

# Crops

## Right equipment key to success



### Strip-till Focus

**C**HOOSING the right strip-till equipment for your soils and conditions is the key to success with strip tillage.

John Nowatzki, North Dakota State University Extension technology specialist, offers a guide to strip-tillage equipment.

There are 15 to 20 different strip-till manufacturers, but their implements have similar features.

**Coulter blades** cut through the soil and residue in front of the tillage shank. Coulters need to be spring-mounted to allow movement over stones. Some manufacturers are using fluted coulters designed with depth-control features.

**Residue managers** clear crop residue away from the tilled strip. They usually are mounted a few inches in front of the coulter blade to move the crop residue, which allows the coulter to penetrate the soil. Some manufacturers mount the row cleaners behind the coulter and just in front of the tillage shank.

**Tillage shanks** penetrate and loosen the soil and can be designed with a fer-

### Key Points

- Equipment selection is one of the keys to successful strip tilling.
- Implements have unique designs, but similar features.
- From 15 to 30 horsepower per strip is generally needed to pull strippers.

tilizer injection tube so gaseous, liquid or dry granular fertilizers can be applied with the strip-tillage operation. Tillage depth is dependent on the type of soil and conditions and the specific crop that will be planted.

**Berm-building disks** are mounted on each side of the tillage shank and 6 to 8 inches behind the shank. The disks can be mounted to mound the strip to promote moisture runoff and facilitate soil drying in the spring, or to create a slight depression in the soil to catch snow and rain to increase soil moisture for next year's crop.

**Conditioning baskets** are mounted behind the shanks to break soil clods and smooth the soil. Some manufacturers use rubber wheels instead of packing wheels, but some way of smoothing the soil and breaking lumps is important on strip-till equipment.



PHOTO COURTESY OF HINIKER CO.

**MULTITASKER:** Strip-till implements clear and till the strip, build a berm, place fertilizer, and smooth the seedbed in one pass.

### Power and GPS requirements

Strip-till equipment requires about 15 to 30 tractor horsepower per strip, but varies depending on component design and depth of operation. It is important to properly size and ballast the tractor so that it operates efficiently.

"A primary concern of strip tilling is to precisely plant into the strips the following spring," Nowatzki says. "Strip-tillage machines can be equipped with markers to facilitate accurate spacing of rows on each round in the field."

"However, using precise global positioning system guidance likely will result in more consistent planting in the rows. The GPS accuracy must be within

the tolerances of the strip-tilled width, which is easily achievable with real-time kinematic differential correction, but more difficult with less precise GPS differential correction services," he says.

Source: NDSU Extension Communications

### More online

SEE "Web Exclusives" section at [www.DakotaFarmer.com](http://www.DakotaFarmer.com) for a link to a strip-till demonstration video from NDSU Extension and new product information from manufacturers.

## BLU-JET

### Strip Till Systems

- ▶ Manage Heavy Residue
- ▶ Establish Clean Strips
- ▶ Accurately Place Fertilizer
- ▶ Firm and Seal Rows All In One Pass
- ▶ Sizes to fit your operation  
6R30, 8R30, 12R30 Fold, 16R30 Fold and 24R30 Fold

**Quality Design, Performance Proven**

**800.658.3127**  
[www.blu-jet.com](http://www.blu-jet.com)

Thurston Manufacturing Company  
1708 H Ave - Box 218 - Thurston, Nebraska, 68062-0218

- ▶ 3-Point and Pull Type Models Available
- ▶ Liquid, Dry, Anhydrous, or Dual

## Pluribus Strip-Till

**7772-HS-AIR**

The art of one-pass seedbed preparation

NHS

Dry

Liquid

**DAWN**  
EQUIPMENT COMPANY

**800.554.0007**  
[www.dawnequipment.com](http://www.dawnequipment.com)