# Count on it.

# The Waterbird® - Australia's own

# Designed, engineered and fully manufactured in Australia.

TORO

Our range of custom made agricultural mini-sprinklers is the result of continuous consultation between engineers, growers and dealers to minimise water consumption whilst increasing yield.



## Waterbird<sup>®</sup> Classic

## Waterbird<sup>®</sup> PC



#### Features

- Engineered to provide improved water application for under tree and vine installations
- · Aerofoil shaped frame minimises dry spots
- Snap Fit bearing provides easy field disassembly
- Anti-insect/dust proof spinner retracts to protect nozzle when not in operation
- · Improved distribution characteristics with large droplet size being less susceptible to wind effects
- Low angle of throw for maximising under foliage penetration
- Proven robust frame design for superior strength and long field life
- Available with snap-off deflector for irrigating young trees (reduces diameter to 30% of stated performance)
- · Eight colour coded flow rates from 29 L/h to 304 L/h
- Maximum diameter of throw in excess of 10 m
- Fully assembled models available with pre-installed tube and stake

PERFORMANCE CHART Diam

Deflector TAB

Spinner (m)

1.0

1.0

1.0

1.2

1.2

1.2

1.4

1.6

Diam. with LTD

Spinner (m)

2.2

2.4

2.4

2.4

2.4

3.0

4.1

4.2

Diam. Deflector

Plate (m)

1.4

1.4

1.4

1.4

1.6

2.2

2.6

3.0

Flow (L/h)

29

36

41

44

55

64

61

76

89

80

99

115

108

134

156

125

155

17

156

192

221

214

265

304

#### **Specifications**

Jet Colour

Orifice Diam.

Black

1.00 mm

White

1.05 mm

Maroon

1.25 mm

Green

1.40 mm

Blue

1.65 mm

Grey

1.80 mm

Yellow

2.0 mm

Red

2.3 mm

• Inlet: 10 mm MBSP/NPT

Pressure (kPa)

100

150

200

100

150

200

100

150

200

100

150

200

100

150

200

100

150

200

100

150

200

100

150

- Recommended Pressure Range: 100 200 kPa
- Materials: Frame, bearing and nozzle: Acetal Spinner: Nylon

Diam.

Std

Spinner (m)

49

5.5

5.8

6.1

6.9

7.3

6.8

7.8

8.3

7.3

9.2

10.3

8.4

9.4

10.5

8.5

9.4

10.8

8.3

9.4

10.3

8.8

10.2

10.3



- **Features**
- Unique patented pressure compensating diaphragm assembly for improved performance
- Pressure compensating mechanism provides uniform flow on undulating terrain
- · Anti-insect/dust proof spinner retracts to protect nozzle when not in operation
- A two stage spinner provides two diameters of throw. The smallest . diameter is for younger trees, and the deflector is simply removed for developed trees
- · Aerofoil shaped frame improves sprinkler distribution pattern
- · Large droplet size is less susceptible to wind effects
- · Snap Fit bearing for easy infield maintenance
- Low angle of throw maximises under foliage penetration
- Eight colour coded flow rates from 35 L/h to 152 L/h
- Available in both standard and deflector tab spinners
- Fully assembled models available with pre-installed tube and stake

#### **Application**

• Inlet: 10 mm MBSP/NPT

**Specifications** 

• Recommended Pressure Range: 150 - 350 kPa • Materials: Frame, bearing and nozzle: Acetal Spinner: Nylon



#### PERFORMANCE CHART

Height* (m)         Orifice Diam. Orifice Diam.         Pressure (kPa)         Std Spinner* (m)         Defector TAB Spinner* (m)         Pfour         Height** (L/h)         Height** (m)           0.56         150         5.2         0.6         35         36							
0.62         Black         200         5.8         0.6         36           0.65         0.91 mm         300         6.0         0.6         36         0.39           0.56         0.61         300         6.0         0.66         36         0.39           0.62         300         6.0         0.6         36         0.39           0.62         350         5.6         0.6         36         0.39           0.62         0.57         150         6.0         1.0         46           0.57         200         6.4         1.0         49           200         6.6         1.0         48         0.36           0.50         350         6.6         1.0         47           0.60         350         6.6         1.0         47           0.83         350         6.4         1.4         54           0.90         White         150         6.4         1.4         57           0.60         350         6.8         1.4         58         0.43           0.92         350         6.8         1.4         59         0.43           0.60         350	Height*			Std Spinner*	Deflector TAB Spinner**		Stream Height*** (m)
0.65 0.56         Black 0.91 mm         250         5.6         0.6         36         0.39           0.56         0.91 mm         300         6.0         0.6         36         0.39           0.65         350         5.6         0.6         36         0.6         36           0.65         350         5.6         0.6         36         0.6         36           0.65         0.65         150         6.0         1.0         46         0.39           0.71         1.07 mm         250         6.6         1.0         48         0.36           0.60         350         6.6         1.0         48         0.36           0.60         350         6.6         1.0         47           0.83         350         6.6         1.0         47           0.60         300         6.8         1.4         57           0.60         350         6.8         1.4         58           0.92         350         6.8         1.4         59           0.60         150         7.4         1.4         74           0.90         7.6         1.4         76         0.33 <td>0.56</td> <td></td> <td>150</td> <td>5.2</td> <td>0.6</td> <td>35</td> <td rowspan="4">0.39</td>	0.56		150	5.2	0.6	35	0.39
0.65 0.56         0.91 mm         250         5.6         0.6         36         0.39           0.56         300         6.0         0.6         36         0.39           0.62         350         5.6         0.6         36         0.39           0.65         350         5.6         0.6         36         0.57           0.57         1.07 mm         250         6.6         1.0         46           0.71         0.77         300         6.6         1.0         48           0.60         350         6.6         1.0         48         0.36           0.60         350         6.6         1.0         47         0.36           0.60         350         6.6         1.0         47         0.36           0.60         350         6.8         1.4         57         0.43           0.90         Maroon         200         6.8         1.4         58         0.43           0.92         350         6.8         1.4         59         0.43           0.77         Maroon         200         7.6         1.4         74           0.90         7.6         7.8         1.	0.62	11	200	5.8	0.6	36	
0.56         300         6.0         0.6         36           0.62         350         5.6         0.6         36           0.65         350         5.6         0.6         36           0.57         150         6.0         1.0         46           200         6.4         1.0         49           200         6.6         1.0         48           0.90         350         6.6         1.0         48           0.60         350         6.6         1.0         48           0.90         0.60         350         6.6         1.0         47           0.83         0.90         6.8         1.4         57         0.43           0.90         0.60         250         6.8         1.4         57           0.60         350         6.8         1.4         58           0.92         350         6.8         1.4         59           0.60         350         6.8         1.4         59           0.77         350         7.4         1.4         74           0.90         7.6         7.8         1.4         76	0.65		250	5.6	0.6	36	
0.65         150         6.0         1.0         46           0.57         200         6.4         1.0         49           0.71         1.07 mm         250         6.6         1.0         48           0.90         300         6.6         1.0         48         0.36           0.60         350         6.6         1.0         48         0.36           0.83         350         6.6         1.0         47         0.36           0.90         White         150         6.4         1.4         54         0.43           0.90         White         250         6.8         1.4         57         0.43           0.90         90         6.8         1.4         57         0.43           0.91         150         7.4         1.4         74           0.92         150         7.4         1.4         76           0.90         Maroon         250         7.8         1.4         76	0.56	0.91 mm	300	6.0	0.6	36	
0.57         Light Blue         200         6.4         1.0         49           0.71         1.07 mm         250         6.6         1.0         48         0.36           0.90         300         6.6         1.0         48         0.36           0.60         350         6.6         1.0         47         0.36           0.83         350         6.6         1.0         47           0.80         0.90         40         40         40           0.60         1.17 mm         150         6.4         1.4         57           0.60         1.17 mm         300         6.8         1.4         57           0.60         1.17 mm         350         6.8         1.4         59           0.60         0.92         350         6.8         1.4         59           0.60         0.77         150         7.4         1.4         74           0.70         Maroon         250         7.8         1.4         76	0.62		350	5.6	0.6	36	1
0.71 0.90         Light Blue 1.07 mm         250         6.6         1.0         48         0.36           0.90         1.07 mm         300         6.6         1.0         48         0.36           0.60         350         6.6         1.0         48         0.36           0.83         350         6.6         1.0         47           0.83         200         6.8         1.4         54           0.90         200         6.8         1.4         57           0.60         1.17 mm         300         6.8         1.4         58           0.92         350         6.8         1.4         59         0.43           0.92         350         6.8         1.4         74         0.43           0.77         Maroon         250         7.4         1.4         74           0.90         Maroon         250         7.8         1.4         76	0.65		150	6.0	1.0	46	
0.71         1.07 mm         250         6.6         1.0         48         0.36           0.90         300         6.6         1.0         48         0.36           0.60         350         6.6         1.0         47           0.83         350         6.6         1.0         47           0.83         0.90         48         150         6.4         1.4         54           0.60         1.17 mm         200         6.8         1.4         57         0.43           0.80         0.92         350         6.8         1.4         58         0.43           0.60         150         7.4         1.4         74         0.43           0.60         150         7.4         1.4         74         0.43           0.90         Maroon         200         7.6         1.4         76         0.33	0.57	7  <b>.</b>	200	6.4	1.0	49	
0.90         300         6.6         1.0         48           0.60         350         6.6         1.0         47           0.83         350         6.6         1.0         47           0.83         150         6.4         1.4         54           0.90         200         6.8         1.4         57           0.60         250         6.8         1.4         57           0.60         300         6.8         1.4         58           0.92         350         6.8         1.4         59           0.60         150         7.4         1.4         74           0.77         Maroon         200         7.6         1.4         76	0.71		250	6.6	1.0	48	0.36
0.83         0.83         150         6.4         1.4         54           0.90         0.60         1.17 mm         200         6.8         1.4         57           0.60         1.17 mm         250         6.8         1.4         57         0.43           0.80         0.92         300         6.8         1.4         58         0.43           0.92         0.60         350         6.8         1.4         59         0.43           0.77         0.77         150         7.4         1.4         74         0.20           0.90         Maroon         250         7.8         1.4         77         0.33	0.90		300	6.6	1.0	48	
0.90         White         200         6.8         1.4         57           0.60         1.17 mm         250         6.8         1.4         57           0.80         300         6.8         1.4         57         0.43           0.92         350         6.8         1.4         58           0.92         150         7.4         1.4         74           0.77         0.77         200         7.6         1.4         76           0.90         200         7.6         1.4         77         0.33	0.60	7	350	6.6	1.0	47	
0.60         White 1.17 mm         250         6.8         1.4         57         0.43           0.80         300         6.8         1.4         58         0.43         0.4	0.83		150	6.4	1.4	54	
0.60         1.17 mm         250         6.8         1.4         57         0.43           0.80         300         6.8         1.4         58         0.43	0.90	71	200	6.8	1.4	57	
0.80         300         6.8         1.4         58           0.92         350         6.8         1.4         59           0.60         150         7.4         1.4         74           0.77         200         7.6         1.4         76           0.90         250         7.8         1.4         77	0.60		250	6.8	1.4	57	0.43
0.60 0.77 Maroon Maroon 0.70	0.80		300	6.8	1.4	58	
0.77 Maroon 200 7.6 1.4 76	0.92	7	350	6.8	1.4	59	
Maroon 250 7.9 1.6 77 0.33	0.60		150	7.4	1.4	74	
	0.77		200	7.6	1.4	76	
	0.90	Maroon 1.34 mm	250	7.8	1.4	77	0.33
0.65 300 7.6 1.4 76	0.65	1.34 11111	300	7.6	1.4	76	
0.75 350 7.6 1.4 75	0.75		350	7.6	1.4	75	
0.85 150 8.4 1.4 96	0.85		150	8.4	1.4	96	
0.74 200 8.4 1.4 97	0.74		200	8.4	1.4	97	
0.97 Green 250 8.4 1.4 97 0.50	0.97		250	8.4	1.4	97	0.50
1.05 300 8.4 1.4 98	1.05		300	8.4	1.4	98	]
350 8.4 1.4 98			350	8.4	1.4	98	
150 8.4 1.4 120		-	150	8.4	1.4	120	
200 8.4 1.4 115		Durali	200	8.4	1.4	115	
Purple 250 7.6 1.4 116 0.35		Purple	250	7.6	1.4	116	0.35
300 7.8 1.4 116		1.01 1111	300	7.8	1.4	116	]
350 7.8 1.4 116			350	7.8	1.4	116	
150 9.5 1.6 135			150	9.5	1.6	135	
200 9.0 1.6 135			200	9.0	1.6	135	0.50
Blue 250 9.0 1.6 134 0.50			250	9.0	1.6	134	
300 9.0 1.6 133		1.01 mm	300	9.0	1.6	133	
350 9.0 1.6 134			350	9.0	1.6	134	
150 8.4 2.0 151			150	8.4	2.0	151	
200 8.4 2.0 151			200	8.4	2.0	151	
Grey 250 8.4 2.0 152 0.39			250	8.4	2.0	152	0.39
300 8.4 2.0 150		1.70 mm	300	8.4	2.0	150	
350 8.4 2.0 149			350	8.4	2.0	149	

200 Measured from spinner outlet

> \*Based on spinner at 250 mm above ground level. \*\*Based on spinner at 250 mm above ground level at 200 – 350 kPa.

\*Measured from spinner outlet.

## Waterbird® PC Olive

# Waterbird® Trellis



#### **Features**

- · Designed specifically to meet the needs of olive growers
- Self cleaning, pressure compensating mechanism provides uniform flow for undulating terrain
- Anti-insect/dust proof spinner retracts to protect nozzle when not in operation
- A two stage spinner provides two diameters of throw. The smallest diameter is for younger trees, and the deflector is simply removed for developed trees
- Highly visible UV stabilised red stake provides easy identification and reduces the chance of mechanical damage
- Aerofoil shaped frame improves distribution
- Proven robust frame design for superior strength and long field life
- Advanced wedge design spinner ensures excellent start-up reliability and low maintenance
- Supplied with a deflector tab on the spinner to reduce diameter of throw to approx. 30%. Can be removed at any time by hand

#### **Specifications**

Jet Colour Orifice Diam

Purple

0.9 mm

- Inlet: 10 mm MBSP/NPT
- Recommended Pressure Range: 150 350 kPa
- Materials: Frame, bearing and nozzle: Acetal
   Spinner: Nylon



Diam Stream Height\* (m) Diam. Deflector Pressure (kPa) Flow (L/h) Std Spinner (m) TAB Spinner (m) 150 1.26 28 4.2 200 4.0 1.2 29 250 4.0 1.2 27 0.11 1.2 27 300 4.0 350 4.0 1.2 28 150 4.5 1.35 36

_	200	4.5	1.35	37	
Brown 1.06 mm	250	4.5	1.35	36	0.13
	300	4.5	1.35	36	
	350	4.5	1.35	36	
Light Blue 1.25 mm	150	4.5	1.35	47	
	200	4.5	1.35	47	
	250	4.5	1.35	47	0.13
	300	4.5	1.35	48	
	350	4.5	1.35	48	
Light Green 1.33 mm	150	5.0	1.35	55	
	200	5.0	1.35	56	
	250	5.0	1.35	56	0.15
	300	5.0	1.35	57	
	350	5.0	1.35	56	
Orange 1.46 mm	150	6.0	1.8	68	
	200	6.0	1.8	70	
	250	6.0	1.8	68	0.15
	300	6.0	1.8	68	
	350	6.0	1.8	69	
Grey 1.46 mm	150	6.8	2.04	86	
	200	6.8	2.04	88	
	250	6.8	2.04	88	0.24
	000	( 0	0.07	00	

 350
 6.8
 2.04
 90

 Note: Performance Chart shows test results carried out to relevant Standards (ISO and/or equivalent). The radii shown are "effective" to 0.3mm/hr.
 \*Measured from spinner outlet.

6.8

2.04

89

300

# ¢

#### **Features**

- Developed to meet the unique needs of nut tree growers
- Trellis hook allows for easy suspension from poly tubing with a cable tie
- Snap lock bearing prevents nozzle dislodging by machinery during harvest and spraying
- Anti-insect/dust proof spinner retracts to protect nozzle when not in operation
- · Low angle of throw for maximising under foliage penetration
- Robust aerofoil shaped frame for improved distribution and long field life
- More efficient water application larger droplets, low angle and less wind effect
- Fully assembled model available with pre-installed 5 mm x 0.6 m tube and 5 mm Adaptor
- Limited Throw Deflector (LTD) models available

#### **Specifications**

- Inlet: 10 mm MBSP/NPT
- Recommended Pressure Range: 100 200 kPa
  Materials: Frame, bearing and nozzle: Acetal
- Spinner: Nylon
  Trellis Hook: suits cable ties to 5 mm width

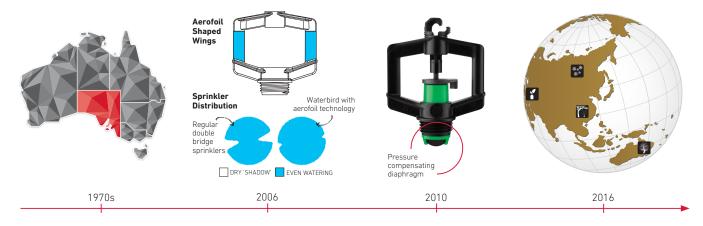


PERFORMANCE CHART						
Jet Colour Orifice Diam.	Pressure (kPa)	Diam. Std Spinner (m)	Diam Deflector LTD Spinner (m)	Diam Deflector TAB Spinner (m)	Flow (L/h)	Stream Height* (m)
	100	6.1			44	0.56
White 1.05 mm	150	6.9	2.4	1.0	55	0.62
1.05 1111	200	7.3			64	0.65
	100	6.8			61	0.57
Maroon 1.25 mm	150	7.8	2.4	1.0	76	0.71
1.25 1111	200	8.3			89	0.90
_	100	7.3			80	0.60
Green 1.40 mm	150	9.2	2.4	1.2	99	0.83
1.40 mm	200	10.3			115	0.90
Diameters of throw based on sprinkler spinner installed 250mm above ground.						

\*Measured from spinner outlet.

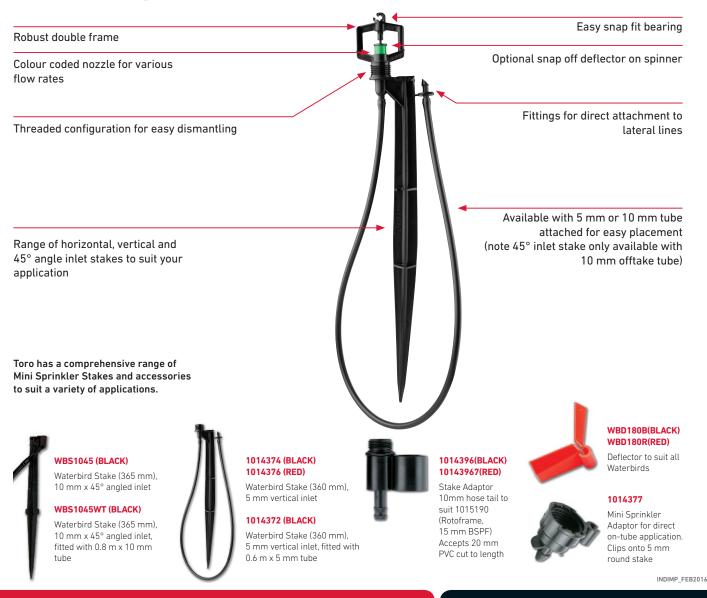
### PERFORMANCE CHART

# **The Waterbird® Story**



The Waterbird range was developed in South Australia over 40 years ago as a replacement for overhead sprinklers. Toro launched aerofoil technology, revolutionising the Waterbird sprinkler design to minimise dry spots and improve the distribution pattern. Toro's patented pressure compensating diaphragm assembly is released providing greater stream control, improved uniformity over wide operating pressures and increased radius. Today, our range continues to evolve to meet the changing needs of growers in Australia and over 50 countries worldwide.

# Accessories, sprinkler stakes and risers



# 1300 130 898 toro.com.au

# Toro Australia Pty Ltd