia by Moffat Pty Limited



740 Springvale Road  
Mulgrave 3170  
Victoria  
Australia

24HR Service 1 800 622 216  
Parts 1 800 337 963

|        |  |
|--------|--|
| Tel    | 03 9518 3888   |
| Fax    | 03 9518 3818   |
| E-mail | <a href="mailto:vsales@moffat.com.au">vsales@moffat.com.au</a> |
| web    | <a href="http://www.moffat.com.au">www.moffat.com.au</a>       |

#### ISO9001

All Washtech products are designed and  
manufactured by Washtech using the  
internationally recognised ISO9001 quality  
management system, covering design,  
manufacture and final inspection, ensuring  
consistent high quality at all times.

In line with policy to continually develop and  
improve its products, Washtech Ltd reserves the  
right to change specifications and design without  
prior notice.

