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@Scotts Precision Manufacturing



Also manufactured under license and distributed in the USA by:



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PROUDLY BUILT IN THE UK







Eyolution

Versatile. Gentle. Proven.

For this year, the range of Evolution Separators has received a host of upgrades and improvements designed to reduce maintenance and increase performance.

An introduction to the range of Evolution Separators

The primary role is to gently separate clod, stones, haulm and loose soil from the following range of root crops, fruit, vegetables and alliums (although this list continues to grow):

Potatoes, Salad Potatoes, Sweet Potatoes, Onions, Shallots, Carrots, Parsnips, Celeriac, Chicory, Swedes, Red Beet, Brussels Sprouts, Flower Bulbs, Apples, Bell Peppers.

The Evolution Separator generally works by extracting the debris between 2 contra rotating rollers. The larger roller (spiral roller) has air chambers and is deformable with a spiralling rib. The smaller roller (clod roller) is smooth with a choice of finishes. The clever design of the "spiral rib" entrains the debris down into the valley between the rollers where, if the debris if soft enough is then crushed and ejected down below the separator. Stones will also pass between the rollers as the "spiral roller" readily deforms around the stone so does not allow loses of crop at this time. If larger stones enter the valley and there is not enough deformation in the spiral roller there is a safety mechanism that allows the clod roller to spring away momentarily to allow the stone to pass through.

Evolution Separators are offered in a wide range of formats. The two main types are as follows:

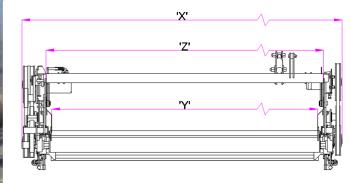
In-Store: electric motor, direct drive (one motor/ gearbox per shaft). The in-store version is available in widths from 5 segments (853mm working width) up to 17 segments (2905mm working width). Available with 1, 2, 4, 6, 8 and 10 pairs of rollers.

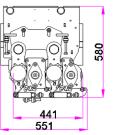
Mobile: hydraulic driven with choices of: direct motor drive (1 motor per shaft), toothed belt, chain and sprocket or Kevlar V belt drive. The mobile version is available in widths from 5 segments (831mm working width) up to 20 segments (3435mm working width). 18 segments wide and above are a double width design with a central bearing/ coupling. Available with 1, 2, 4, 5, 6, 8 and 10 pairs of rollers.

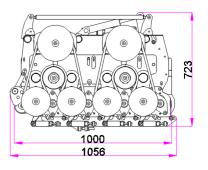


Segments	Overall width	Working Width	Inside panels
wide	'X'	'Υ'	'Z'
20	3710mm	3435mm	3487mm
18	3368mm	3093mm	3145mm
17	3230mm	2883mm	2959mm
14	2717mm	2370mm	2446mm
13	2546mm	2199mm	2275mm
12	2375mm	2028mm	2104mm
11	2204mm	1857mm	1933mm
10	2033mm	1686mm	1762mm
9	1862mm	1515mm	1591mm
8	1691mm	1344mm	1420mm
7	1520mm	1173mm	1249mm
6	1349mm	1002mm	1078mm
5	1178mm	831mm	907mm

MOBILE VERSION

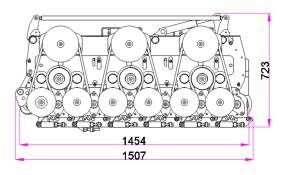


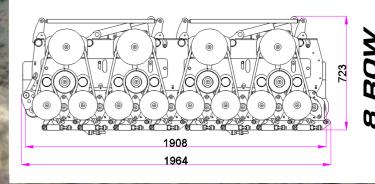




ROV

RON





IN-STORE OR MOBILE VERSIONS

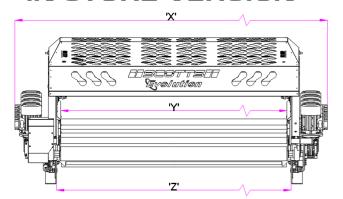


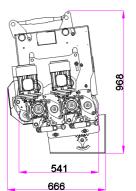
In store: direct electric motor drive

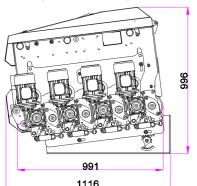


Mobile: hydraulic drive with Kevlar V belts

IN-STORE VERSION

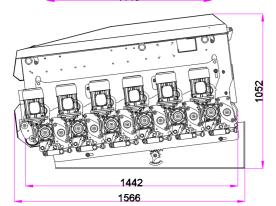


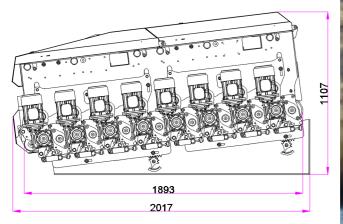




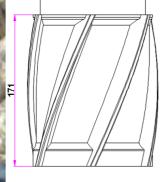
RON

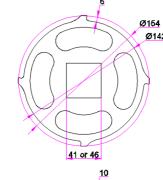
ROW

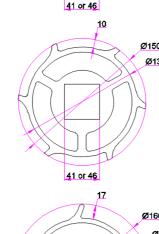




Segments wide	Overall width 'X'	Working Width 'Y'	Inside panels 'Z'
17	3490mm	2905mm	2959mm
16	3319mm	2734mm	2788mm
14	2977mm	2392mm	2446mm
13	2806mm	2221mm	2275mm
12	2635mm	2050mm	2104mm
11	2464mm	1879mm	1933mm
10+100mm	2393mm	1808mm	1862mm
10	2293mm	1708mm	1762mm
9	2122mm	1537mm	1591mm
8	1951mm	1366mm	1420mm
7	1780mm	1195mm	1249mm
6	1609mm	1024mm	1078mm
5	1438mm	853mm	907mm







4.385		
	2 Row	93mm
1750	3 Row	121mm
900	4 Row	149mm
1	6 Row	204mm
98	8 Row	259mm
Ber	10 Row	315mm
Sec	12 Row	370mm
E	5mm	4 RIE
		3 Row 4 Row 6 Row 8 Row 10 Row

Height lost



17mm 3 RIB

KEY FEATURES:

BETTER CLEANING AND HARDER WEARING



Choice of air chamber equipped spiral roller segments available in: 4 x 6mm rib, 6 x 10mm rib and 3 x 17mm rib versions

We manufacture a wide range of polyurethane colours to suit customer needs. Blue being the preferred choice for food production lines where optical sorters are present.

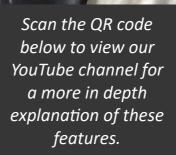


SELF CLEANING

Self-cleaning of the unit is achieved by the constant deforming of the spiral rollers, inertia and a fixed scraper mounted under each clod roller.

THE BEST FOR STONE PROTECTION

The large air chambers are essential for protection against stone damage to the protruding spiral rib by allowing the rib to deform around the









TOTAL CONTROL

In order to vary the amount of separation and fine tune the separator for different crops / conditions, the unit is equipped with a host of easy to operate functions as listed:

- Speed control of the spiral roller shafts.
- Speed and direction control of each pair of clod rollers.
- Gap adjustment between each contra rotating pair of rollers (All gaps are adjusted in a single movement on each side).
- Height adjustment of clod rollers (all clod rollers lift at once).
- Angle adjustment of the separator. (mobile version)



KEY FEATURES:

DRIVE STYLES TO SUIT YOU:



Direct drive electric motors eliminates the need for chains, sprockets and guards (In store version)



Direct hydraulic motor drive (available on all versions)



Kevlar V belt drive (mobile version)

FEED ON/ OFF ROLLERS

The soft, low fluted transfer roller is also available as a feed on roller ideal for bridging gaps and more



As standard all in-store Evolution
Separators come equipped with
1 or 2 water spray bars. If
operating in dry conditions the
fine mist of water allows dust to
stick to the leading edge of each
spiral rib which reduces the
aggressiveness and avoid losses
of small or
mis-shaped potatoes.

MISTING INTERVAL TIMER

WATER MISTING SYSTEM



The timer offers duration and interval adjustment for the water misting system. Simple to operate, the unit is mounted directly onto the water solenoid valve.

(optional)



Remote greasing kit fitted as standard for all bearings (In store and mobile version)

ADJUSTMENTS MADE SIMPLE, ACCURATE AND EFFECTIVE





Standard clod roller height control: turnbuckle (In store) or hydraulic ram (mobile version).

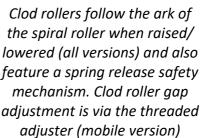
All clod rollers are linked and raise/ lower together (8 row version is split 4 + 4).



Optional electric linear ram
(In store version)



Clod roller gap adjustment moves all clod rollers equally with a single turn of the starwheel on each side (In store version)





CLOD ROLLER (smooth/P)

We offer a choice of finishes to best suit crop types and operating conditions:

- Rubber (65mm/73mm): Most aggressive finish, generally used for heavy soils/wet conditions, capable of extracting larger soft clods in potatoes. Best recommended for infield use.
- Mild steel (63mm/73mm): less aggressive with exceptionally good wear rates.
- Stainless steel (63mm/73mm): least aggressive. Generally used for instore processing lines, recommended for drier conditions, smaller potatoes or difficult shapes
- Stainless steel (40mm): recommended for onions and shallots.

BUILT WITH SAFETY IN MIND



Gas strut operated top guard for easy access, supplied with magnetic safety switch (In store version)

