## Rack Conveyor Dishwashers **RR**



Rhima Australia www.rhima.com.au Rhima New Zealand www.rhima.co.nz Rhima Singapore www.rhima.sg





#### **RACK CONVEYOR DISHWASHERS**

The rack conveyor dishwashers are the ideal answer for demanding establishments such as restaurants, canteens, schools, hospitals, hotels of any size, cruise-liners, caterers and airports.

Rhima has 4 different series of rack conveyor washers:

- Compact Washers
- Evo Washers
- Pro Washers
- Optima Washers

The RR line offers a variety of models within each series that have multiple accessories that can be combined with the tray washers and the belt-conveyor dishwashers, to offer tailor-made solutions for any customer's need.

The built-in detergent economiser (standard) and the heat recovery system (optional) improve the energy efficiency, with a consequent control on operating costs, as well as consumption, with a special focus on environment preservation.





#### BENEFITS

- Radial wash tanks sloped to help empty the tanks
- Self-cleaning vertical wash pumps, protected from electrical overloads
- AISI 304 stainless steel boilers, fully insulated to reduce thermal losses
- S/S surface filters on every tank, easily removable without detaching washing arms, to keep the water clean and free from food scraps
- Double-skin insulated and counterbalanced doors, equipped with anti-fall safety device. This is to save energy, and allows for quieter operation.

- Two-5 speed traction system with built-in clutch. Variable speed inverter available on request, to modify the conveyor speed when needed
- Non-Return Valve to prevent the backflow of water, and avoid any contamination of the water supply in case of external depression
- OPTIONAL: Heat Recovery in case of cold water inlet. This unit recovers and re-uses the heat/energy produced by the machine during service to pre-heat the cold water supply.

#### **COMPACT WASHERS**

#### SMALL SIZE, GREAT PERFORMANCE

The RR compact dishwashers line has been designed to satisfy the demand of small and medium restaurants or food establishments.

The working direction of this range can be adjusted to suit different operations.



#### **STANDARD**

- Two operating speeds
- Digital display and soft touch keyboard
- S/S wash and rinse arms
- Autotimer
- Wash and rinse economizers
- Sloped wash tanks to provide complete drainage of the wash water
- S/S surface filters
- Insulated double-skin door
- Non return valve
- AISI 304 S/S boiler
- Vertical self cleaning wash pump

#### OPTIONS

- Blowers with a 4.5kW heating element, available on straight as well as corner (90°/180°) modules (also insulated)
- Steam condenser
- Heat recovery
- Pre-wash module with drawer strainer (AS)
- Detergent pump





Racks/Hour* Power Supply Basket Size	nr dB(a)	70/100 400 V 3N-50Hz 500 x 500	150/200 400 V 3N-50Hz	100/150 400 V 3N-50Hz
Basket Size	dB(a)		400 V 3N-50Hz	400 V 3N-50Hz
	dB(a)	500 x 500		
	dB(a)		500 x 500	500 x 500
Noise at 1 m		66.2	66.2	69.7
Dimensions	mm	1080x715x1565/1900H	1080x715x1565/1900H	1880x715x1565/1900H
PRE-WASH				
Pump	kW	/	/	0.9
Operating Temperature	°C	/	/	45
Tank Capacity		/	/	40
WASHING				
Wash pump	kW	0.9	0.9	1.5
Operating Temperature	°C	55	55	55
Tank capacity	I	80	80	80
Heating	kW	9	9	9
RINSE				
Water consumption +	l/h - kPa	200	320	260
Heating	kW	12	28	18
Boiler capacity		28.5	28.5	28.5
Total Power*	kW	23	39	30
Operating temperature	°C	85	85	85
DRYING				
Length	mm	500	500	500
Fan	kW	0.25	0.25	0.25
Capacity	m3/h	570	570	570
Heating	kW	4.5	4.5	4.5
STEAM CONDENSER				
Fan power	kW	0.05	0.05	0.05
Absolute humidity	gv/kga	28	28	28
Capacity	m3/h	340	340	340

\* Feeding water 55°C + 200 - 500 kpa

#### **EVO WASHERS**

The RR Evo dishwashers series has been designed to meet the DIN 10512 norm. The working direction of this range can be adjusted to suit different operations.





#### STANDARD

- Two operating speeds
- Digital display and soft touch keyboard
- IPX5 electronic board
- Ability to adjust pressure on the wash and rinse arms
- S/S wash and rinse arms
- Autotimer
- Wash and rinse economizers
- Sloped wash tanks to provide complete drainage of the wash water
- S/S surface filters
- Insulated double-skin door
- Non return valve
- AISI 316 S/S boiler
- Vertical self cleaning wash pump

#### **OPTIONS**

- Blowers with a 4.5kW and 9kW heating element, available on straight as well as corner (90°/180°) modules (also insulated)
- Steam condenser
- 4 models of heat recovery
- Booster pump
- Pre-wash module with drawer strainer (AS)
- Sanitisation system
- Break Tank
- S/S pumps
- Speed Adjuster
- Detergent Pump

		RR190	<b>RR210</b>	<b>RR250</b>	<b>RR280</b>
RACKS PER HOUR					
at minimum speed	n.	83	111	148	185
at maximum speed	n.	107	143	190	238
DIN10510 compliant	n.	80*	92*	116*	134*
rinse water consumption	l/h	130	160	230	280
clearance (l x h)	mm	510 x 450	510 x 450	510 x 450	510 x 450
PRE WASH					
pump	kW	-	-	0.9	2,18
washing pressure at nozzle	kPa	-	-	30	40
rated capacity	l/min	-	-	330	875
tank volume	I	-	-	45	85
CHEMICAL WASH					
pump	kW	1,5	2,18	1,5	1,5
washing pressure at nozzle	kPa	40	40	40	40
rated capacity	l/min	700	875	700	700
tank volume	I	85	85	85	85
tank heating element	kW	9	9	9	9
DOUBLE RINSE					
pre-rinse pump	kW	0.2	0.2	0.2	0.2
pre-wash tank volume	I	4,5	4,5	4,5	4,5
total installed power					
hot water intake (55°C)	kW	19,9	20,6	23,8	28,1
cold water intake (10°C)	kW	25,9	29,6	35,8	40,1
with HR10	kW	23	26,7	29,9	34,2
with HR20	kW	-	-	26,9	31,2
with HRP30	kW	-	-	28,1	33,9
DIMENSIONS (L x W x H)					
standard	mm	1900x805x1830 /2120	2100x805x1830 /2120	2500x805x1830 /2120	2800x805x1830 /2120
BLOWERS					
module 600 (4,5 kW)	mm	L+400, H+240	L+400, H+240		
module 900 (9 kW)		L+700, H+240	L+700, H+240	L+700, H+240	L+700, H+240
angle module 90° (4,5kW - 9kW)	mm	L+850, H+240	L+850, H+240	L+850, H+240	L+850, H+240
angle module 180° (4,5kW - 9kW)	mm	L+850, W+850 H+240	L+850, W+850 H+240	L+850, W+850 H+240	L+850, W+850 H+240
AS	mm	L+450	-	L+450	L+450
LC	mm	-	-	L-300, W+250	-

#### **PRO WASHERS**

The RR Pro dishwashers line has been designed to deal with demanding conditions. All models are fitted with a reinforced double rinse.

The working direction of this range can be adjusted to suit different operations.





# • 📼 RR396

#### STANDARD

- Five operating speeds
- Digital display and soft touch keyboard
- IPX5 electronic board
- Autotimer
- Wash and rinse economisers
- Detergent saving system
- AISI 316 wash tanks inclined to provide complete drainage of the wash water
- S/S surface filters
- Insulated double-skin door
- Non return valve
- AISI 316 S/S boiler
- Vertical self cleaning wash pump
- Renewed reinforced double rinse system, which grants higher efficiency with lower consumption

#### **OPTIONS**

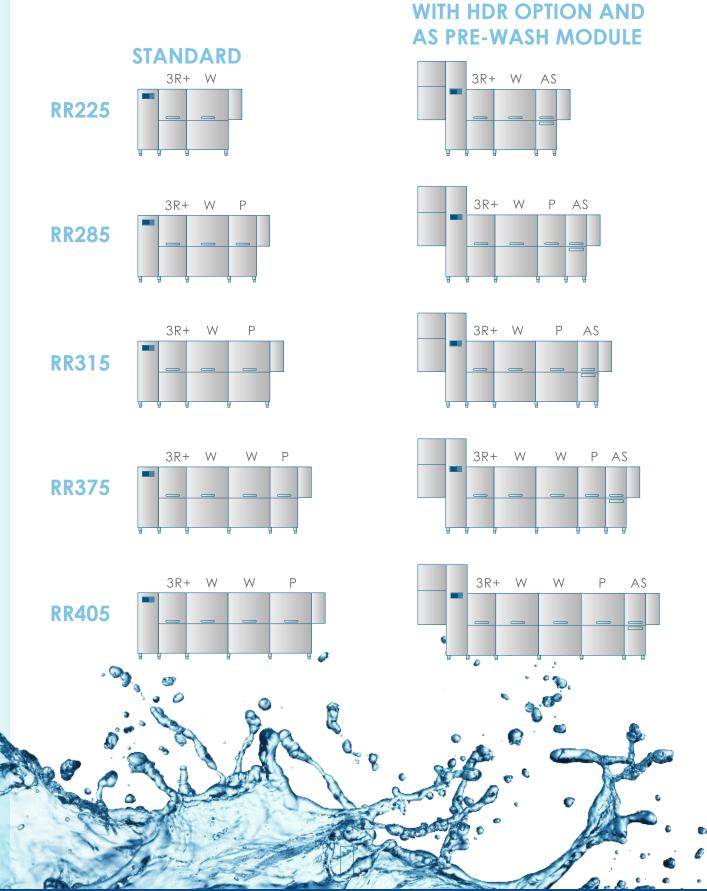
- Blowers with a 4.5kW and 9kW heating element, available on straight as well as corner (90°/180°) modules (also insulated)
- Steam condenser
- 4 heat recovery devices, in accordance with the dishwasher model required
- Pre-wash module with drawer strainer (AS)
- Stainless steel wash pump
- HACCP supervisor
- Centralized drain
- Possibility to turn off the dryer heating elements, if needed
- Break Tank
- Detergent Pump

		<b>RR246</b>	RR296	RR326	RR356	RR396
RACKS PER HOUR						
DIN10510 compliant	n.	100	135	150	190	210
DIN10510 compliant in case of AS	n.	123	159	177	213	231
at maximum speed	n.	250	300	330	360	400
rinse water consumption	l/h	150	190	250	310	340
clearance (l x h)	mm	510 x 450				
PRE WASH						
pump	kW	-	1	2,18	1	2,18
washing pressure at nozzle	kPa	-	30	40	30	40
rated capacity	l/min	-	330	857	330	875
tank volume	I	-	45	85	45	85
2 CHEMICAL WASH						
pump	kW	-	-	-	2,18	2,18
washing pressure at nozzle	kPa	-	-	-	40	40
rated capacity	l/min	-	-	-	875	875
tank volume	I	-	_	-	9	9
tank heating element	kW	-	_	-	9	9
1st CHEMICAL WASH						
pump	kW	2,18	2,18	2,18	2,18	2,18
washing pressure at nozzle	kPa	40	40	40	40	40
rated capacity	l/min	875	875	875	875	875
tank volume	l/min	85	85	85	85	85
tank heating element	kW	9	9	9	9	9
DOUBLE RINSE						
pre-rinse pump	kW	0.2	0.2	0.2	0.2	0,2
pre-wash tank volume	1	12	12	12	12	12
total installed power						
hot water intake (55°C)	kW	20,6	21,6	25,8	37,3	39,8
cold water intake (10°C)	kW	29,6	33,6	34,8	_	
with HR10	kW	23,8	27,8	32	48	49
with HR20	kW		24,8	29	42	46
with HRP30	kW		25,8	30	41,5	44
DIMENSIONS (L x W x H)						
standard	mm	2100x805x1830	2700x805x1830	3000x805x1830	3600x805x1830	3900x805x1830
BLOWERS						
module 600 (4,5 kW)	mm	L+400,				
module 900 (9 kW)		H+240 -	L+700,	L+700,	L+700,	L+700,
	~~~	 L+850,	H+240 L+850,	H+240 L+850,	H+240 L+850,	H+240 L+850,
angle module 90° (4,5kW - 9kW)	mm	H+240 L+850,	H+240 L+850,	H+240 L+850,	H+240 L+850,	H+240 L+850,
angle module 180° (4,5kW - 9kW)	mm	W+850 H+240	W+850 H+240	W+850 H+240	W+850 H+240	W+850 H+240
AS	mm	L+450	L+450	L+450	L+450	L+450
LC	mm	_	L-300, W+250	-	L-300, W+250	-

#### **OPTIMA WASHERS**

The RR Optima dishwashers series has been designed to deal with demanding conditions. All models are fitted with a 3 step rinse system which ensures considerable water savings.

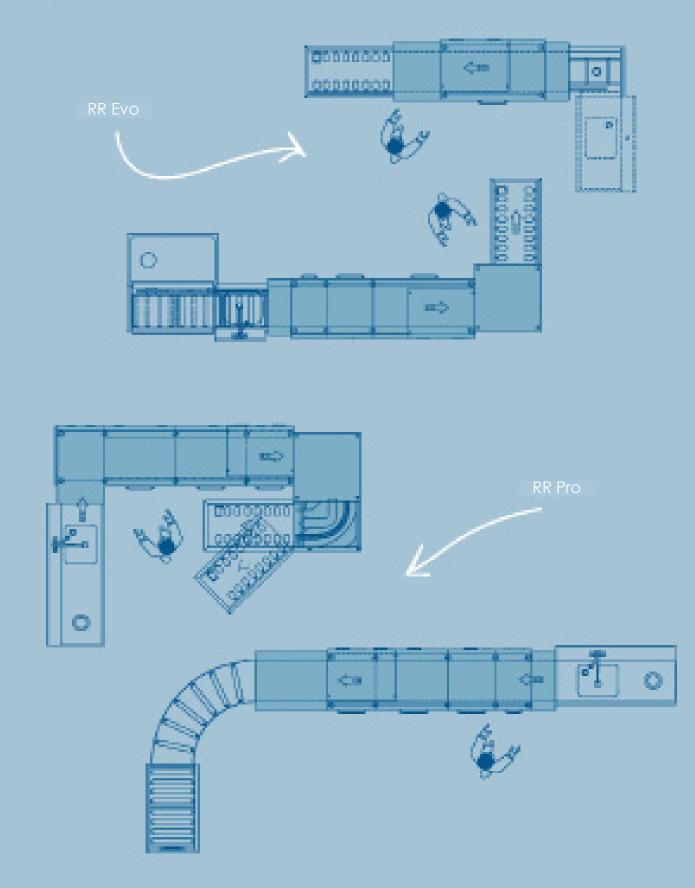
The working direction of this range can be adjusted to suit different operations.

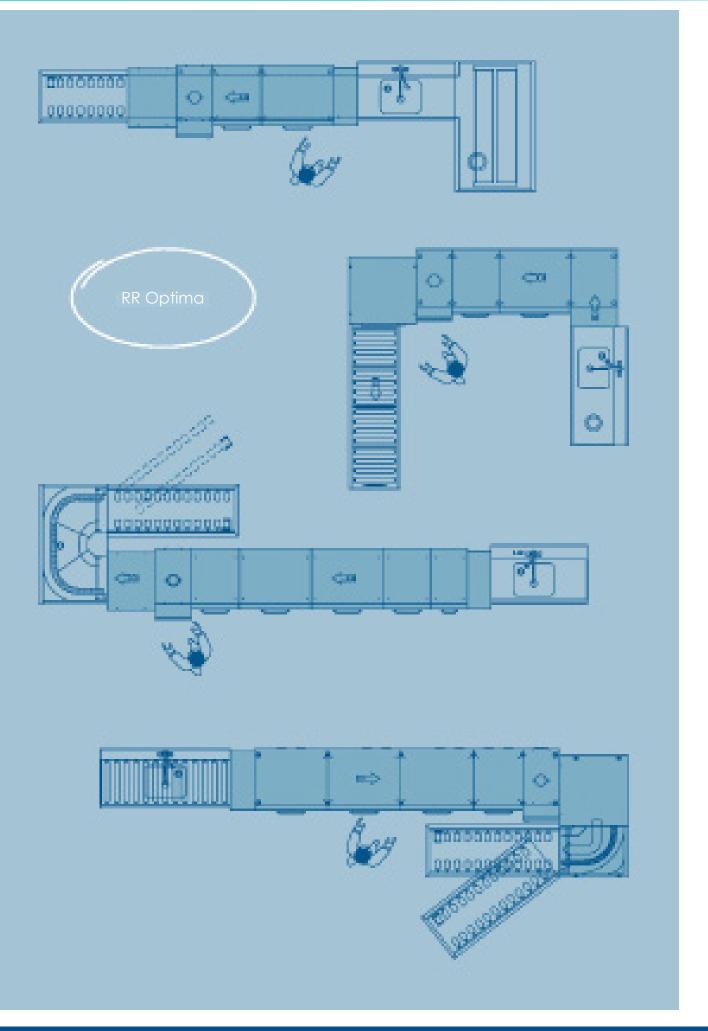


10 | Rhima

		RR225	RR285	RR315	, RR375	RR405	
RACKS PER HOUR				() ()	<u>,</u> ,		
DIN10510 compliant	n.	100	135	150	• 190	210	
DIN10510 compliant in case of AS	n.	126	162	180	216	234	
at maximum speed	n.	250	300	330	360	400	
RINSE WATER CONSUMPTION							
per hour (min-max)	mm	100 - 110	130 - 140	150 - 170	180 - 205	200 - 220	
per rack (min-max)*	L	0.45 - 1	0.45 - 0.96	0.5 - 1	0.5 - 0.95	0.5 - 0.95	
clearance (L x H)	mm	510 x 450					
PRE WASH							
pump	kW	-	0,9	2,18	0,9	2,18	
rated capacity	I/min	-	330	875	330	875	
operating temperature	C°	-	47	47	47	47	
tank volume	I	-	45	85	45	85	
CHEMICAL WASH							
pump	kW	2,18	2,18	2,18	2,18	2,18	
rated capacity	I/min	875	875	875	875	875	
operating temperature	C°	55	60	60	65	65	
tank volume	I	85	85	85	85	85	
tank heating element	kW	9	9	9	9	9	
CHEMICAL WASH							
pump	kW	-	-	-	2,18	2,18	
rated capacity	I/min	-	-	-	875	875	
operating temperature	C°	-	-	-	55	55	
tank volume	I	-	-	-	85	85	
tank heating element	kW	-	-	-	9	9	
DOUBLE PRE-RINSE							
pump	kW	0,2	0,2	0,2	0,2	0,2	
tank volume	I	6	6	6	6	6	
RINSE							
pump	kW	0,4	0,4	0,4	0,4	0,4	
total installed power							
hot water intake (55°C)	kW	21,1	22,1	26,2	37,7	40,5	
cold water intake (10°C)	kW	25,5	27,98	32,26	45,16	46,44	
WITH HDR	kW	25,88	26,78	31,06	42,46	45,24	
DIMENSIONS							
standard	mm	2250x900x1750 /2210	2850x900x1750 /2210	3150x900x1750 /2210	3750x900x1750 /2210	4050x900x1750 /2210	
with HDR 200	mm	2850x900x2100 /2210	3450x900x2100 /2210	3750x900x2100 /2210	4350x900x2100 /2210	4690x900x2100 /2210	
with hdra 209M	mm	3100x985x2100 /2210	3700x985x2100 /2210	4000x985x2100 /2210	4600x985x2100 /2210	4900x985x2100 /2210	
with hdra 218M	mm	3100x1600x2100 /2210	3700x1600x2100 /2210	4000x1600x2100 /2210	4600x1600x2100 /2210	4900x1600x2100 /2210	
in case of AS pre-wash module with drawer strainer	mm	L+450	L+450	L+450	L+450	L+450	

# Machines layouts





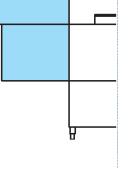




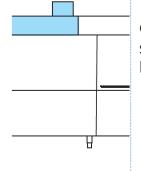






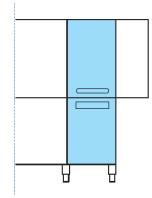


Available in 4,5kW and 9kW, 600mm stage or 900mm module dryers, in accordance with the model required. Available also with thermal insulation and on mechanized arcs.



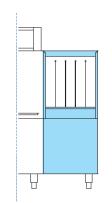
#### **HEAT RECOVERY SYSTEMS**

Compact version HR10, standard HR20 and with Heat Pump HRP30.



#### AS: PREWASH MODULE WITH DRAWER STRAINER

Not available for models with LC 90° corner prewash.



#### LC: 90° INLET WITH PRE-WASH

Only for model RR250, not available when AS prewash module installed.

# ACCESSORIES

#### **ACCESSORISE YOUR RHIMA EQUIPMENT**

#### Why should I use Rhima accessories?

Rhima accessories are produced and tested specifically for your equipment. We ensure you receive a solution, not just a piece of equipment.

#### **ROLLER TABLES**

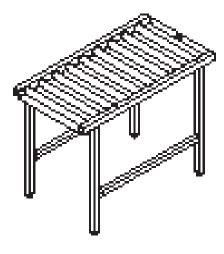
Available in various lengths:

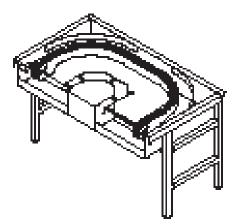
- 1100mm
- 1600mm
- 2100mm
- or custom.

We can also modify to suit your requirements and provide storage and sinks. Each table comes with an end limit switch.

#### **CURVE 90°/180°**

90° or 180° curves available to connect your machine to roller tables if limited space available.





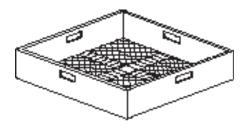
#### **DETERGENT PUMP**

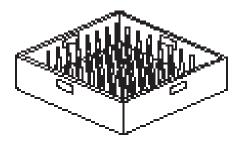
To automatically dispense chemicals into the wash & rinse cycles.

## DISHRACKS

#### IDEAL FOR ALL DISHWASHING EQUIPMENT

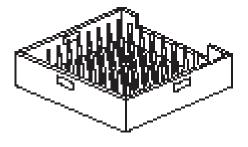
- Smooth sides no water residue
- Diagonal handles better balance and better grip
- Wide mesh for better balance and better grip
- Stackable for safe transformation and storage
- Double wall construction for strength and stability

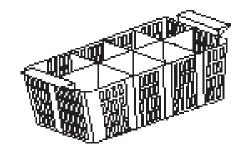




BASKET FOR CUPS & GLASSES PN: 010G

BASKET FOR PLATES PN: C40





BASKET FOR TRAYS PN: 060GR BASKET FOR CUTLERY PN: C47

# **CLEANING AND CARE**

#### **CHEMICALS FOR YOUR RHIMA EQUIPMENT**

#### Why should I use Rhima detergents?

Rhima detergents are produced locally under strict quality control and have been specially formulated for use in Rhima washing equipment. Rhima's range of detergents and rinse additives, are full strength, concentrated products that will not only give superior wash results by allowing you to use less, but will also save you money without sacrificing quality. Please talk to us about which Rhima detergent products are perfect for your application.

#### **SUPERWASH 10 Litre**

A liquid washing detergent specifically designed for washing soiled items across the hospitality and industrial industries. Only to be used in combination with an automatic dispenser. Comes in 1 x 10L boxes.



**Final Rinse** 

#### **FINAL RINSE 5 Litre**

Automatically added to the rinse cycle of the washer to assist rapid drying and reduce spotting and streaking of plates & glassware. Only to be used with automatic dispensers. Available in 2 x 5L carton.

## RHIMA CARE

#### SERVICE AND MAINTENANCE FOR YOUR WASHER

### Does my washer need regular service and maintenance?

Whether your Rhima washer is in or out of warranty, it needs regular professional maintenance to ensure it is operating at optimum performance.

Regular maintenance can also reduce running costs and greatly extend your washer's useful life. As importantly, a well serviced machine helps to safeguard against unexpected, inconvenient, expensive breakdowns.

## Does my washer comply with HACCP guidelines?

Your Rhima washer is a commercial grade appliance that is designed to wash and sanitise your items to local council and health department guidelines. To ensure that your machine meets these requirements, it should be reguarly tested by our experienced technicians who will ensure it complies with safety, hygiene and operational standards. A test report is provided for your records.



#### My washer needs to be fixed and it's 11AM on a Sunday morning. Who do I call?

Rhima provides professional washing equipment to professionals just like you. We understand that businesses do not all operate 9 to 5 and neither do we. Call us at anytime and a service representative will respond to your call. Our first priority is to try to get you operational over the phone, however if this is not possible, you will be given the option of waiting until the next business day to log a service call or if you can't wait, then in most cases a service technician will be arranged to attend your premises as soon as possible, usually same day.

## BENEFITS OF RHIMA PREVENTATIVE MAINTENANCE

- Improved washer efficiency and reliability
- Priority service in the event of repairs being required
- Reduction in unexpected breakdowns and costly stoppages
- Savings on total maintenance costs
- Optimisation of detergent and rinse
  additive usage
- Prolonged service life
- 24/7 service response
- First 2 hours of labour on breakdowns\*

\*Callout fee applies. Not valid for faults not directly related to washer i.e. interruption to services (power, water & drainage) or operator

We can tailor a Rhima Care Preventative Maintenance Agreement to suit your needs including a HACCP test if required.







Rhima Australia Pty Ltd www.rhima.com.au Tel: 1300 347 944

Rhima New Zealand www.rhima.co.nz Tel: +64 9414 5575

Rhima Singapore www.rhima.sg Tel: +65 9107 8943