

# **FLAIL MOWER RANGE**



## THE CUTTING PERFORMANCE YOU DESERVE

Spearhead has been at the forefront of vegetation control machinery for over three decades. We listen intently to customer feedback in a quest to perfect our machines. They're robust, long-lasting, and highly efficient.

Our extensive Flail range comprises a host of inline, offset and folding mower options presented to ensure optimum output in all applications. From the smallest Sniper 125 Mini model, through to the Sniper 600 SHD all bases are covered to make managing your vegetation faster, easier, safer and more comfortable than ever before.

The Spearhead Flail range sets the standard. Anything less won't deliver the performance you deserve.





With a cutting width of 1.25m, the Sniper 125 Mini flail mower is suitable for lawns, parkland and amenity operations fitted to tractors of 15hp and greater.

This fully welded machine features a low maintenance, high speed dual belt driven transmission powered via a gearbox and enclosed connecting driveshaft to give dependable performance to each of its 26 hammer flails.

A 114mm adjustable rear roller with accompanying scraper bar safely provides a tidy and professional finish to the cut material and allows the machine to be able to offer a range of cutting heights to the operator.





WEIGHT GUIDE

MACHINE WEIGHT















15 - 30hp (12-19kW)

1700kg (3748lbs)

115kg (254lbs)

1.25m (4'1")

Rear mount only

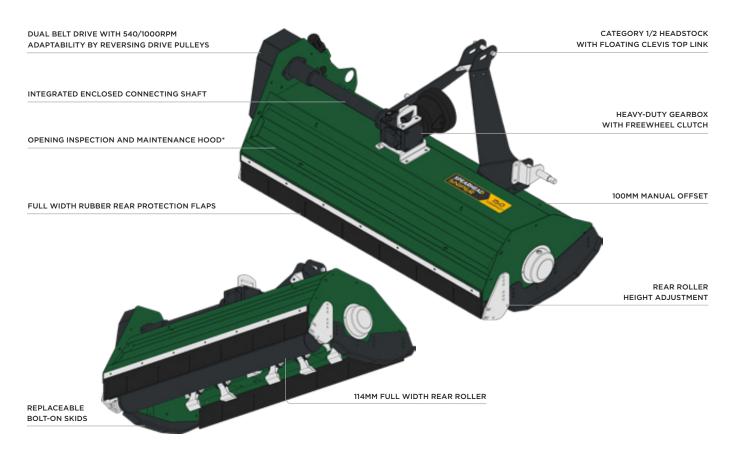
540rpm

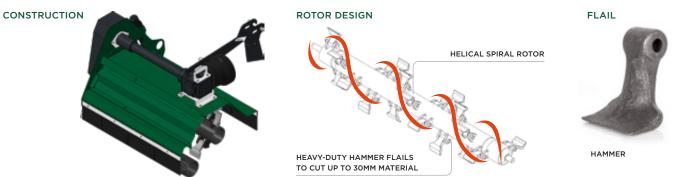
Heavy-duty

22 - 47mm (7/8" - 1 9/16")



# SNIPER COMPACT





The Sniper 150 compact flail mower is the perfect choice for the small holder or small scale amenity user with an eye for achieving a high quality and consistent cut in pasture, paddock and general vegetation control applications when working with a compact tractor.

This robust machine features heavy-duty hammer flails fitted on an electronically balanced spiral rotor ideally suiting it for light scrub clearance in material up to 30mm. Dependable power transmission is given through dual belt drive and in combination with full width adjustable skids and rear roller with scraper to ensure a quality, well distributed cut.

The Sniper 150 features a cutting width of 1.5 metres with an adjustable mounting headstock that can be manually offset by 100mm to further aid the working requirements of the operator.



TRACTOR HE WEIGHT GUIDE MACHINE WEIGHT

CUTTING WIDTH

HITCH

PTO SPEED

DISTANCE

FLAIL TYPE

NUMBER OF FLAILS

<u>:Ш</u> CUTTING HEIGHT

15 - 30hp (12-19kW)

1700kg (3748lbs)

235kg (518lbs)

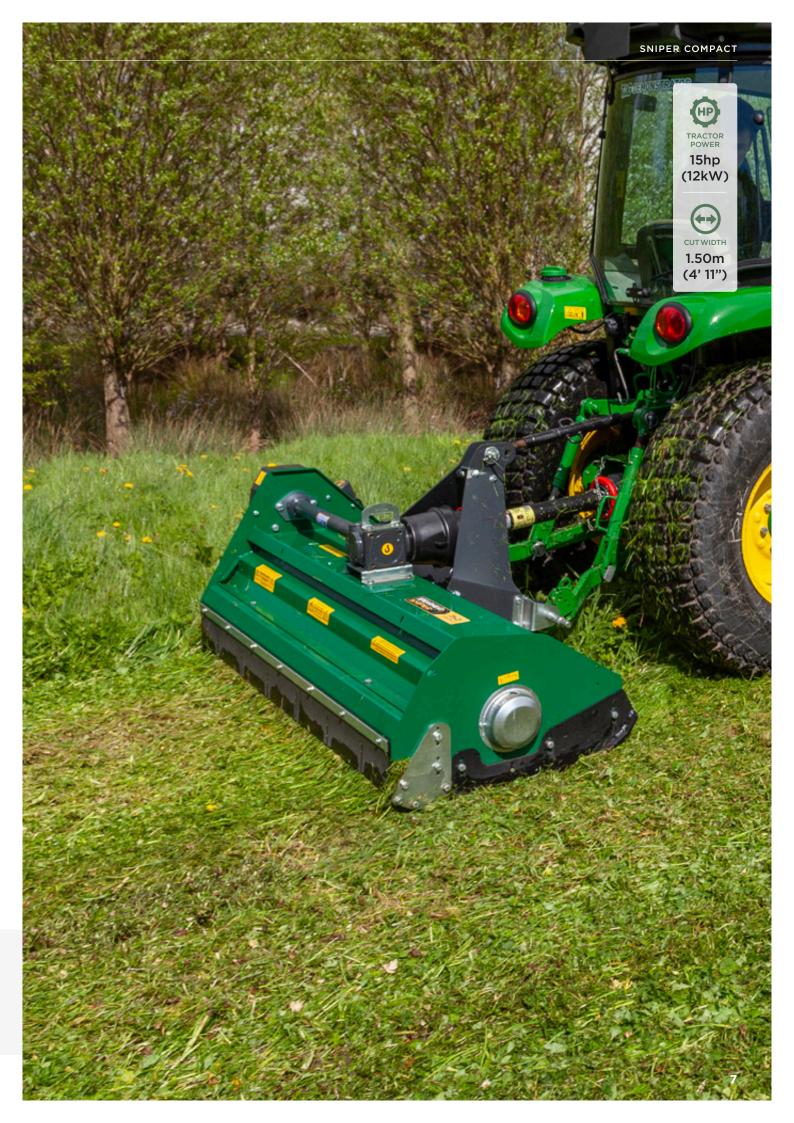
1.50m (4' 11")

Rear mount only

(mechanical)

Heavy-duty hammer flail

10 - 50mm (3/8" - 2")







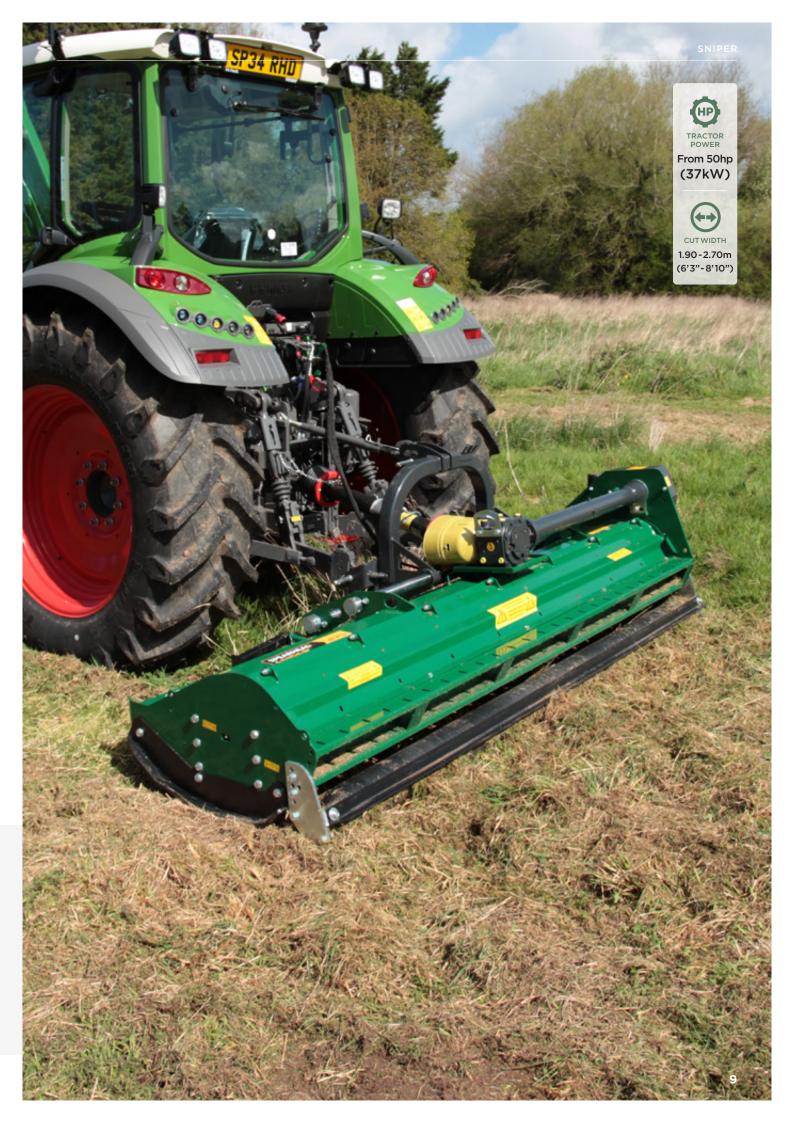
The Sniper flail mower is designed for agricultural and municipal use giving a high quality and consistent cut in rear roller with sc material up to 40mm. It is the perfect choice for maintenance distributed finish. of farmland and pasture areas.

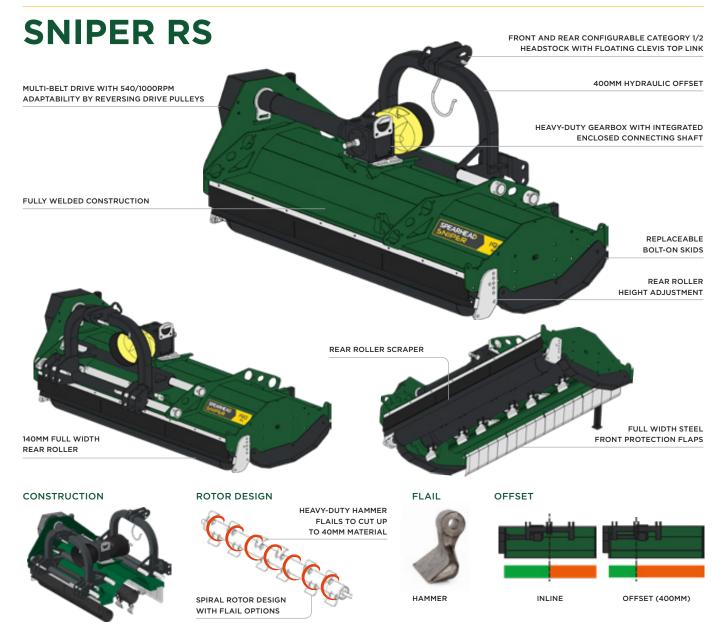
This robust machine features heavy-duty hammer flails fitted on an electronically balanced rotor mounted on enclosed, self-aligning bearings. Belt drive gives reliable power

transmission and a 140mm full width adjustable, self-cleaning rear roller with scraper will ensure a quality cut and well distributed finish.

The Sniper range is available in a choice of working widths between 1.9 and 2.7 metres with operating flexibility offered by a 400mm hydraulic side shift that allows work around trees and other obstructions.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	<b>→</b> НІТСН	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 190 SNIPER	50 - 130hp (37 - 97kW)	2900kg (6393lbs)	500kg (1102lbs)	1.90m (6' 3")	Rear mount only	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	24	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 225	60 - 130hp (45 - 97kW)	2900kg (6393lbs)	565kg (1246lbs)	2.25m (7' 5")	Rear mount only	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	28	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 250 SNIPER	80 - 130hp (60 - 97kW)	2900kg (6393lbs)	620kg (1367lbs)	2.50m (8' 2")	Rear mount only	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	32	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 270	80 - 130hp (60 - 97kW)	2900kg (6393lbs)	670kg (1477lbs)	2.70m (8' 10")	Rear mount only	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	34	15 - 65mm (9/16" - 2 9/16")





The Sniper RS brings the same features as the standard Spearhead Sniper with the added ability of being assembled for its operation front or rear mounted thanks to a cowl construction which allows for the headstock assembly to be fitted in two different ways.

This cost-effective machine can be attached to a wide range of prime movers with the addition of 400mm hydraulic sideshift ability allowing the machine greater access to cut in harder to reach farmland and pasture areas.

All Sniper RS machines come with a minimum of 24 hammer flails, operating at a high tip speed via a 540rpm input multi-belt driveline. This is combined with a 140mm full width adjustable, self-cleaning rear roller with scraper to ensure a professional, well distributed cut in material up to 40mm in diameter.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	нітсн	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 190 SNIPER RS	50 - 130hp (37 - 97kW)	2900kg (6393lbs)	525kg (1158lbs)	1.90m (6' 3")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	24	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 225 SNIPER RS	60 - 130hp (45 - 97kW)	2900kg (6393lbs)	590kg (1301lbs)	2.25m (7' 5")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	28	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 250 SNIPER RS	80 - 130hp (60 - 97kW)	2900kg (6393lbs)	650kg (1433lbs)	2.50m (8' 2")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	32	15 - 65mm (9/16" - 2 9/16")





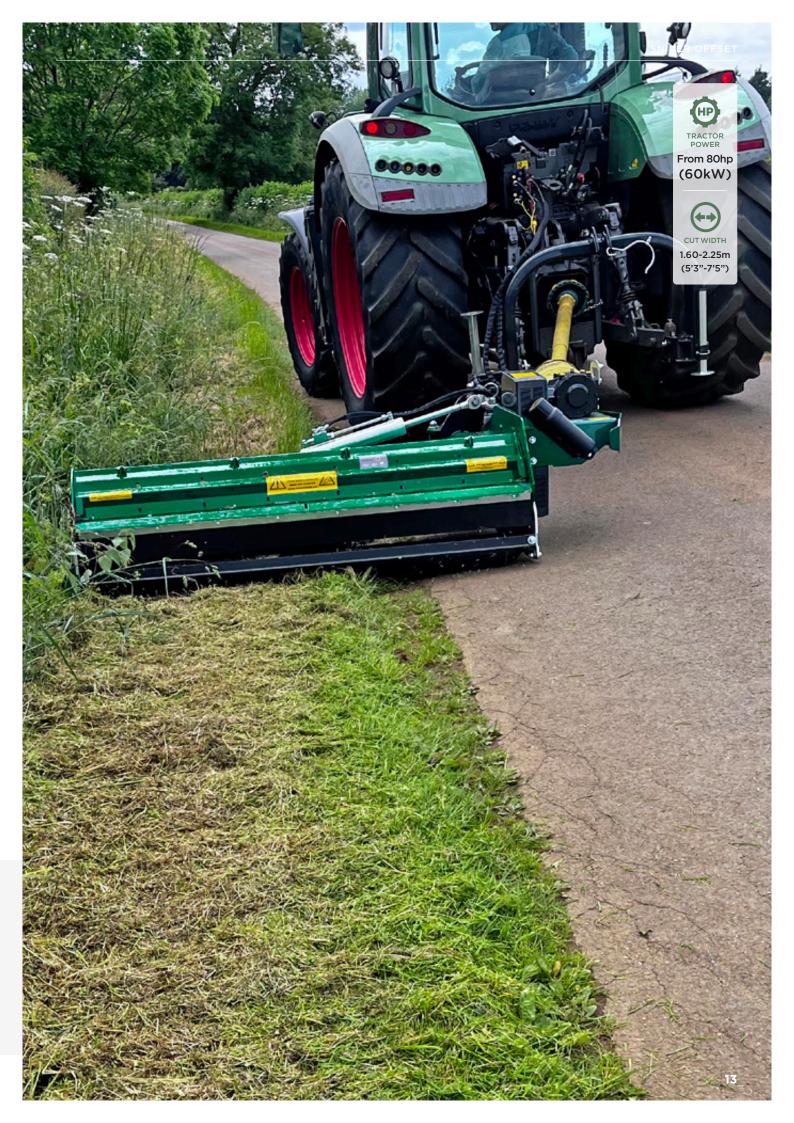
The Sniper Offset flail mower is designed for verge and embankment use giving a high quality and consistent cut in material up to 40mm. It is the perfect choice for maintenance of places such as waterways and highways.

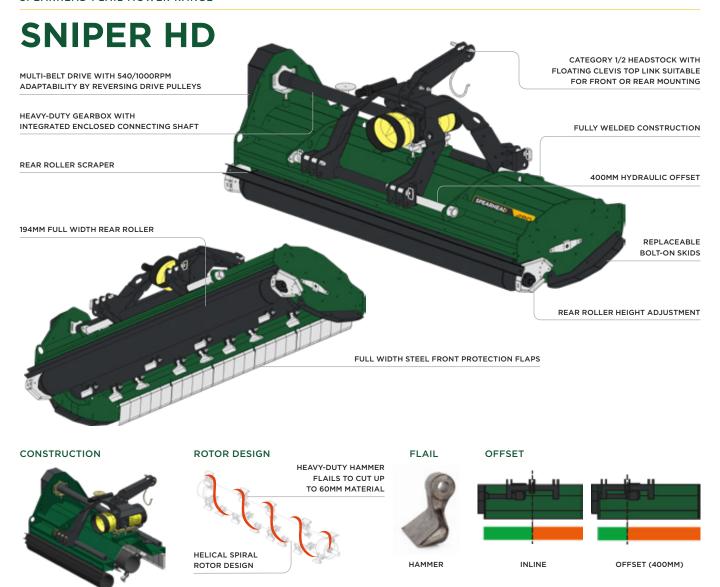
The Sniper Offset range is available in a choice of working widths between 1.6 and 2.3 metres with additional operating flexibility through variable parallel offsetting arms up to a maximum of 1.5m to cater to the working environment. In

addition, the machine features variable cowl angling to aid the following of ground contours.

This robust machine features heavy-duty hammer flails fitted on an electronically balanced rotor mounted on enclosed, self-aligning bearings. Belt drive gives reliable power transmission and a 140mm full width adjustable, self-cleaning rear roller with scraper and rubber flap will ensure a quality cut and well distributed finish.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	+ <b>60</b> +	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 160 SNIPER 0FFSET	80 - 160hp (60 - 120kW)	5500kg (12125lbs)	680kg (1499lbs)	1.60m (5' 3")	Rear mount only	540rpm	1.46m (4' 9") (hydraulic)	Heavy-duty hammer flail	20	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 190 OFFSET	90 -160hp (67 -120kW)	5500kg (12125lbs)	710kg (1565lbs)	1.90m (6' 3")	Rear mount only	540rpm	1.46m (4' 9") (hydraulic)	Heavy-duty hammer flail	24	15 - 65mm (9/16" - 2 9/16")
SPEARHEAD 225 SNIPER 0FFSET	100 - 160hp (75 - 120kW)	5500kg (12125lbs)	890kg (1742lbs)	2.25m (7' 5")	Rear mount only	540rpm	1.46m (4' 9") (hydraulic)	Heavy-duty hammer flail	28	15 - 65mm (9/16" - 2 9/16")





The Sniper HD flail mower is designed for agricultural and municipal use giving a high quality and consistent cut in material up to 60mm. It is the perfect choice for intense farmers and professional operators such as contractors and local authorities.

This robust machine features heavy-duty hammer flails fitted in a double helical pattern on an electronically balanced rotor mounted on enclosed, self-aligning bearings. Belt drive gives

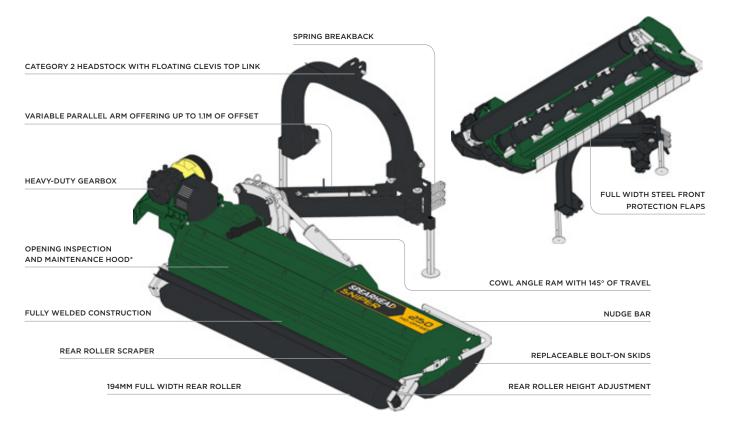
reliable power transmission and a 194mm full width selfcleaning rear roller with scraper and rubber flap will ensure a quality cut and well distributed finish.

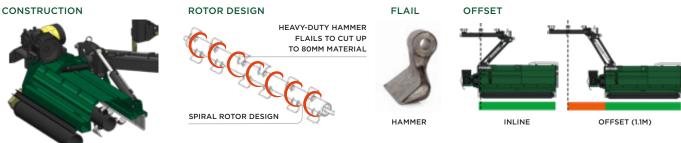
The Sniper HD range is available in a choice of working widths between 2.4 and 3.0 metres with operating flexibility offered by a 400mm hydraulic side shift that allows work around trees and other obstructions. The machine can also be front or rear mounted thanks to a reversible headstock.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	+ <b>60</b> +	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 240 HD	80 - 180hp (60 - 135kW)	2900kg (6393lbs)	905kg (1995lbs)	2.40m (7' 10")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	32	35 - 110mm (1 3/8" - 4 5/16")
SPEARHEAD 260 HD	90 - 180hp (67 - 135kW)	2900kg (6393lbs)	935kg (2061lbs)	2.60m (8' 6")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	32	35 - 110mm (1 3/8" - 4 5/16")
SPEARHEAD 280 HD	90 - 180hp (67 - 135kW)	2900kg (6393lbs)	990kg (2183lbs)	2.80m (9' 2")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	36	35 - 110mm (1 3/8" - 4 5/16")
SPEARHEAD 300 HD	100 - 180hp (75 - 135kW)	2900kg (6393lbs)	1025kg (2260lbs)	3.00m (9' 10")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	40	35 - 110mm (1 3/8" - 4 5/16")



## **SNIPER HD OFFSET**





The Sniper HD Offset flail mower is designed for intense verge and embankment use giving a high quality and consistent cut in material up to 80mm. It is the perfect choice for maintenance of places such as waterways, highways and heavy, overgrown scrub areas.

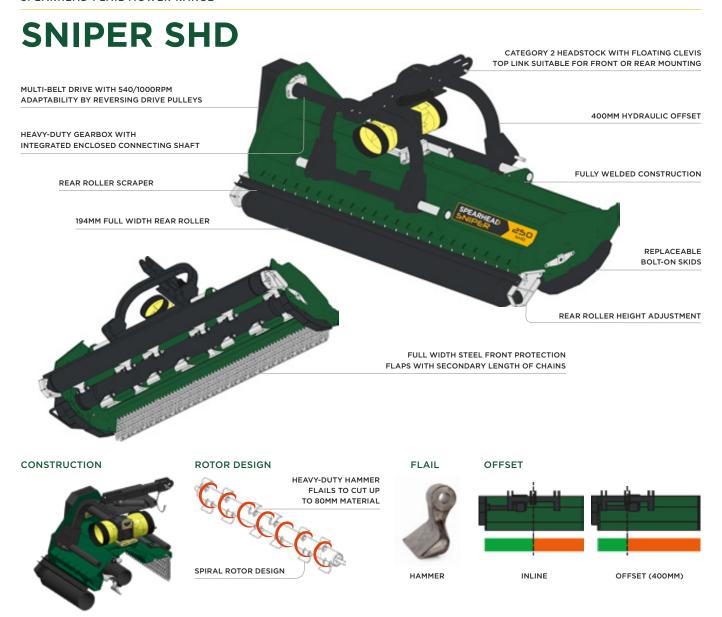
The Sniper HD Offset range is available in a working width from 2.3 metres with additional operating flexibility through variable parallel offsetting arms up to a maximum of 1.1m to cater to the working environment. In addition, the machine

features variable cowl angling to aid the following of ground contours.

This highly robust machine features heavy-duty hammer flails fitted on an electronically balanced rotor mounted on enclosed, self-aligning bearings. Belt drive gives reliable power transmission in challenging conditions and a 194mm full width adjustable, self-cleaning rear roller with scraper will ensure a quality cut and well distributed finish.

TRACTOR H	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	<b>++-------------</b>	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 130-200hg SNIPER 150-250HD 097-150kW		1130kg (2291lbs)	2.30m (7' 6")	Rear mount only	540 / 1000rpm	1.09m (3' 7") (hydraulic)	Heavy-duty hammer flail	20	3 - 57mm (1/8" - 2 1/4")
SPEARHEAD 250 140-200hr SNIPER HD DEF-SET (104-150kW		1200kg (2646lbs)	2.50m (8' 2")	Rear mount only	540 / 1000rpm	1.09m (3' 7") (hydraulic)	Heavy-duty hammer flail	22	3 - 57mm (1/8" - 2 1/4")





The Sniper SHD flail mower is designed for agricultural and municipal use giving a high quality and consistent cut in material up to 80mm. It is the perfect choice for intense use farmers and professional operators such as contractors and local authorities.

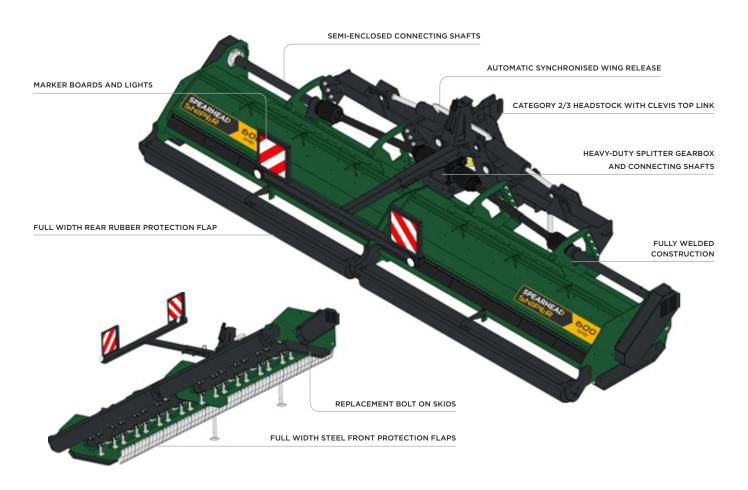
This highly robust machine features heavy-duty hammer flails fitted on an electronically balanced rotor mounted on enclosed, self-aligning bearings. Belt drive gives reliable power transmission in challenging conditions and a 194mm full width adjustable, self-cleaning rear roller with scraper will ensure a quality cut and well distributed finish; even in the most intense terrain.

The Sniper SHD range is available in a choice of working widths between 2.5 and 2.8 metres with operating flexibility offered by a 400mm hydraulic side shift that allows work around trees and other obstructions. The machine can also be front or rear mounted thanks to a reversible headstock.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING	<b>+</b>	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 210 SNIPER SHD	60-120hp (45-90kW)	5500kg (12125lbs)	1050kg (2315lbs)	2.10m (6' 11")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	23	35 - 123mm (1 3/8" - 4 13/16")
SPEARHEAD 250 SNIPER SHD	70-130hp (52-97kW)	5500kg (12125lbs)	1150kg (2535lbs)	2.50m (8' 2")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	25	35 - 123mm (13/8" - 413/16")
SPEARHEAD 280 SNIPER SHO	80-130hp (60-97kW)	5500kg (12125lbs)	1230kg (2712lbs)	2.80m (9' 2")	Front and rear mount	540 / 1000rpm	400mm (hydraulic)	Heavy-duty hammer flail	27	35 - 123mm (1 3/8" - 4 13/16")



# **SNIPER 600 SHD**





The Sniper 600SHD flail mower is designed for agricultural and municipal use giving a high quality and consistent cut in material up to 80mm. It is the perfect choice for high-output, intense use farmers and professional operators such as contractors and local authorities.

This highly robust machine features heavy-duty hammer flails fitted on two electronically balanced rotors mounted on

enclosed, self-aligning bearings. Belt drive and heavy-duty driveline gives reliable power transmission in challenging conditions and with four, height adjustable, 15" guidance wheels will ensure a quality cut and well distributed finish; even in the most intense terrain.

The Sniper 600SHD range is available in a working width of 6.2 metres which a fold into a transport width of less than 2.5m.



WEIGHT GUIDE

MACHINE WEIGHT

CUTTING WIDTH

HITCH

PTO SPEED

DISTANCE

FLAIL TYPE

<u>: |||||</u> CUTTING HEIGHT

120-280hp (90-209kW)

7500kg (16535lbs)

3100kg (6834lbs)

6.20m (20'1")

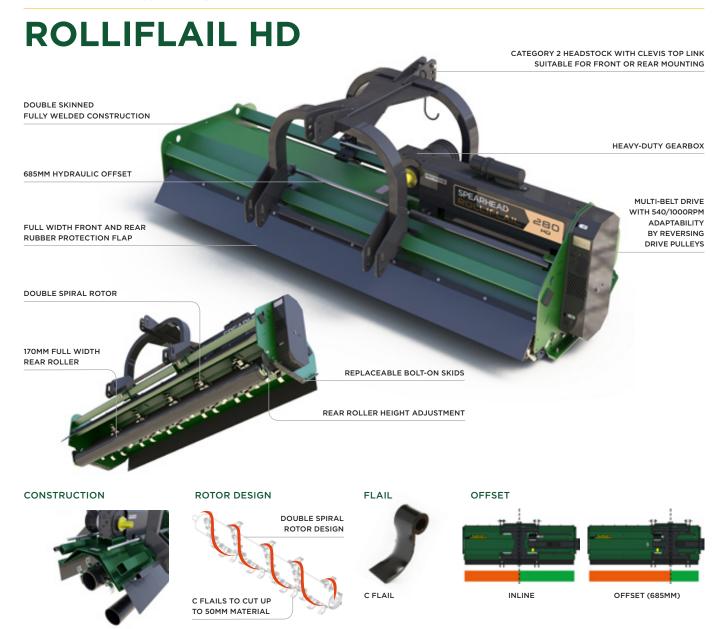
2.45m (8'1")

Rear mount only

Heavy-duty hammer flail

22 - 83mm (7/8" - 3 1/4")





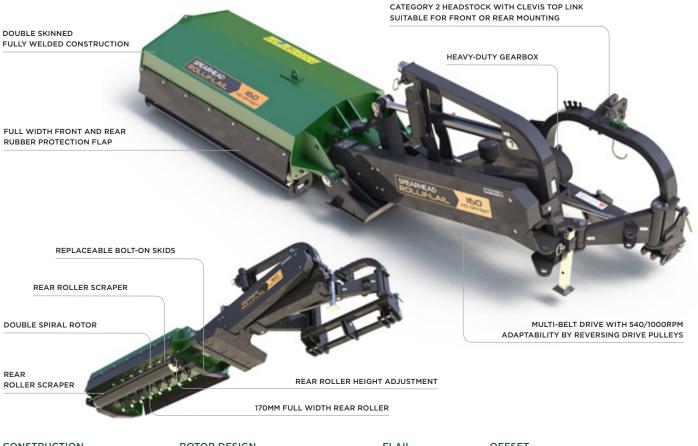
The Spearhead Rolliflail HD mower is designed for heavy-duty flail mowing and gives a high-quality finish in material up to 30mm. Its high output easily manages parkland, orchard, scrub and bramble clearance and roadside verge mowing.

This versatile machine features heavy-duty C flails on a constant suction double spiral rotor. Belt drive gives reliable power transmission and a 170mm full width adjustable rear roller with rubber flap will ensure a quality cut and well distributed finish.

The Rolliflail HD range is available in a choice of working widths between 2.0 and 2.8 metres with further operating flexibility offered by a 685mm hydraulic side shift that allows work around trees and other obstructions if required. The machine can also be front or rear mounted thanks to a reversible headstock.

	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	<b>+</b>	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD 200 HD	50hp (37kW)	5000kg (12125lbs)	730kg (1610lbs)	1.93m (6' 4")	Front and rear mount	540 / 1000rpm	685mm (hydraulic)	C flail	48	30 - 150mm (1.2" - 6")
SPEARHEAD 250 HD	60hp (45kW)	5000kg (12125lbs)	814kg (795lbs)	2.40m (7' 10")	Front and rear mount	540 / 1000rpm	685mm (hydraulic)	C flail	60	30 - 150mm (1.2" - 6")
SPEARHEAD 280 HD	70hp (52kW)	5000kg (12125lbs)	730kg (1610lbs)	2.65m (8' 8")	Front and rear mount	540 / 1000rpm	685mm (hydraulic)	C flail	66	30 - 150mm (1.2" - 6")

# ROLLIFLAIL HD OFFSET





With a working width of 1.2, 1.6 or 2.0 metres this fully offset, the Rolliflail HD Offset is a heavy-duty flail mower designed specifically for professionals that require a high output verge mower for intensive use.

A hydraulic verge floatation system and belt driven spiralled rotor fitted with heavy-duty flails ensure a quality finish even

in the most demanding environments. Safety features include a mechanical safety breakback and a cushioned drive system that protects vital components from any sudden load impacts.

A front mounting build option is also available for users looking to compliment an existing verge mowing configuration for greater productivity.

	<b>***</b>	KG	50A	do	+50+		***		*	<u>‡Ш</u>
	TRACTOR HP	MINIMUM WEIGHT GUIDE	MACHINE WEIGHT	CUTTING WIDTH	HITCH	PTO SPEED	OFFSET DISTANCE	FLAIL TYPE	NUMBER OF FLAILS	CUTTING HEIGHT
SPEARHEAD HO OFFSET	50hp (37kW)	5500kg (12125lbs)	1010kg (2227lbs)	1.15m (3' 9")	Front and rear mount	540 / 1000rpm	660mm (hydraulic)	Comp flail	38	15 - 150mm (9/16" - 6")
SPEARHEAD 160 ROLLIFLAIL HD OFFSET	60hp (45kW)	5500kg (12125lbs)	1060kg (2337lbs)	1.45m (7' 10")	Front and rear mount	540 / 1000rpm	660mm (hydraulic)	Comp flail	48	15 - 150mm (9/16" - 6")
SPEARHEAD 200 ROLLIFLAIL HD OFFSET	70hp (52kW)	5500kg (12125lbs)	1150kg (2536lbs)	2.00m (6' 7")	Front and rear mount	540 / 1000rpm	660mm (hydraulic)	Comp flail	66	15 - 150mm (9/16" - 6")



# **SNIPER MINI/COMPACT MACHINES**

STANDARD SPECIFICATION	SNIPER 125 MINI	SNIPER 150 COMPACT
FEATURES		
Minimum weight guide	1700kg (3748lbs)	1700kg (3748lbs)
Machine weight*	115kg (254lbs)	235kg (518lbs)
Hitch	Cat 1-2 with floating clevis top link	Cat 1-2 with floating clevis top link
Hitch position	Rear mount only	Rear mount only
Cutting width	1.25m (4' 1")	1.50m (4' 11")
Overall width	1.40m (4' 8")	1.67m (5' 6")
Overall length	0.65m (2' 2")	0.78m (2' 7")
Cowl height**	330mm (1' 1")	422mm (1' 5")
Cutting height	22mm - 47mm (7/8" - 1 9/16")	10mm - 50mm (3/8" - 2")
Cutting capacity	10mm (3/8")	30mm (1 3/16")
Maximum offset distance	N/A	100mm (3 15/16")
Offset type	N/A	Mechanical
Recommended tractor HP	15 - 30hp (12 - 19kW)	15 - 30hp (12 - 19kW)
Power take-off speed	540rpm	540rpm
DRIVELINE		
Gearbox	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft
Input shaft	1 3/8" Z6	1 3/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	0.3 litres (0.5 pints)	0.8 litres (1.7 pints)
Belt quantity	2	2
CONSTRUCTION		
Cowl construction	All welded construction	All welded construction
Skid construction	Replaceable bolt-on skid	Replaceable bolt-on skid
FLAIL, ROTOR AND ROLLER		
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	26	22
Flail tip speed	45 m/s (8858 fpm)	41 m/s (8070 fpm)
Rotor diameter	60mm (2 3/8")	114mm (4 1/2")
Roller diameter	114mm (4 1/2")	114mm (4 1/2")

<sup>\*</sup>Weights may vary dependent on machine type and specification

# **SNIPER MACHINES**

STANDARD SPECIFICATION	SNIPER 190	SNIPER 225	SNIPER 250	SNIPER 270
FEATURES				
Minimum weight guide	2900kg (6393lbs)	2900kg (6393lbs)	2900kg (6393lbs)	2900kg (6393lbs)
Machine weight*	500kg (1102lbs)	565kg (1246lbs)	620kg (1367lbs)	670kg (1477lbs)
Hitch	Category 2 with floating clevis top link	Category 2 with floating clevis top link	Category 2 with floating clevis top link	Category 2 with floating clevis top link
Hitch position	Rear mount only	Rear mount only	Rear mount only	Rear mount only
Cutting width	1.90m (6′ 3″)	2.25m (7′ 5″)	2.50m (8' 2")	2.70m (8′ 10″)
Overall width	2.10m (6′ 11″)	2.45m (8' 1")	2.70m (8′ 10″)	2.90m (9′ 6″)
Overall length	0.95m (3' 2")	0.95m (3' 2")	0.95m (3' 2")	0.95m (3' 2")
Cowl height**	480mm (1' 7")	480mm (1' 7")	480mm (1' 7")	480mm (1' 7")
Cutting height	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")
Cutting capacity	40mm (1 9/16")	40mm (1 9/16")	40mm (1 9/16")	40mm (1 9/16")
Maximum offset distance	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")
Offset type	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Recommended tractor HP	50 - 130hp (37 - 97kW)	60 - 130hp (45 - 97kW)	80 - 130hp (60 - 97kW)	80 - 130hp (60 - 97kW)
Power take-off speed	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm
DRIVELINE				
Gearbox	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft
Input shaft	1 3/8" Z6	1 3/8" Z6	1 3/8" Z6	1 3/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)
Belt quantity	4	5	5	5
CONSTRUCTION				
Cowl construction	All welded construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid
FLAIL, ROTOR AND ROLLER				
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	24	28	32	34
Flail tip speed	48 m/s (9448 fpm)	48 m/s (9448 fpm)	48 m/s (9448 fpm)	48 m/s (9448 fpm)
Rotor diameter	159mm (6 1/4")	159mm (6 1/4")	159mm (6 1/4")	159mm (6 1/4")
Roller diameter	140mm (5 1/2")	140mm (5 1/2")	140mm (5 1/2")	140mm (5 1/2")

## **SNIPER RS MACHINES**

STANDARD SPECIFICATION	SNIPER 190RS	SNIPER 225RS	SNIPER 250RS
FEATURES			
Minimum weight guide	2900kg (6393lbs)	2900kg (6393lbs)	2900kg (6393lbs)
Machine weight*	525kg (1158lbs)	590kg (1301lbs)	650kg (1433lbs)
Hitch	Cat 1-2 with floating clevis top link	Cat 1-2 with floating clevis top link	Cat 1-2 with floating clevis top link
Hitch position	Front and rear mount	Front and rear mount	Front and rear mount
Cutting width	1.90m (6′ 3″)	2.25m (7′ 5″)	2.50m (8' 2")
Overall width	2.11m (6' 11")	2.41m (7' 11")	2.71m (8' 11")
Overall length	1.10m (3' 7")	1.10m (3' 7")	1.10m (3' 7")
Cowl height**	0.93m (3' 1")	0.93m (3' 1")	0.93m (3' 1")
Cutting height	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")
Cutting capacity	40mm (1 9/16")	40mm (1 9/16")	40mm (1 9/16")
Maximum offset distance	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")
Offset type	Hydraulic	Hydraulic	Hydraulic
Recommended tractor HP	50 - 130hp (37 - 97kW)	60 - 130hp (45 - 97kW)	80 - 130hp (60 - 97kW)
Power take-off speed	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm
DRIVELINE			
Gearbox	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft
Input shaft	13/8" Z6	13/8" Z6	1 3/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)
Belt quantity	4	5	5
CONSTRUCTION			
Cowl construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt-on skid	Replaceable bolt-on skid	Replaceable bolt-on skid
FLAIL, ROTOR AND ROLLER			
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	24	28	32
Flail tip speed	48 m/s (9448 fpm)	48 m/s (9448 fpm)	48 m/s (9448 fpm)
Rotor diameter	159mm (6 1/4")	159mm (6 1/4")	159mm (6 1/4")
Roller diameter	140mm (5 1/2")	140mm (5 1/2")	140mm (5 1/2")

 $<sup>\</sup>ensuremath{^{*}}\xspace\ensuremath{\mathsf{Weights}}\xspace$  may vary dependent on machine type and specification

<sup>28 \*\*</sup>Top of cowl to floor

## **SNIPER OFFSET MACHINES**

STANDARD SPECIFICATION	SNIPER 160 OFFSET	SNIPER 190 OFFSET	SNIPER 225 OFFSET
FEATURES			
Minimum weight guide	5500kg (12125lbs)	5500kg (12125lbs)	5500kg (12125lbs)
Machine weight*	680kg (1499lbs)	710kg (1565lbs)	790kg (1742lbs)
Hitch	Category 2 with floating clevis top link	Category 2 with floating clevis top link	Category 2 with floating clevis top link
Hitch position	Rear mount only	Rear mount only	Rear mount only
Cutting width	1.60m (5′ 3″)	1.90m (6′ 3″)	2.25m (7' 5")
Overall width	2.18m (7' 2")	2.48m (8' 2")	2.73m (9')
Overall length	1.68m (5' 6")	1.68m (5′ 6″)	1.68m (5' 6")
Cowl height**	480mm (1' 7")	480mm (1' 7")	480mm (1' 7")
Transport width	1.55m (5' 2")	1.55m (5' 2")	1.55m (5' 2")
Transport height	2.19m (7' 3")	2.49m (8' 3")	2.79m (9' 2")
Cutting height	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")	15mm - 65mm (9/16" - 2 9/16")
Cutting capacity	40mm (1 9/16")	40mm (1 9/16")	40mm (1 9/16")
Maximum offset distance	1.46m (4′ 9″)	1.46m (4' 9")	1.51m (4' 11")
Cowl working angle	90° up / 55° down	90° up / 55° down	90° up / 55° down
Offset type	Hydraulic	Hydraulic	Hydraulic
Recommended tractor HP	80 - 160hp (60 - 120kW)	90 - 160hp (67 - 120kW)	100 - 160hp (75 - 120kW)
Power take-off speed	540rpm	540rpm	540rpm
DRIVELINE			
Gearbox	Cast iron housing	Cast iron housing	Cast iron housing
Input shaft	13/8" Z6 wide angle	13/8" Z6 wide angle	1 3/8" Z6 wide angle
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)	1.2 litres (2.1 pints)
Belt quantity	3	4	5
CONSTRUCTION			
Cowl construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid
FLAIL, ROTOR AND ROLLER			
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	20	24	28
Flail tip speed	48 m/s (9448 fpm)	48 m/s (9448 fpm)	48 m/s (9448 fpm)
Rotor diameter	159mm (6 1/4")	159mm (6 1/4")	159mm (6 1/4")
Roller diameter	140mm (5 1/2")	140mm (5 1/2")	140mm (5 1/2")

#### **SNIPER HD MACHINES**

STANDARD SPECIFICATION	SNIPER 240HD	SNIPER 260HD	SNIPER 280HD	SNIPER 300HD
FEATURES				
Minimum weight guide	2900kg (6393lbs)	2900kg (6393lbs)	2900kg (6393lbs)	2900kg (6393lbs)
Machine weight*	905kg (1995lbs)	935kg (2061lbs)	990kg (2183lbs)	1025kg (2260lbs)
Hitch	Category 2 with floating clevis top link			
Hitch position	Front and rear mount			
Cutting width	2.40m (7′ 10″)	2.60m (8′ 6″)	2.80m (9' 2")	3.00m (9′ 10″)
Overall width	2.62m (8′ 7″)	2.82m (9′ 3″)	3.00m (9′ 10″)	3.19m (10′ 6″)
Overall length	1.15m (3′ 9″)	1.15m (3' 9")	1.15m (3' 9")	1.15m (3' 9")
Cowl height**	540mm (1' 10")	540mm (1' 10")	540mm (1' 10")	540mm (1' 10")
Cutting height	35mm - 110mm (1 3/8" - 4 5/16")			
Cutting capacity	60mm (2 3/8")	60mm (2 3/8")	60mm (2 3/8")	60mm (2 3/8")
Maximum offset distance	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")
Offset type	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Recommended tractor HP	80 - 180hp (60 - 135kW)	90 - 180hp (67 - 135kW)	90 - 180hp (67 - 135kW)	100 - 180hp (75 - 135kW)
Power take-off speed	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm
DRIVELINE				
Gearbox	Cast iron housing with integrated enclosed connecting shaft			
Input shaft	1 3/8" Z6	1 3/8" Z6	1 3/8" Z6	13/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil			
Gearbox oil capacity	1.5 litres (2.6 pints)			
Belt quantity	5	6	6	6
CONSTRUCTION				
Cowl construction	All welded construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid			
FLAIL, ROTOR AND ROLLER				
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	32	32	36	40
Flail tip speed	54 m/s (10629 fpm)			
Rotor diameter	219mm (8 5/8")	219mm (8 5/8")	219mm (8 5/8")	219mm (8 5/8")
Roller diameter	194mm (7 5/8")	194mm (7 5/8")	194mm (7 5/8")	194mm (7 5/8")

 $<sup>\</sup>ensuremath{^{*}}\xspace\ensuremath{\text{Weights}}\xspace$  may vary dependent on machine type and specification

## **SNIPER HD OFFSET MACHINES**

STANDARD SPECIFICATION	SNIPER 230HD OFFSET	SNIPER 250HD OFFSET	
FEATURES			
Minimum weight guide	5500kg (12124lbs)	5500kg (12124lbs)	
Machine weight*	1130kg (2291lbs)	1200kg (2646lbs)	
Hitch	Category 2 with floating clevis top link	Category 2 with floating clevis top link	
Hitch position	Rear mount only	Rear mount only	
Cutting width	2.30m (7' 6")	2.50m (8′ 2″)	
Overall width	2.86m (9' 4")	3.16m (10′ 5″)	
Overall length	2.16m (7' 1")	2.16m (7′ 1″)	
Cowl height**	540mm (1' 10")	540mm (1' 10")	
Transport width	1.61m (5' 4")	1.61m (5' 4")	
Transport height	2.97m (9' 9")	3.24m (10' 8")	
Cutting height	3mm - 57mm (1/8" - 2 1/4")	3mm - 57mm (1/8" - 2 1/4")	
Cutting capacity	80mm (3 3/16")	80mm (3 3/16")	
Maximum offset distance	1.09m (3' 7")	1.09m (3' 7")	
Cowl working angle	90° up / 55° down	90° up / 55° down	
Offset type	Hydraulic	Hydraulic	
Recommended tractor HP	130 - 200hp (97 - 150kW)	140 - 200hp (104 - 150kW)	
Power take-off speed	540rpm	540rpm	
DRIVELINE			
Gearbox	Cast iron housing	Cast iron housing	
Input shaft	1 3/8" Z6	1 3/8" Z6	
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	
Gearbox oil capacity	2.3 litres (4.0 pints)	2.3 litres (4.0 pints)	
Belt quantity	6	6	
CONSTRUCTION			
Cowl construction	All welded construction	All welded construction	
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	
FLAIL, ROTOR AND ROLLER			
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	
Quantity	20	22	
Flail tip speed	50 m/s (9842 fpm)	50 m/s (9842 fpm)	
Rotor diameter	168mm (6 5/8")	168mm (6 5/8")	
Roller diameter	194mm (7 5/8")	194mm (7 5/8")	

#### **SNIPER SHD MACHINES**

STANDARD SPECIFICATION	SNIPER 210SHD	SNIPER 250SHD	SNIPER 280SHD	SNIPER 600SHD
FEATURES				
Minimum weight guide	5500kg (12125lbs)	5500kg (12125lbs)	5500kg (12125lbs)	7500kg (1653lbs)
Machine weight*	1050kg (2315lbs)	1150kg (2535lbs)	1230kg (2712lbs)	3100kg (6834lbs)
Hitch	Category 2 with floating clevis top link	Category 2 with floating clevis top link	Category 2 with floating clevis top link	Category 2 with floating clevis top link
Hitch position	Front and rear mount	Front and rear mount	Front and rear mount	Rear mount only
Cutting width	2.10m (6' 11")	2.50m (8' 2")	2.80m (9′ 2″)	6.20m (20' 4")
Overall width	2.30m (7' 7")	2.80m (9' 2")	3.00m (9′ 10″)	6.55m (21' 6")
Overall length	1.20m (3' 11")	1.20m (3' 11")	1.20m (3' 11")	2.20m (7' 3")
Cowl height**	540mm (1' 10")	540mm (1' 10")	540mm (1' 10")	_
Transport width	_	_	_	2.24m (8' 1")
Cutting height	35mm - 123mm (1 3/8" - 4 13/16")	35mm - 123mm (1 3/8" - 4 13/16")	35mm - 123mm (1 3/8" - 4 13/16")	22mm - 83mm (7/8" - 3 1/4")
Cutting capacity	80mm (3 3/16")	80mm (3 3/16")	80mm (3 3/16")	80mm (3 3/16")
Maximum offset distance	400mm (1' 4")	400mm (1' 4")	400mm (1' 4")	N/A
Offset type	Hydraulic	Hydraulic	Hydraulic	N/A
Recommended tractor HP	60 - 120hp (45 - 90kW)	70 - 130hp (52 - 97kW)	80 - 130hp (60 - 97kW)	120 - 280hp (90 - 209kW)
Power take-off speed	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm	1000rpm
DRIVELINE				
Gearbox	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with integrated enclosed connecting shaft	Cast iron housing with semi-enclosed connecting shafts
Input shaft	1 3/8" Z6	1 3/8" Z6	1 3/8" Z6	1' 3/4" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	2.3 litres (4.0 pints)	2.3 litres (4.0 pints)	2.3 litres (4.0 pints)	4.4 litres (7.7 pints)
Belt quantity	5	5	5	12 (6 per cowl)
CONSTRUCTION				
Cowl construction	All welded construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid
FLAIL, ROTOR AND ROLLER				
Type (standard)	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail	Heavy-duty hammer flail
Quantity	23	25	27	72
Flail tip speed	50 m/s (9842 fpm)	50 m/s (9842 fpm)	50 m/s (9842 fpm)	62 m/s (12204 fpm)
Rotor diameter	168mm (6 5/8")	168mm (6 5/8")	168mm (6 5/8")	219mm (8 10/16")

<sup>\*</sup>Weights may vary dependent on machine type and specification **32** \*\*Top of cowl to floor

## **ROLLIFLAIL HD MACHINES**

STANDARD SPECIFICATION	ROLLIFLAIL 200HD	ROLLIFLAIL 250HD	ROLLIFLAIL 280HD
FEATURES			
Minimum weight guide	5500kg (12125lbs)	5500kg (12125lbs)	5500kg (12125lbs)
Machine weight*	730kg (1610lbs)	814kg (1795lbs)	860kg (1896lbs)
Hitch	Category 2 with clevis top link	Category 2 with clevis top link	Category 2 with clevis top link
Hitch position	Front and rear mount	Front and rear mount	Front and rear mount
Cutting width	1.93m (6' 4")	2.40m (7' 10")	2.65m (8' 8")
Overall width	2.33m (7' 7")	2.80m (9' 2")	3.01m (9' 10")
Overall length	1.24m (4')	1.24m (4')	1.24m (4')
Cowl height**	700mm (2' 4")	700mm (2' 4")	700mm (2' 4")
Cutting height	30mm - 150mm (1 3/16" - 6")	30mm - 150mm (1 3/16" - 6")	30mm - 150mm (1 3/16" - 6")
Cutting capacity	30mm (1 3/16")	30mm (1 3/16")	30mm (1 3/16")
Maximum offset distance	685mm (2' 3")	685mm (2' 3")	685mm (2' 3")
Offset type	Mechanical	Mechanical	Mechanical
Recommended tractor HP	50hp (37kW)	60hp (45kW)	70hp (52kW)
Power take-off speed	1000rpm	1000rpm	1000rpm
DRIVELINE			
Gearbox	Cast iron housing with enclosed connecting shaft	Cast iron housing with enclosed connecting shaft	Cast iron housing with enclosed connecting shaft
Input shaft	13/8" Z6	1 3/8" Z6	13/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	1.8 litres (3.1 pints)	1.8 litres (3.1 pints)	1.8 litres (3.1 pints)
Belt quantity	4	4	4
CONSTRUCTION			
Cowl construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid
FLAIL, ROTOR AND ROLLER			
Type (standard)	C flail	C flail	C flail
Quantity	48	60	66
Flail tip speed	51 m/s (10039 fpm)	51 m/s (10039 fpm)	51 m/s (10039 fpm)
Rotor diameter	193mm (7 5/8")	193mm (7 5/8")	193mm (7 5/8")
Roller diameter	170mm (6 11/16")	170mm (6 11/16")	170mm (6 11/16")

#### **ROLLIFLAIL HD OFFSET MACHINES**

STANDARD SPECIFICATION	ROLLIFLAIL 120HD OFFSET	ROLLIFLAIL 160HD OFFSET	ROLLIFLAIL 200HD OFFSET
FEATURES			
Minimum weight guide	5500kg (12125lbs)	5500kg (12125lbs)	5500kg (12125lbs)
Machine weight*	1010kg (2227lbs)	1060kg (2337lbs)	1150kg (2536lbs)
Hitch	Category 2 with clevis top link	Category 2 with clevis top link	Category 2 with clevis top link
Hitch position	Front and rear mount	Front and rear mount	Front and rear mount
Cutting width	1.15m (3' 9")	1.45m (4' 9")	2.00m (6' 7")
Working width (inline)	3.39m (11' 2")	3.67m (12')	4.19m (13' 9")
Working width (offset)	3.73m (12' 3")	4.01m (13' 2")	4.53m (14' 10")
Overall length	1.24m (4' 1")	1.24m (4' 1")	1.24m (4' 1")
Cowl height**	0.65m (2' 2")	0.65m (2' 2")	0.65m (2' 2")
Cutting height	15 - 150mm (9/16" - 6")	15 - 150mm (9/16" - 6")	15 - 150mm (9/16" - 6")
Cutting capacity	50mm (2")	50mm (2")	50mm (2")
Maximum offset distance	0.66m (2' 2")	0.66m (2' 2")	0.66m (2' 2")
Offset type	Hydraulic	Hydraulic	Hydraulic
Recommended tractor HP	50hp (38kW)	60hp (45kW)	70hp (53kW)
Power take-off speed	540 / 1000rpm	540 / 1000rpm	540 / 1000rpm
DRIVELINE			
Gearbox	Cast iron housing	Cast iron housing	Cast iron housing
Input shaft	13/8" Z6	1 3/8" Z6	13/8" Z6
Gearbox lubricant	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil	EP80-90W or GL-4 / GL-5 oil
Gearbox oil capacity	2.3 litres (4.9 pints)	2.3 litres (4.9 pints)	2.3 litres (4.9 pints)
Belt quantity	1	1	1
CONSTRUCTION			
Cowl construction	All welded construction	All welded construction	All welded construction
Skid construction	Replaceable bolt on skid	Replaceable bolt on skid	Replaceable bolt on skid
FLAIL, ROTOR AND ROLLER			
Type (standard)	Comp flail	Comp flail	Comp flail
Quantity	38	48	66
Flail tip speed	53 m/s (10433 fpm)	53 m/s (10433 fpm)	53 m/s (10433 fpm)
Rotor diameter	140mm (5 1/2")	140mm (5 1/2")	140mm (5 1/2")

 $<sup>^{\</sup>ast}\mbox{Weights}$  may vary dependent on machine type and specification

**<sup>34</sup>** \*\*Top of cowl to floor





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