

MORRIS

C2

CONTOUR

INDEPENDENT
OPENER DRILL



WE GROW BETTER CROPS

morrisequipment.ca

Our Customers tell us they grow better crops with Morris Equipment.

Why settle for a good crop when you can grow a great crop?



Seeded same day, same rates, same depth, same fertilizer placement

In this demonstration in Falher, AB, the Morris canola population was 7 plants/ft² and was a full leaf stage more advanced versus the farmer's independent opener machine at 5 plants/ft². Rapid uniform emergence and low seedling mortality is why Morris C2 owners know they grow better crops.



Agronomically Superior by Design

Accurate depth control:

In 2008, Morris introduced the Contour drill, the first independent opener drill with a 1:1 contour ratio. It was a superior design, so Morris continued to incorporate the same principles into the C2 row unit. Other competitors have since followed our lead.

Class leading trash clearance

Many of our customers don't harrow before seeding. The C2 row unit has a 12° reclined shank and an elevated catch point that facilitates a smooth uninterrupted flow of crop residue through the C2 drill frame.

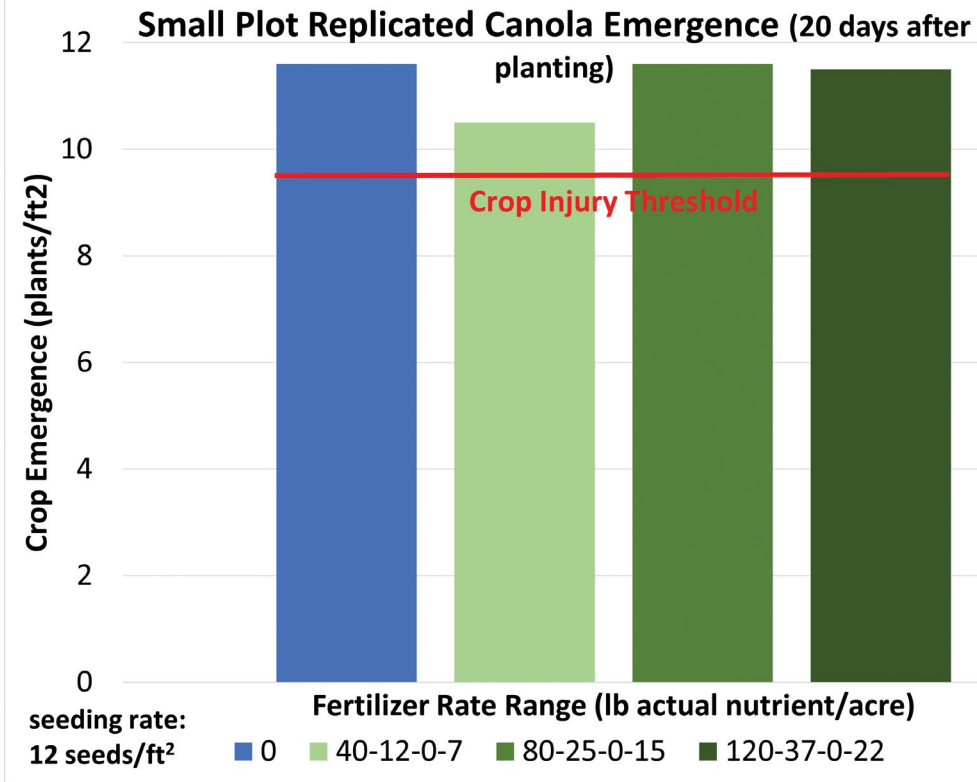


Outstanding fertilizer-seed separation

The Morris double shoot openers are a patented design that provide outstanding seed and fertilizer separation. Seed is directed to the outer edge of the seed bed with 90% of the seed found in a 1" wide ribbon (a 50-70% range is typical for same plane double shoot openers). Fertilizer drops into a channel cut by the opening knife and stays where it's put.

How much fertilizer can I safely apply in the band?

We use a crop injury threshold to provide our customers with advice on safe fertilizer rates.

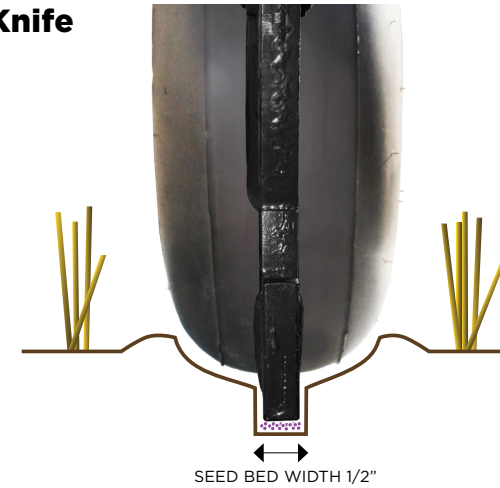


This threshold is set at 85% of the unfertilized crop emergence. Any fertilized crop with emergence at or above the crop injury threshold is acceptable. The small plot replicated canola summary shows that all fertilizer rates tested are above the red line and safe.

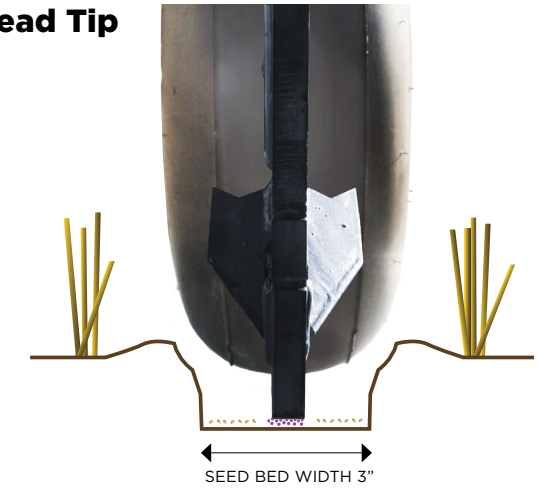
Single & Double Shoot Openers

Single Shoot

Narrow Knife

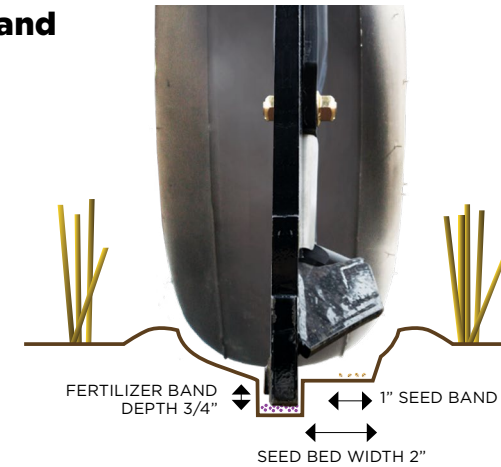


3" Spread Tip

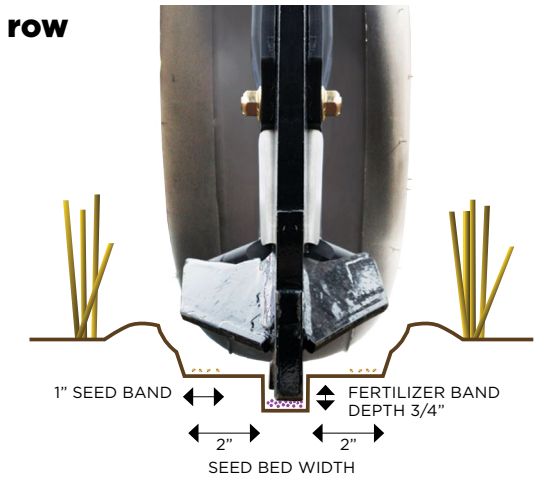


Double Shoot

Side band



Paired row



Superior product separation leads to more rapid uniform crop emergence and reduced seedling mortality.

Soil-Seed Contact

To promote uniform seed germination, we pack the soil around the seed. Packing breaks down large soil aggregates and reduces soil porosity, which allows water to move from higher soil moisture areas to the packed soil surrounding the seed.

Morris has been deliberate in our design efforts to optimize soil-seed contact and seed germination. Our double shoot openers are designed to minimize soil fracturing and maximize soil flow around the boot and into the furrow prior to packing. The packer tire then applies downforce that is distributed across an optimized surface area.



Key design elements Morris double shoot openers employ to minimize soil disturbance:

1. The 1/2" wide nose opens the soil and cuts rather than fractures soil.
2. The narrow injected polymer boot.
3. Carbide covers the shovel surface to improve wear life and minimize soil disturbance.

The Morris C2 row unit is the HEAVIEST BUILT in the market.

Our rugged and ultra-durable cast row unit is designed for years of trouble-free service on your farm.



1. 1" Chrome pins at all connections.

5. Cast packer arm

Built heavy duty with left and right versions to eliminate skewing.

2. Packer options

- a. 5.5" x 16" Otico semi-pneumatic
- b. 5.5" x 16" semi-pneumatic
- c. 4.5" x 16" semi-pneumatic
- d. 4" x 16" V-packer

3. Hose holder

A hose holder eliminates the need for hose clamps to fasten the secondary hoses to the boot.



4. Depth Cam

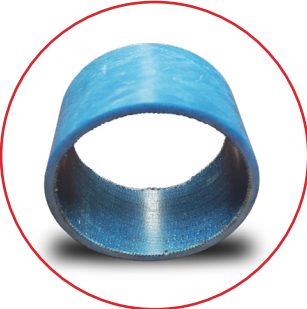
Changing depth on the C2 is easy. The letter stamped on the depth cam represents 1/4" change in depth.

6. Patented frame mounting system

This mounting system lifts and tightens the row unit square to the frame.

7. Hydraulic cylinder

Our hydraulic ram is designed for years of trouble-free use. Our cylinder rod is 1" diameter and has an over-sized piston that keeps the shaft centered throughout the range of travel.



8. Bushings

Morris uses extended wear bushings for its greaseless pivot points with 75% greater wear area than leading competitors.

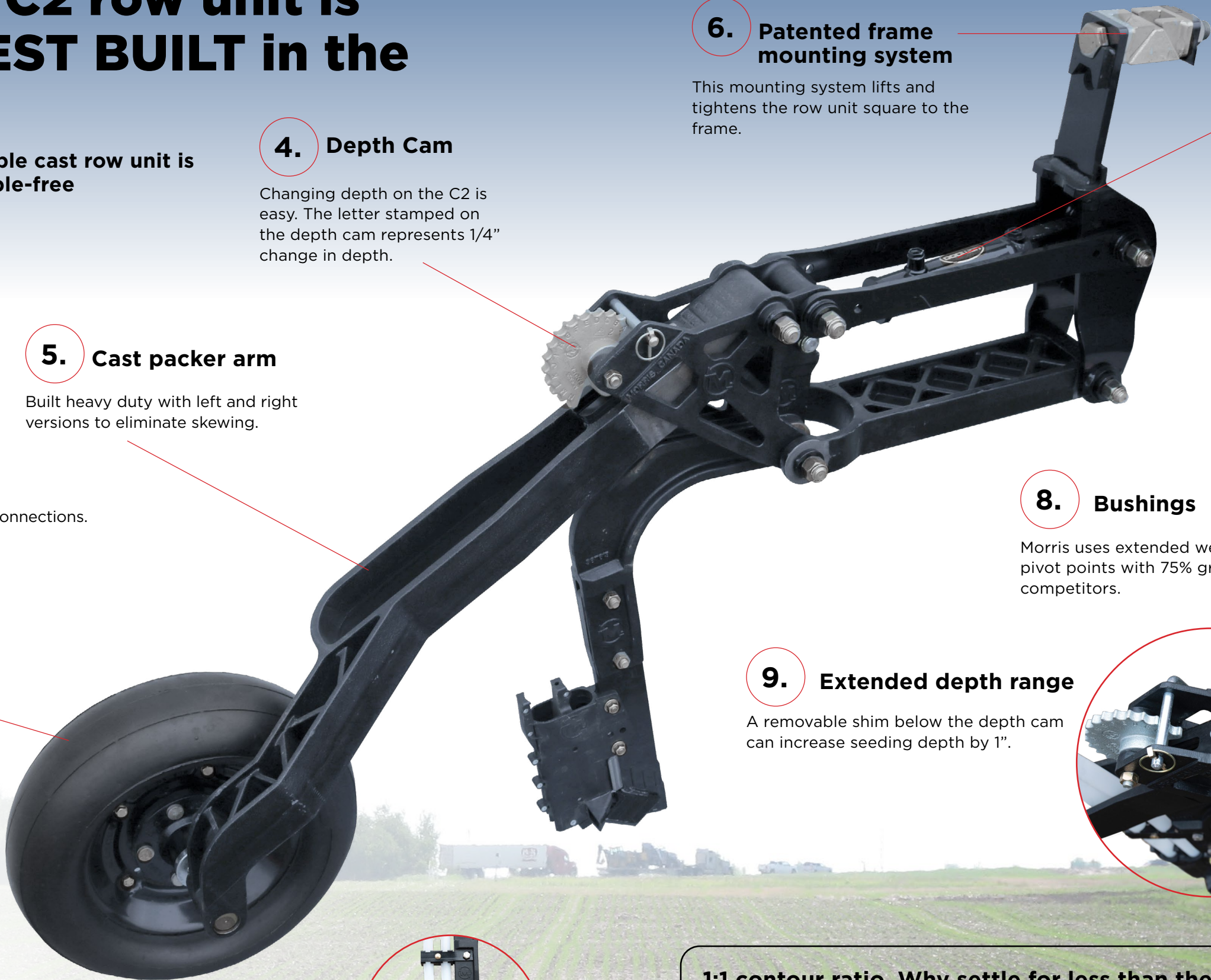
9. Extended depth range

A removable shim below the depth cam can increase seeding depth by 1".



1:1 contour ratio. Why settle for less than the best?

This parallel linkage system has 16" of vertical travel when the depth control and penetration angle of the opener does not change. **This means superior crop emergence on the crowns of hills and through washouts.**





Compact Transport Width
 Navigating roads with narrow bridges is easy with the C2 drill that is 10' wide in transport.



Reduced Hydraulic Requirements
 The C2 Contour drill uses a passive flow hydraulic system featuring a nitrogen filled accumulator that acts as a cushion for opener trip out. While seeding there is no oil flow back to the tractor.



Gentle on the Seed
 Our flat fan divider heads allow for a smooth uninterrupted flow of product from the air cart to the soil. This accurate and efficient air system ensures the seed germination, crop development and yield potential are optimized.

Base Size	3 Frame Models		
	25' (7.62 m)	31' (9.45 m)	
Weight	- 10" Spacing 25.40 cm Spacing	14,738 lb 6,685 kg	16,025 lb 7,269 kg
	- 12" Spacing 30.48 cm Spacing	13,933 lb 6,320 kg	15,155 lb 6,874 kg
Working Width	- 10" (25.40 cm) Spacing	25' (7.62 m)	30' (9.14 m)
	- 12" (30.48 cm) Spacing	25' (7.62 m)	31' (9.45 m)
Number of Shanks	- 10" (25.40 cm) Spacing	30	36
	- 12" (30.48 cm) Spacing	25	31
Frame Width	- Main	5' (1.52 m)	5' (1.52 m)
	- Wing Inner	10' (3.05 m)	13' (3.96 m)
	- Wing Outer	N/A	N/A
Transport Position	- Width	9' 10" (3.00 m)	9' 10" (3.00 m)
	- Height	13' 9" (4.19 m)	16' 2" (4.93 m)
	- Length	31' 6" (9.60 m)	31' 6" (9.60 m)
Tires	- Main Frame Wheels	(4)12.5Lx15 FI Load Range F	(4)12.5Lx15 FI Load Range F
	- Wing Frame Front Castor Wheels	Single Castor (2) 12.5SLx15 12 Ply Rating	Single Castor (2) 12.5SLx15 12 Ply Rating
	- Wing Frame Rear Wheels	(1 per wing) (2) 12.5SLx15 12 Ply Rating	(1 per wing) (2) 12.5SLx15 12 Ply Rating
	- Optional Main Frame Wheels	NA	NA
Opener	- Trip Out Force	Minimum 300 lbs (136 kg) at 450 psi (3102 kPa) to Maximum 700 lbs (317 kg) at 1200 psi (8274 kPa)	
	- Packing Force	80 lbs to 200 lbs (36 kg - 91 kg)	
	- Packer Wheel	4.50" x 16" Semi Pneumatic Otico tire 4.80" x 16" Semi Pneumatic or Pneumatic 5.50" x 16" Semi Pneumatic Otico tire 5.50" x 16" Semi-Pneumatic 4.00" x 16" "V" Crown	
Opener to Ground Clearance	12" (30.48 cm)		
Frame to Ground Clearance	32" (81.28 cm)		
Frame Depth	94" (238.76 cm) center to center		
Rank to Rank Spacing	47" (119.38 cm) center to center		
Number of Ranks	3 Rows		
Shank to Shank Spacing	30" (76.20 cm) on 10" (25.40 cm) Spacing		
	36" (91.44 cm) on 12" (30.48 cm) Spacing		
Weight Kit	Optional		
Safety Lights	Standard		
Hitch Clevis	Standard - Catagory 4	Optional - Catagory 5	
Safety Chain	Standard		

Specifications are estimates and subject to change.

MORRIS SUPERIOR FARMS

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The policy of MORRIS EQUIPMENT LTD. is one of continuing improvement; therefore, the company reserves the right to change any specification without notice.