



Highway Safety Developments Ltd

Signs & Safety

HIGHWAY SAFETY DEVELOPMENTS LTD.

**WINTER WEATHER
PRODUCTS**



www.hsd.ie



Highway Safety Developments Ltd.

CE Certified Manufacturer
to I.S. EN 12899-1:2007

ISO9001: 2015 | OHSAS 18001:2007 | CE 1358 - CPR - 0144/2

INTRODUCTION

www.hsd.ie

We are Ireland's largest CE Certified manufacturer of signs for the roads market, proudly manufacturing all our signs in our facility in Knocktopher, Co. Kilkenny. Our CE certificate of conformance reference is 1358-CPR-0144/2.

- CE certification since June 2013. We are externally certified to the European Standard I.S. EN 12899-1:2007 - Fixed,
- Vertical Road Traffic Signs and Structures. The scope of this standard is for fixed signs used for the instruction and guidance of road users on public and private land.
- This certification allows us place the CE mark on all our manufactured signs and structures which is mandatory under the Construction Products Regulation 305/2011/EU since the 1st of July 2013.

The system is audited by a notified body on an annual basis to ensure continued compliance. All of our signs are barcoded, to give full traceability of each component used in the manufacturing process.

We are certified ISO 9001:2015 which is an international standard in Quality Management Systems.

We are also certified OHSAS 18001:2007 which encompasses ensuring the health, safety and welfare of people in the workplace. We are committed to continually monitor, measure and improve our operational performance and management systems to promote the utmost standard in health, safety and welfare in the workplace.

SIGNAGE:

- Road Signs [CE Certified]
- LED & Solar Powered Signs
- Commercial Signs
- Health & Safety Signs
- Tourism Signs, including Aluminium Raised Letter Signs
- Sign Accessories [CE Sign Poles, brackets]

ROAD SAFETY:

- Road Safety Barriers – Permanent & Temporary
- Traffic and Pedestrian Control
- Traffic Management Vehicles and Trailers
- Bollards

SERVICES

- Bespoke Manufacture
- Design
- Delivery
- Installation
- Maintenance & Repair
- Refurbish
- Hire
- Traffic Management
- CNC Routing

LEISURE PRODUCTS:

- Waymarker Posts, Walkways & Bridges
- Furniture, Litter Bins and Planters
- Water Safety
- Cycling
- Stiles & Kissing Gates

CONTACT US

Contact our dedicated sales team:

Highway Safety Developments Ltd., Knocktopher, Co. Kilkenny, R95 TW83.

Phone: 056-7768702 | Fax: 056-7768854 | Email: sales@hsd.ie

Website: www.hsd.ie [including webshop] [t](#) [f](#)



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Other brochures available upon request or to download from our website

Cruiser™ Grit/Salt Drop Spreaders

A family of two grit/salt drop spreaders for accurate and controlled spreading to a pre-defined width. Cruiser Towable 80 can be towed by passenger cars, four wheel-driven tractors, vans or trucks, whilst Cruiser Manual 50 is ideal for use on footpaths and pavements, simply wheel forward to disperse.

Specifications

Design Features

- Can be used with dry, damp or wet grit/salt.
- Continuous rippling action of the rubber plate within the hopper ensures the gritting material does not clog.
- Rotating rubber paddles scoop material from the trough and dispense it evenly.
- Range of spreading settings – an adjusting handle allows accurate control of spreading.
- No rotating parts inside the hopper.
- Cruiser Towable 80 is supplied as standard with a pin-hitch towbar.

Dimensions

	CRUISER TOWABLE 80	CRUISER MANUAL 50
Size:	1555mm long (1725mm fully extended) x 1270mm wide (with mudguards) x 900mm high	1115mm long x 790mm wide x 955mm high
Load height:	800mm	560mm
Towbar height:	400mm adjustable to 640mm	-
Capacity:	160 litres	53 litres
Maximum payload:	275kg of wet brown rock salt (holds approx. 11 x 25kg bags)	90kg of wet brown rock salt
Unladen weight:	85kg	48kg
Maximum laden weight:	360kg	-
Minimum weight of tow vehicle:	720kg	-
Area of coverage:	2,720m ² @ 100gms/m ²	900m ² @ 100gms/m ²
Maximum spreading width:	800mm	500mm
Approx. spreading distance:	3.4km	1.8km
Maximum towing speed:	20mph	-

Towing options

Cruiser 80 can be towed by two and four wheel-driven tractors, vans and trucks. It can also be towed by passenger cars with the ball hitch option (please refer to the towing vehicle's manufacturer's handbook under towing/trailer recommendations).

Not Suitable for use on Public Highways.

Optional Extras

CRUISER 80 ONLY

- Number plate mountings.
- Rear lights.
- Reflectors.
- Mudguards.
- Ball hitch.

Cruiser Manual 50



Cruiser Towable 80



Approximate Spreading Rates

DRY ROCK SALT	Rate gms/m ²	Distance		Area m ²
		km	miles	
Cruiser Towable 80	100	2.6	1.6	2,110
	450	0.6	0.4	470
Cruiser Manual 50	100	1.4	0.8	700
	450	0.3	0.2	155

WET ROCK SALT	Rate gms/m ²	Distance		Area m ²
		km	miles	
Cruiser Towable 80	100	3.4	2.1	2,720
	450	0.7	0.5	604
Cruiser Manual 50	100	1.8	1.1	900
	450	0.4	0.25	200

Cruiser Manual 50 and Towable 80 carry the **CE** mark which shows compliance with Machinery Directive (2006/42/EC) which is the European Safety Directive relating to these products.

Turbocast 300™ Grit/Salt Broadcast Spreader

A manual broadcast gritter that spreads dry or wet grit/salt mixture to a width of between 3 and 7 metres with minimum effort. A large area can be covered quickly with minimum passes making it ideal for car parks, approach roads and depots.

Specifications

Design Features

- Chassis manufactured from mild steel with Armortec®+ coating.
- 52 litre Durapol®+ material hopper.
- Plastic guards protect all working mechanisms.
- Slim design – can fit through a standard 760mm door.
- Easy to empty.
- Range of spreading settings.
- Solid rubber cushioned tyres.
- Polypropylene spinning plate – protected by a steel frame.
- Agitation mechanism – designed to efficiently spread either wet or dry rock salt.

Dimensions

Size:	1235mm long x 670mm wide x 950mm high
Load height:	690mm
Capacity:	52 litres (holds approx. 2.5 x 25kg bags of rock salt)
Maximum payload:	66kg of wet brown rock salt
Unladen weight:	43kg
Maximum spreading width:	approx. 7.3 metres (based on using 74kg of damp brown rock salt @ fast walking pace)



Easy to empty

Front rest allows the unit to be emptied wheelbarrow fashion.



Polypropylene spinning plate

Protected by a steel frame.



All working mechanisms are protected



*Armortec® corrosion resistant coating is specially formulated to extend the life of Glasdon metal products and components used externally.

*Durapol® material is a polymer formulated to withstand extremes of temperature and is impact tested in our Quality Assurance Laboratory as part of our BS EN ISO 9001:2008 test procedure. Durapol® material will not chip or rust, is easy to clean and never needs painting.



Range of settings



Slim design



Solid rubber cushioned tyres

Optional Extra

Cover

To provide protection when storing outside.
(Note: Grit/salt should never be left in the Turbocast 300 after use.)



Approximate Spreading Rates

	Damp Brown Rock Salt	Damp White Rock Salt
Slow Walking Pace	3m	3.5m
Medium Walking Pace	5.5m	5.5m
Fast Walking Pace	7.3m	6.5m

Typical Coverage Guide Per Full Hopper

	Rate gms/m ²	Area m ²
Damp Brown Rock Salt	48	1,375
Damp White Rock Salt	44	1,432

Turbocast 300 carries the **CE** mark which shows compliance with Machinery Directive (2006/42/EC) which is the European Safety Directive relating to these products.

Turbocast 800™ Towable Dual Action Grit/Salt Spreader

A grit/salt spreader with a 200 litre capacity that can be used as a broadcast or drop spreader. Ideal for use by local authorities to grit city/town centres, small to medium sized industrial sites and private roads.

Specifications

Design Features

- Durapol®** material hopper - will not rust, chip or corrode.
- Low maintenance stainless steel chassis, drive mechanism & broadcast spinner plate.
- Consistently distributed 8 metre spread width.
- Unique agitation mechanism spreads wet or dry grit/salt.
- Durapol side deflectors create drop-spreading action for accurate high dosage treatments.
- Spread adjustment mechanism for complete control of spread output from 5 – 60gms/m² for broadcast spreading. Can be set far higher for drop spreading (up to 480gms/m²).
- Adjustable speed control allows for uniform spread output range from 5 - 20mph.
- ON/OFF switch for drive engagement/disengagement to minimise wastage when travelling between sites.
- Adjustable height tow bar with pin hitch or ball hitch coupling.
- Encapsulated drive mechanism for low maintenance operation.

Dimensions

- Side deflectors not in use: 1935mm
- Side deflectors in use: 2040mm
- Size: 2000mm long x 1210mm wide x 1050mm high
- Capacity: 200 litres (approx. 10 x 25kg bags)
- Towbar height: 290 – 690mm
- Maximum payload: 250kg*
- Unladen weight: 170kg
- Maximum laden weight: 420kg
- Maximum spreading width: 8 metres
- Maximum towing speed: 20mph
- *The weight of grit/salt is highly dependent on type and moisture content.



Approximate Spreading Rates

Rate gms/m ²	Distance		Area
	km	miles	m ²
5	6.23	3.87	49,998
15	2.08	1.29	16,666
30	1.04	0.65	8,333
60	0.52	0.32	4,166

An OFF setting allows the unit to be towed without dispersing grit when required.

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Broadcast Spreads

An 8 metre spread can be covered at towing speeds from 5 – 20mph, to suit towing vehicle and application.



Drop Spreads

For accurate, controlled spreading, eliminating any waste grit/salt.

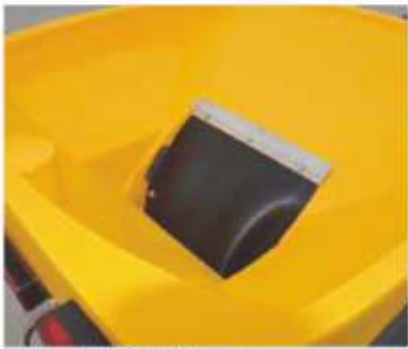


Optional Extras

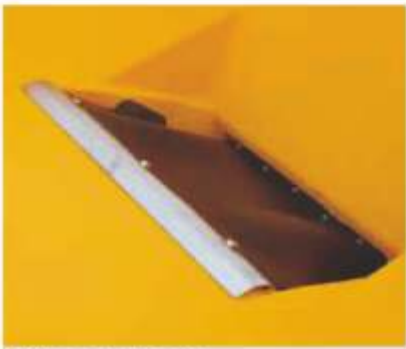
Amber flashing light



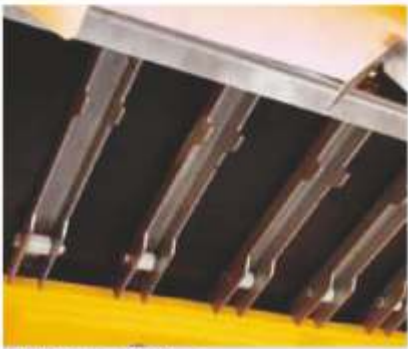
Number plate holder



Durapol** material hopper



Rubber agitation mat



Agitation mechanism



Broadcast spinner plate



Twin side deflectors



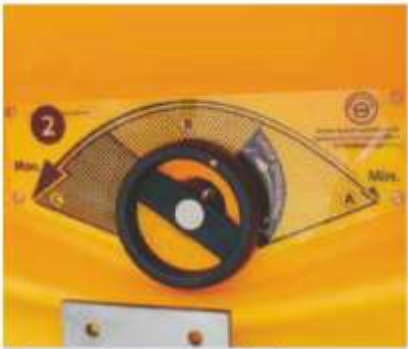
Mudguards



Towing bar and security cable



Jockey wheel assembly



Spread adjustment handwheel

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Turbocast 1000™ Towable Dual Action Grit/Salt Spreader

A grit/salt spreader with a large ½ tonne capacity and the unique ability to be used as a broadcast or drop spreader. Ideal for use by local authorities, large industrial sites, hospitals, universities and private roads.

Specifications

Design Features

- Durapoli® material hopper.
- Rubber agitation mat breaks up the grit/salt and feeds it to the hopper funnels.
- Agitation mechanism provides a quiet and smooth operation.
- Dual spinner plates distribute the grit/salt evenly and consistently.
- Twin side deflectors – create drop-spreading action by limiting the width of spread, can be used independently.
- Spread adjustment and shut off lever allows control of the spread rate.
- Spreads both wet and dry grit/salt. (The spread width and consistency will vary dependent on the moisture content of the grit/salt.)
- Mechanism cover – all working mechanisms are encapsulated inside a protective cover.
- Dump flap apertures.
- Maintenance hatch.
- Mud guards.
- 'A' frame & security cable.
- Reversing bars – to protect the unit from accidental damage when reversing.
- Light cluster – comprising a rear brake, number plate, indicator and rear fog lights.
- Reflectors.
- 20mph sticker.

Dimensions

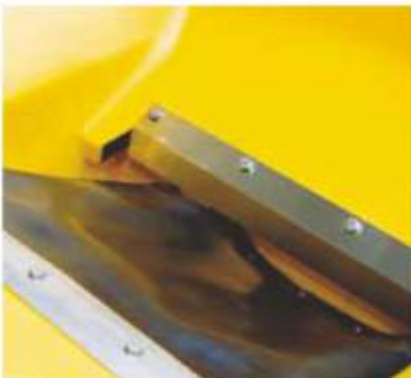
Side deflectors not in use:	2676mm long x 1637mm wide
Side deflectors in use:	2966mm long x 1590mm wide
Load height:	1151mm
Towbar height:	462mm
Capacity:	430 litres
Maximum payload:	500kg (holds approx. 20 x 25kg bags of rock salt)
Unladen weight:	250kg
Maximum laden weight:	750kg
Maximum spreading width:	approx. 10 metres
Maximum towing speed:	20mph



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Durapol** material hopper



Rubber agitation mat



Agitation mechanism



Dual spinner plates



Twin side deflectors



Spread adjustment and shut off lever



Mechanism cover



Dump flap apertures



Maintenance hatch



Integrally moulded mudguards



A-Frame & security cable



Reversing bars

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Turbocast 1000™ Towable Dual Action Grit/Salt Spreader

Broadcast Spreads

A large area can be covered quickly with minimum passes, for an even and consistent spread.



Drop Spreads

For accurate, controlled spreading, eliminating any waste grit/salt.



Turbocast 1000 converts from a broadcast spreader into a drop spreader with the use of unique twin side deflectors.



Release the catch with a gloved hand.



Lower the first side deflector into position.



Repeat the procedure for the second side deflector to complete the conversion.

Approximate Spreading Rates*

Broadcast Spread	Rate	Distance		Area
	gms/m ²	km	miles	m ²
Setting 1	15	3.3	2	33,333
Setting 2	35	1.5	1	14,285
Setting 3	55	1	0.6	9,090

*Based on dry white rock salt.

Rate of Spread

3 spread rate settings have been selected to follow recommended guidelines set by Highways England.

- 1. **Precautionary** (prior to ground frost, snow and ice).
- 2. **Intermediate** (following ground frost).
- 3. **Priority** (following ice and snow).

An OFF setting allows the unit to be towed without dispersing grit when required.

Not Suitable for use on Public Highways.

Optional Extras

 <p>Operator's box</p>	 <p>Maintenance lamp</p>	 <p>Digga™ shovel</p>	 <p>Amber flashing light</p>
 <p>Filling grille</p>	 <p>Pin hitch extension bar</p>	 <p>Fine grit salt kit</p>	 <p>Number plate holder</p>



The broadcast spread can be limited to one side only where required

Towing: Turbocast 1000 is Not Suitable for use on Public Highways

Icemaster 50™ Grit/Salt Broadcast Spreader

Icemaster 50 Gritter is ideal for spreading dry, granular material onto frozen surfaces and roads. Ideal for smaller locations where larger machines cannot effectively operate.



Specifications

Design Features

- Durapol® material 50 litre hopper.
- Rotary agitator – breaks up the grit/salt for a consistent spread.
- Range of spreading settings – an adjusting handle allows accurate control of spreading.
- Rear stand.
- Pneumatic tyres.

Dimensions

Capacity:	50 litres
Width:	655mm
Unladen weight:	16kg
Weight capacity:	55kg (holds approx. 4 x tubs of Glasdon Icemelt)

Icemaster 25™ Grit/Salt Broadcast Spreader

A handy and lightweight broadcast spreader for use with dry material. Ideal for smaller locations where only a small area needs to be treated.



Specifications

Design Features

- Durapol 25 litre hopper.
- Rotary agitator – breaks up the grit/salt for a consistent spread.
- Range of spreading settings – an adjusting handle allows accurate control of spreading.
- Rear stand.
- Pneumatic tyres.

Dimensions

Capacity:	25 litres
Width:	530mm
Unladen weight:	9.75kg
Weight capacity:	25kg (holds approx. 2 x tubs of Glasdon Icemelt)

Gritting Machine Spares

Glasdon offer a complete after-sales service. Spare parts are available for all Glasdon gritting machines. Please telephone our sales office on 01253 600410 for further information and to discuss your requirements.

Snowdozer™ Snow Plough Attachment

Snowdozer is a unique, easy to fit attachment, simply slide over the forklift truck forks and tighten fixings by hand to secure.



Specifications

Design Features

- Reversible 1750mm wide Durapol material blade.
- 25° angled blade – pushes snow to the side of the road.
- Twist locks – easily operated with gloves on.
- Universal fork moulding – fits all standard forklifts.
- Steel frame with Armortec® coating.
- Internal steel bump stops – indicate when fully engaged.

Dimensions

BLADE		Length of Legs	
Width:	1750mm	Right leg:	700mm
Internal diameter:	630mm	Left leg:	1000mm
Blade thickness:	15mm	Width of legs:	150mm
Angle of sweep:	25 degrees to the left	Depth of Legs	
FRAME		Right leg:	650mm
Width of blade support:	1220mm	Left leg:	900mm
Height of blade support:	50mm		

*Armortec® corrosion resistant coating is specially formulated to extend the life of Glasdon metal products and components used externally.
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Durapol® material will not chip or rust, is easy to clean and never needs painting.

Snowshovel™ Spade



Snow covered steps and door entrances can be cleared quickly and easily. Simple to use, Snowshovel has been purpose-designed with a broad-angled blade. Mild steel shovel with Armortec[®] coating and a wooden handle.

Snowscoop™ Shovel



Lightweight and easy to push, Snowscoop quickly clears snowdrifts from entrance areas, footpaths and car parks. Wheels are recessed into the 600mm wide steel blade to prevent jamming during snow clearance. Supplied in three snap-together sections. Mild steel construction with Armortec coating.

Digga™ Shovel

Made from robust polypropylene with a steel pin-reinforced shaft, Digga unscrews into two sections.



Glasdon Snospade™ Shovel



Snospade has an extending aluminium handle, which can be quickly adjusted using the twist grip lock. The shovel head is manufactured from robust Durapol[®]* material. Compact size makes it ideal for storage in grit bins or car boots.



Dispensa™ Spreader



A hand held spreader for use with Glasdon grit/salt storage containers (see pages 12-14).

Glasdon Ice Grips™ Shoe Spikes



Glasdon Ice Grips are dual traction so they can be used on snow and ice. Suitable for temperatures down to -40°C.

	Medium	Large	X-Large
UK Men's	3-6	6-10	10-13
UK Women's	3-6	6-10	10-13
Euro Men's	35-39	39-46	46-48
Euro Women's	35-39	39-46	46-48
US Men's	4-7	7-12	12-14
US Women's	5-8	8-13	13-15

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Icemelt™ Compound

Icemelt is a unique ice-penetrating formula, which works faster, spreads further and is more effective than conventional rock salt.

Specifications

Design Features

- One 12.5 litre tub will cover 250m².
- Ice-penetrating action ensures surfaces remain safe to walk on even if refreezing occurs.
- Dispenser supplied.
- Fully bio-degradable.
- 12.5 litre tubs or 25kg bags available.
(Icemelt must be kept dry.)



Nestor™ 400 Grit Bin

A large 400 litre capacity grit/salt storage container manufactured in tough Durapol®* material.

Specifications

Design Features

- Double skinned lid – for supreme strength and weather protection.
- Knuckle hinged lid – fully opens exerting little stress on the hinge.
- Angled lid and drainage channels to reduce moisture ingress.
- Large aperture and low front lip for easy access.
- Choice of 2 lids – Plain or moulded-in GRIT-SALT legend.
- Base recesses – to allow lifting by a forklift truck.
- Concave base with stability features.
- Can be stacked for storage – up to 3 bins high.

Optional Extras



DIN lock
• Concrete fixing kit

Hasp and staple

Personalisation

Dimensions

Capacity: 400 litres
 Length: 1150mm
 Height: 950mm
 Width: 725mm
 Weight capacity: 540kg loose grit/salt (or approx. 21 x 25kg bags of rock salt)
 Colours: Yellow, Deep Green. Other colours are available – please contact our Sales Office for details.

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Can be stacked for storage - up to 3 bins high

Nestor™ 90 Grit Bin



A 90 litre grit/salt bin, a smaller version of the Nestor 400, but with all the same design features and optional extras. Ideal for smaller sites, or where a number of smaller bins can be sited across a large site.



Specifications

Dimensions

Capacity:	90 litres
Length:	630mm
Height:	674mm
Width:	536mm
Weight capacity:	125kg loose grit/salt (or approx. 4 x 25kg bags of rock salt)
Colours:	Yellow, Red, Deep Green.
Other colours are available – please contact our Sales Office for details.	

Orbistor™ Grit Bin

A spherical grit bin which provides exceptional benefits to the user and unbeatable strength.



Specifications

Design Features

- Manufactured from Durapol® material.
- Large 800 litre capacity.
- Integral knuckle and rod hinge with plastic coated reinforcing rod.
- Spherical design ensures no weak corners.
- Moulded-in drainage channels on the lid.
- Angled lid maximises storage space.
- Lower loading edge – for improved access.
- Front recesses – for lid opening.
- Forklift slots with hand holds.

Optional Extras

- Hasp and staple
- Personalisation



Dimensions

Capacity:	800 litres
Height:	1075mm
Diameter:	1280mm
Weight capacity:	1000kg loose grit/salt (or approx. 40 x 25kg bags of rock salt)
Area of coverage:	20,000m ² @ 50gms/m ²
Colours:	Yellow, Deep Green.



*Durapol® material is a polyurethane formulated to withstand extremes of temperature and is impact-tested in our Quality Assurance Laboratory as part of our BS EN ISO 9001:2008 test procedure. Durapol® material will not chip or rust, is easy to clean and never needs painting.

Slimline™ Grit Bin

The compact shape of Slimline grit/salt bin makes it ideal for siting where space is limited, e.g. pavements, small car parks, reception entrances and shop forecourts.

Specifications

Design Features

- Manufactured from Durapol® material.
- Fully rotating lid.
- Moulded-in drainage features.
- Integral fork lift slots.
- Large, easy access aperture.
- Light weight (when empty) – for easy siting by one person.
- Choice of 2 lids – Plain or moulded-in GRIT-SALT legend.

Optional Extras

- Hasp and staple
- Personalisation
- Drainage holes



Dimensions

Capacity:	160 litres
Length:	838mm
Height:	750mm
Width:	515mm
Weight capacity:	208kg loose grit/salt (or approx. 8 x 25kg bags of rock salt)
Area of coverage:	4,160m ² @ 50gms/m ²
Colours:	Yellow, Beige, Deep Green, Red.



Rollastor™ Portable Grit Bin

Rollastor can easily be wheeled from one central point to assist with the manual gritting of larger areas.

Specifications

Design Features

- Manufactured from tough, high-density polyethylene.
- Front hopper feed aperture – for easy removal of contents.
- Supplied with a Digga™ Shovel

Dimensions

Capacity:	110 litres
Length:	480mm
Height:	945mm
Width:	550mm
Weight capacity:	132kg (holds approx. 5 x 25kg bags of rock salt)
Area of coverage:	2,900m ²
Colour:	Dark Grey



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