



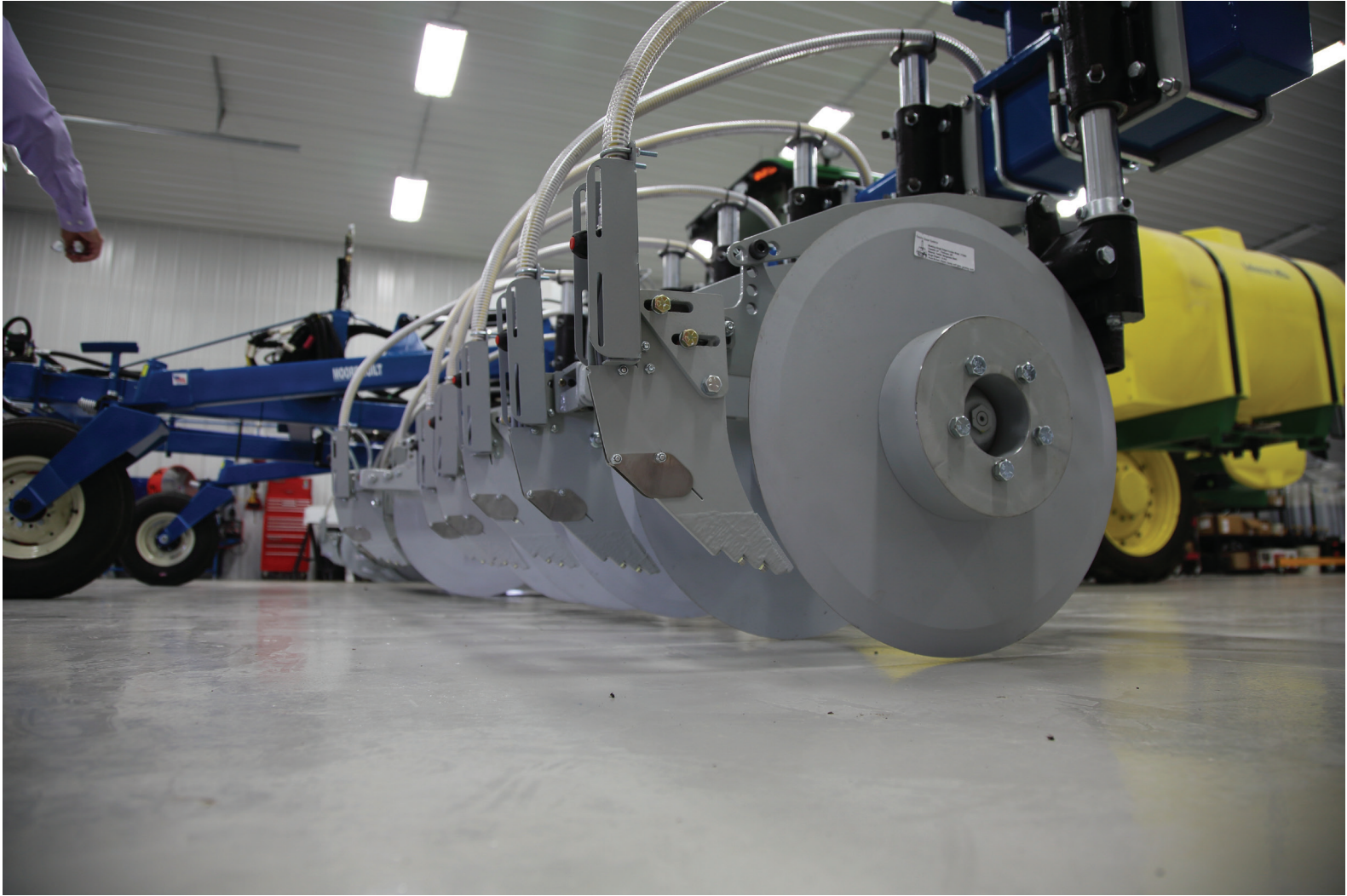
**Mustang Openers are High Speed with low soil disturbance
and low horsepower at speeds to 12.5 mph and depths to 9 inches**

- The openers can be arranged in multiple ranks or can be closely mounted side by side.
- Gyro Counter weights add weight to the blade for improved cutting and slicing of residue...a dynamic rolling counter weight.
- The slim design allows an unobstructed flow of residue with a maximum overall width of 8 inches....the narrowest opener design for nutrient application.
- The Injector Foot is not a shank or knife. The Injector Foot holds the injector into place with streaming liquid flow into the narrow slot under vacuum.
- A diluted vertical band is created with liquids including NH3.
- The unit seals off at the 2 inch depth as the injector foot makes the injection into the vacuum slot of the coulter blade.
- The root targeted, positional band is unique. A 3 - to - 4 inch vertical root interception of TAPPS and TAPPKTS is implemented with the Triplex Injection.

Exactrix® Global Systems LLC
4501 East Trent Ave.
Spokane, WA 99212
(509) 535.9925
Fax (509) 535.9989



MUSTANG P-51



Highest Yield Potential with Mustang P-51 High Speed Openers In 5 Sizes Forming TAPPS and TAPPKTS.

- Allows No Till farmers to be No-till Farmers banding NH3, PKS nutrients to ideal root colony depths.
- Meets the need in all farm sizes from 750 acres to 30,000 acres annually. Lowest operating cost achieved.
- Greatest flexibility in Timing of Nutrients..Pre-plant or Side dress or same day banding and seeding.
- Surgical placement of plant nutrients deeper, with maximum time in the tractor seat in extreme residue.
- Triplex Injection with the lowest level of soil disturbance at depths to 9 inches..



Case 940 banding in growing wheat. A five section machine at 50 feet with 15 inch band spacing.

P-51A, banding depth 4 inch, 5 bolt hub, with triple lip grease seal, 3/8 x 20 or 22 double edged at 155 pounds.

Optional, 4 bolt hub, 1,500 pound hub with grease seal lube hub, 1/4 x 20 double edged blade. 135 pounds, Max 400 pounds down pressure to 10 mph

Yielder Category.

P-51B, banding depth 5 inch, 5 bolt, Cat Duo Cone Floating Ring Seals, Oil Running, 3,300 pound Hub, 3/8 x 22 inch blade. Steel pivot bearings. weight 250 pounds. Max 650 pounds down pressure to 15 mph. Upgradeable to C series.

P-51C, banding depth 6 inch, 5 bolt, Cat Duo Cone Floating Ring Seals, 3,300 pound, Oil Running Hub, 3/8 x 24 inch. Fiber Glide bearings sealed in main pivot. Sealed mounting clamps.

Maximum 650 pounds down pressure to 15 mph. Upgradeable to CUE series.

Maximum Endurance for Large Acre producers in difficult glacial till soils. C series Ultra Endurance or CUE, weighs 100 pounds more than the standard C opener group using 150% heavier blades and components.

P-51CUE, banding depth 7 inch, 5 bolt, Cat Duo Cone Floating Ring Seals, 3,300 pound, Oil Running Hub with Yielder 1/2 x 26 inch double edged blades 345 pounds. Maximum 650 pounds down pressure to 15 mph.

P-51 B, C and CUE are designed for Yielder 5 bolt hubs at speeds to 20 mph using Caterpillar Duo Cone seals.

New or used Yielder blades can be used.

Yielder blades at 21 to 20 inch are still usable on the P-51 series openers.

Flexibility.

Case 940 5 section, 7 section fold in widths to 65 feet is available from Exactrix for big producers on the Great Plains.

DMI tool bars can be set up to No-tillage band nutrients.

The Deere 2510 can be improved by mounting Mustang openers at the back of the tool bar making a 15 inch tool bar.



The Bourgault 8825 can be set up with a second set of tooling for low soil disturbance application of wheat.

High Speed Tool Bars can be designed to widths of 120 feet with lower cost and more options to change spacing to match the crops raised.

Allows side dressing treatments of winter wheat down to 10 inch spacing with RTK guidance.

Gyro Rolling Counterweights add more punch at high grounds speeds.



Exactrix Mustangs mount to air-seeder frames.

Can be mounted to Deere 1890 as a banding unit.












TAPPS

P-51A..with Yockey Closing wheels for shallow 3 to 4 inch banding.

Shallow banding requires a closing wheel.

Ideal for smaller producers with 1,000 acres per year of banding requirements.

	Banding Depth, Inches.	Blade Dimensions Inches.	Edging			Hub, 5 bolt, 5/8 Duo Cone. Oil Running	Weight lbs.	*1	Gyro Counter Weights	Injection, Triplex Carbided. TIO Type	Vertical Pivot Bearings	Tool Bar Mounting.
			Single	Extreme Double	Single 1 degree			Yockey Closing				
P-51A.	4	3/8 x 20				Grease 2,500 lb.	158 to 175		5 x 7 @ 35 lbs.	Triplex. Press in.	Cast 1040 on 1018 Steel on steel	Adjustable 10 inch Cast 4 and 6 inch bar
	5	3/8 x 22										
P-51B.	5	3/8 x 22				Oil, Sealed 3,300 lb.	235 to 290	DNA	3 x 10@ 65 lbs.	Triplex. Press in.	Cast 1040 on 1018 Steel on steel	Adjustable 10 inch Cast 4 and 6 inch bar
	6	3/8 x 24										
P-51C.	6	3/8 x 24				Oil, Sealed 3,300 lb.	255 to 315	DNA	3 x 10@ 65 lbs.	Hardened and Threaded TIO	Chrome on Fiberglide 20,000 psi. Sealed both ends.	Adjustable 10 inch Cast 4 to 7 inch bar Sealed on Chrome
	7	3/8 x 25.25										
P-51 CUE.	8	1/2x 26				Oil, Sealed 3,300 lb.	279 to 382	DNA	4 x 10@ 95 lbs.	Threaded TIO Replaceable Chrome Insert	Chrome on Fiberglide 20,000 psi. Sealed both ends.	Adjustable 10 inch Cast 4 to 7 inch bar Sealed on Chrome
	9	1/2x 28										
P-51D.	9	1/2x 28				Oil, Sealed 5,200 lb.	357 to 508	DNA	Dual 3 x 10 @ 130 lbs.	Threaded TIO Replaceable Chrome Insert	Chrome on Fiberglide 20,000 psi. Sealed both ends.	Adjustable 5 inch Cast 7 to 10 inch bar Sealed on Chrome
	10	5/8 x 30										

	Banding Depth, Inches.	Blade Dimensions Inches.	Useable Wear Sacrifice Weight			Service Diameter	Upper Link	Swivel.	Horizontal Arm.	Spindle Retainer	Horizontal Arm Bearing seal	Cross Shaft
			Single	Extreme Double	Single 1 degree							
P-51A.	4	3/8 x 20	*1	8.7 lbs.		16.25	Castle Nut Bolt.	Pinned 15 degree.	3/4 x 3 @ 35 lbs.	Welded.	Fiberglide, Chrome Non sealed.	1.5 inch chrome Castle Nut.
	5	3/8 x 22	* 1	14.2 lbs.								
P-51B.	5	3/8 x 22		5.9 lbs.	4.9 lbs.	20. 25 Reprocess	Castle Nut Bolt.	Pinned 15 degree.	3/4 x 5	3 inch Collar 4 bolt.	Fiberglide, Chrome O-ring sealed.	1.5 inch chrome Castle Nut.
	6	3/8 x 24		12.7 lbs.	10.6 lbs.							
P-51C.	6	3/8 x 24		12.7 lbs.	10.6 lbs.	20. 25 Reprocess	Castle Nut Bolt.	Rotating Head. 1 in. x 16 deg. Sealed.	3/4 x 5	3 inch Collar 4 bolt. 2.5 inch circle.	Fiberglide, Chrome O-ring sealed. Triple lipsealed	1.5 inch chrome Castle Nut.
	7	3/8 x 25.25		17.6 lbs.	14.7 lbs.							
P-51 CUE.	8	1/2x 26			28.2 lbs	20. 25 Reprocess	Floating Bearing.	Rotating Head. 1 in. x 16 deg. Sealed.	3/4 x 6	4 inch Collar 4 bolt, 3.5 inch circle.	Fiberglide, Chrome. Metal Face Seal Triple Lip Seal	1.5 inch chrome Castle Nut.
	9	1/2x 28			39.1 lbs							
P-51D.	9	1/2x 28			39.1 lbs	20. 25 Reprocess	Floating Bearing.	Rotating Head. 1 in. x 16 deg. Sealed.	1 inch x 7	5 inch Collar 4 bolt 4.5 inch circle.	Fiberglide, Chrome. Metal Face Seal Triple Lip Seal	1.75 inch chrome Castle Nut.
	10	5/8 x 30			64.1 lbs							

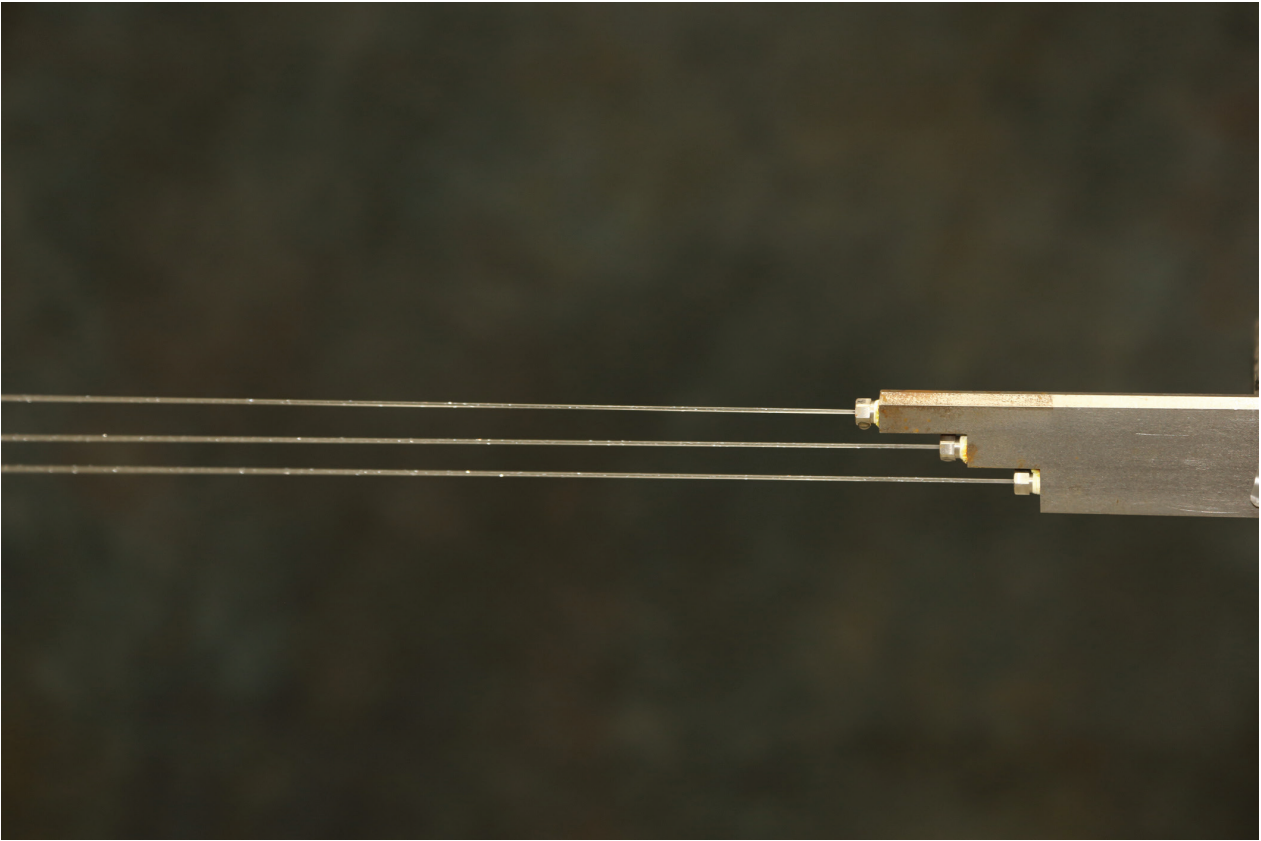
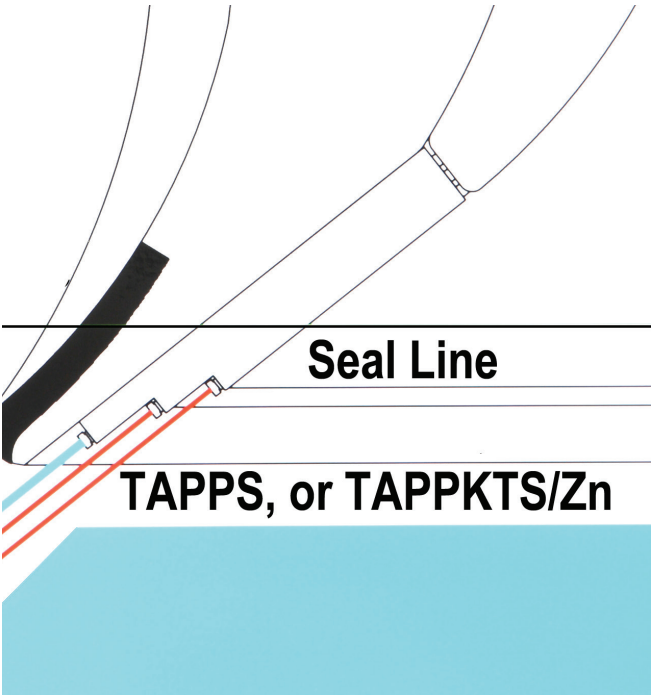


Low cost banding...in sandy soils or rock strewn soils...allows entirely new approaches to uniform application of nutrients.

Improves timing of the nutrients. Allows nutrients to be banded into soils that are moist, saving millions of dollars over the life of the machine.



Triplex Injection.



Applies 3 different products formulating TAPPS, TAPPKTS, TAPPKTS plus organic products, TAPPKTS plus HCl. New bio systems... banding into growing roots. Ideal for banding directly into wheat. Virtually no root damage when side dressing seedling corn to a 6 inch depth with the P-51C. Allows very deep placement of phosphate at 7 inch depth in moist soil conditions with the P-51CUE.

P-51D - Fumigant Injection – 28 and 30 inch coulters banding to depths of 9 inch.

Widely Tested, the Mustang seals the slot in all tested no-till soil conditions of North America. Allows low cost banding on 10 inch centers to 15 inch centers. Low soil disturbance...with a soil saving warranty. Lowest operating cost.... lowest known operating cost with the P-51B, P-51C and P-51CUE at banding depths to 7 inch in moist soil conditions.

24 inch diameter x 3/8", Yielder Manganese Steel, Tougher with Time. Defies abrasion in sand and rock strewn soils.
25 inch diameter x 1/2", Ultra Endurance option for lowest operation cost in very tough conditions.

Extreme Edge
Single edging allows self closing slot. Rock Strewn Soils.
Double edging allows self cleaning edge and self closing slot. Gumbo Clay Soils.

Superior sealing, No greasing, Timken pinion bearings.
Industrial rated design for long life.
3,300 pound rated oil filled, Duo Cone sealed hub.
5/8 bolts with shock loading precision pilot.

Self Cleaning Gap.

Soil Surface Slot, self closing in moist soils.

Moist Soil Vacuum Injection Zone
Crucible of TAPPS and TAPPKTS

5.8 to 8 pH
6 to 8 pH
7 to 8 pH
7 to 8.5 pH
7.5 to 8.8 pH
7.8 to 9 pH
7.8 to 9.2 pH

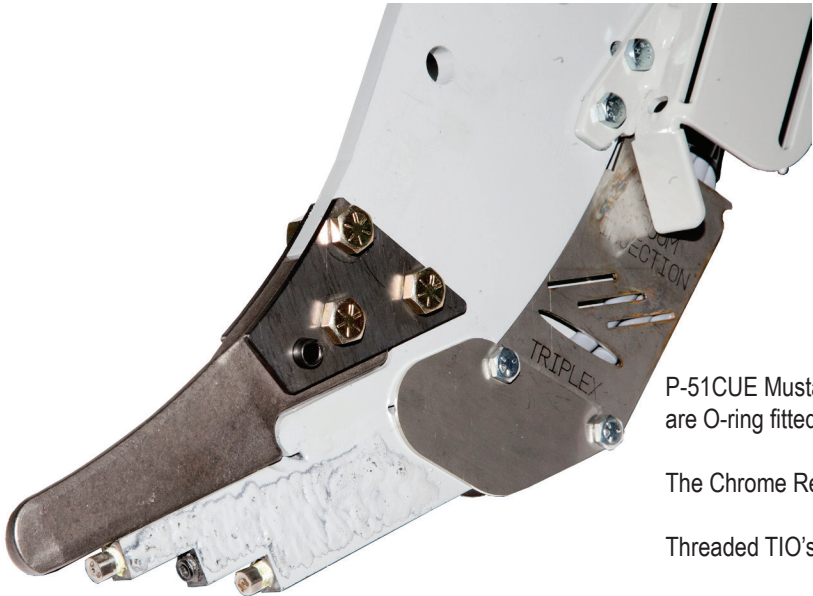
Dilute Zone

Triple Super Ammonization Zone, 4 to 7 in.

Vermiculated Vertical Column of Crystalline TAPPS, TAPPKTS, Hydra Hume, AZn and Micro nutrients.
Acid Base Reaction with 14 pH NH3 and 6.0 to 7.0 pH Humic Acid, APP/ATS/KTS.
Temperature of Reaction similar to a TVA Reactor at 750 degrees F.
Applied at accuracy levels of 1% CV with high pressure orifice injection.

Band pH, .75 inch width x 7 inch depth.
Following Application
15 inch bands, 140 pounds N as NH3
APP/ATS/KTS/AZn/ Hydra Hume.

49 Chrome Construction Bit



P-51CUE Mustang openers have replaceable chrome bits and Hardened TIO's that are O-ring fitted to the injector foot.

The Chrome Replacement bit is economical to change during mid season.

Threaded TIO's allow quick changes.



Case 940/Mustang at 61.5 feet banding No-till into irrigated 280 bushel corn stover, Shelton, NE



Montezuma/Mustang banding at the 7 inch depth, Lyons, KS.

