## AERIAL SPREADING EQUIPMENT

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SPREADING BUCKET

a product by IMS

## Ground-Effect Spreading Bucket

The Ground-Effect Spreading Bucket range has been designed by IMS New Zealand to be strong, lightweight and to maximise the efficiency and distribution of product, all while maintaining the flight characteristics of the underslung spreader bucket throughout a speed range.

The **Ground-Effect Spreading Buckets** have a sliding valve with interchangeable orifice plates of varying sizes, which determines the rate of application. The unique hopper design ensures complete evacuation. The engines have been chosen for their high power-to-weight ratios, and the spinner is designed to ensure a maximum swath width and even product spread.

**Ground-Effect Spreading Buckets** are suitable for application rates of up to 400kg/ha (360lbs/ac) and can be custom-made to suit the operator's requirements.

They are designed for either dry granular products or can be fitted with a hydro-seeding kit for wet applications.



An essential addition to any agricultural helicopter operation.

Part Number	<b>Capacity</b> (Liters)	<b>Capacity</b> (US Gallons)	<b>Capacity</b> (Cubic Feet)
GE200	200	53	7
GE300	300	79	10.6
GE350	350	92	12.4
GE400	400	106	14.1
GE560	560	148	19.8
GE650	650	172	22.9
GE750	750	198	26.5
GE950	950	251	33.5
GE1200	1200	316	40.6
GE1350	1350	355	45.9
GE1500	1500	396	53
GE1650	1650	436	58.3
GE2400	2400	634	84.7
GE2700	2700	713	95.3

## **Granular Variable Flow Control**

With the option of choosing variable control in this series of the Ground-Effect Spreading Bucket, the pilot can manually adjust the Variable Flow Control Valve using the remote speed control. This adjustment can be made while in flight.



#### The Variable Flow Control

**Valve** has been designed for the application of dry media. 1kg to 200kgs per hectare or 0.9lbs to 178lbs per acre.

Product flow rates can be adjusted during flight, eliminating the need to land until the bucket is empty.

Part Number	Capacity (Liters)	<b>Capacity</b> (US Gallons)	<b>Capacity</b> (Cubic Feet)
GE200	200	53	7
GE300	300	79	10.6
GE350	350	92	12.4
GE400	400	106	14.1
GE560	560	148	19.8
GE650	650	172	22.9
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## Ground-Effect Spreading Bucket Accessories

Ground-Effect Spreading Buckets can be specifically designed for various purposes, including pest and mosquito control.



#### **Hopper Lid**

Hopper lids with robust zipped openings are available for the entire Ground-Effect range.

#### Spinner & Motor

A range of spinner and motor configurations are available to suit your specific application requirements. Our team will work with you to supply the optimum system for your needs.





#### Bucket Mounted Air Compressor

Providing a compressed air supply to operate the slide valve ensures fast opening and closing movements.



#### **Product Agitator**

Maximizes product flow to the spinner and reduces product bridging in the hopper.

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## **Heavy Rate Applicator**

#### IMS New Zealand has developed a Heavy Application System for applying bulk dry fertilizer products or wet hydro-seeding at rates in excess of 500kgs per hectare (500lbs per acre).

The **Heavy Rate Applicator's** valve opening is pneumatic and is powered by a bucket-mounted air compressor. Adjusting the door opening position allows the operator to vary the application rate easily and quickly, without the need for any special tools.

Optional extras include a Wing Vane and/or Product Deflector, as shown.

Agitator systems are also available for the **Heavy Rate Applicator**, which minimizes the risk of dry product bridging or hanging up in the bucket.

These systems are available in a range of sizes and come complete with certified **Lifting Lines**, **Spreader Bar** suited to your helicopter, and wiring to the top of the **Lift Lines**.

Contact us for information on a system that best suits your application.

<b>Capacity</b> (US Gallons)	Capacity (Liters)	<b>Capacity</b> (Cubic Feet)			
106	400	14.1			
119	450	15.9			
132	500	17.6			
145	550	19			
158	600	21			
171	650	23			
184	700	24			
250	950	33.5			
277	1050	37			
330	1250	44.1			
356	1350	47.7			
435	1650	58.2			





## Concrete/Masonry Skip

A skip for the placement of wet cement and masonry products is available with either manual or pneumatic door operation. It is robust and effective, suitable for a wide range of products.

A full range of **Concrete Skips** is available to meet your specific needs, with various volumes and release configurations, including pneumatic and manual operation.

These durable skips are suitable for concrete positioning and handling masonry products, and they come in both mild steel and aluminum construction.





<b>Capacity</b> (US Gallons)	Capacity (Liters)	<b>Capacity</b> (Cubic Feet)
40	150	5.3
53	200	7
66	250	8.8
79	300	10.6
92	350	12.4
106	400	14.1
119	450	15.9
132	500	17.6
145	550	19
158	600	21
171	650	23
184	700	24
237	900	32
290	1100	39
286	1300	46
396	1500	53



### Ground-Effect Hydra-Loader

#### Looking for a fast and effective way to load your Ground-Effect Spreading Bucket? Consider our Hydra-Loader.

The **Ground-Effect Hydra-Loader** incorporates a digital load cell system to ensure precise bucket loading saving you time and ensuring effortless accuracy and consistency with each job.

Designed with the operator in mind, it incorporates features to eliminate product waste, optimize efficiency, and have low maintenance requirements.





## **Ground-Effect** Fire Lighter

## The Ground-Effect Fire Lighter is manufactured from corrosion-resistant Stainless Steel to withstand the environment and chemicals it will be exposed to.

The user-friendly design includes a 150mm (6-inch) filler cap and a manual product agitator. Additionally, a variable speed controller, accessible during operation, controls the flow rate of the product, and the pump and igniter turn on and off simultaneously when switched at the pilot controls.



## **Ground-Effect Long Lines**

# The Ground-Effect Long Lines come in standard lengths of 50ft (15m), 100ft (30m), 150ft (45m), 200ft (60m), or the length can be customized for specific purpose.

These **Long Lines** are made from low-stretch Dynice Dux SK75 rope with a smooth polyurethane impregnation, which enhances abrasion resistance. These ropes offer a high strength-to-weight ratio. For instance, an equivalent steel rope would be four times heavier and have only half the strength of Dynice Dux SK75 rope.

The protective sheaths are constructed from durable and waterproof PVC with UV protective stitching. They are designed to incorporate electrical cables and pneumatic/hydraulic hoses as needed.





## Ground-Effect Swivels and Hooks

#### **Manual and Remote Hooks**

Proudly stocking and distributing the Mechanical Specialties range of remote hooks, which come complete with a full cage and wiring loom to match our swivels. We offer assistance and ongoing product support for required airworthiness inspections and overhauls. There are many manual hook combinations that may be suitable for your specific needs. Please get in contact to discuss further.

#### **Multi-Hook Carousels**

**Multi-Hook Carousels** are manufactured in 2-10 hook combinations. These multidrop delivery systems are versatile and reliable, making the placement of multiple loads efficient and specific.

#### **Swivels**

We produce a range of high-quality swivels suitable for any type of helicopter, with an emphasis on reliability and smooth operation. Electrical services are available on swivels, and they can be configured to suit any **Long Line**/accessory configuration.



## Ground-Effect Cargo Nets and Lifting Strops

IMS New Zealand manufactures and stocks a wide range of Lifting Strops and Cargo Nets for use with Remote or Manual Hooks and Long Lines. Please get in contact so we can assist with equipment for your utility helicopter operation.







## For all your helicopter equipment needs, contact us today!



#### **IMS New Zealand Limited**

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