

# An End to Toll Milling

FEED MANUFACTURER RELOCATES AND REBUILDS MILL LOST IN 1997



**McFleg Feeds of South Dakota**  
Watertown, SD • 877-623-5334

**Founded:** 1976  
**Milling capacity:** 350 tpd  
**Tonnage capacity:** 24,000 tpy  
**Products:** Custom swine and poultry premixes and complete feeds  
**Annual sales:** \$24 million  
**Number of employees:** 30

#### Key personnel:

- Bob Drake, president/CEO
- Tim Anderson, vice president
- Marshall Olson, vice president
- Harlan Eickholt, mill manager

#### Supplier List

**Bagging system** ..... Taylor Products Co. Inc.  
**Bag sewing equipment** ..... Fischbein Corp.  
**Batching system** ..... Easy Automation Inc.  
**Bucket elevators** .... Schlagel Inc.  
**Bulk bag unloading system** ..... EBM Mill & Elevator Supply Inc.  
**Contractor** .... EBM Construction Inc.  
**Conveyors (drag)** .... Schlagel Inc.  
**Conveyors (screw)** .... EBM Mill & Elevator Supply Inc.  
**Distributors** ..... Schlagel Inc.  
**Electrical contractor** ... Heartland Builders  
**Elevator buckets** ..... Tapco Inc.  
**Leg belting** ..... Goodyear  
**Microingredient system** ..... Easy Automation Inc.  
**Millwright** ..... EBM Construction Inc.  
**Mixer** ..... Scott Equipment Inc.  
**Speed reducers** ..... Dodge/Falk Sumitomo  
**Square bins** ..... KC Mfg.  
**Steel building** ..... Behlen Mfg.  
**Tote bag filling system** .... EBM  
**Truck scale** ..... Webster Scale Inc.



*McFleg Feeds of South Dakota in November began manufacturing swine and poultry feeds at this 350-tpd mill on the outskirts of Watertown, SD. Photos by Bruce Selyem.*

The new 350-tpd feed mill not far from Interstate 29 on the outskirts of Watertown, SD is the property of a feed company that has undergone several transformations.

When it started up in 1976, McFleg Feeds of South Dakota was strictly an animal nutrition company. The company formulated swine and poultry feeds, had them toll-milled wherever it could, and distrib-

uted the feed to customers. (“McFleg” is a combination taken from the last names of the company’s two founders – Dr. Richard McCullough and Boyd Fleeger – says Feed Mill Manager Harlan Eickholt.)

To gain better control of its products, McFleg purchased and upgraded a feed mill in Bowdle, SD, a Missouri River town in the north-central part of the state. That



*From left: Mill Manager Harlan Eickholt, Vice President Marshall Olson, and President/CEO Bob Drake.*

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*Schlagel receiving leg and three of seven Schlager electronic distributors that deliver incoming ingredients to the appropriate bins.*

mill was destroyed in a fire in 1997.

The company went back to toll milling after that, but it wasn't a satisfactory solution. "We looked at our available options," Eickholt says. "Only a limited number of facilities could handle toll milling for us, and there weren't a lot of facilities available for sale or lease. We wanted to take control of our own destiny, so that meant building a new mill."

It also meant a relocation. Bowdle is in the middle of beef cattle country, but most of McFleeg's customers were in the eastern part of the state. So the company obtained a parcel of land on the edge of Watertown.

In January 2004, McFleeg Feeds broke ground on the new mill, with EBM Construction Inc., Norfolk, NE (800-356-9782), a relative newcomer to turnkey feed mill construction.

"EBM has been in the feed mill repair and renovation business for a long time," Eickholt comments. "They've had a lot of opportunity to observe mills and equipment and figure out how they'd improve it. We looked at designs from three different bidders, and EBM's fit our needs the best."

McFleeg began manufacturing feed at its new mill in mid-November.

### **The Mill**

The main portion of the new \$4-million-plus mill is of steel construc-

tion atop concrete stem walls, standing on a 60-foot-x-60-foot footprint. Most of the manufacturing operations are performed in this tower, though some bagging operations are in an attached 15,000-square-foot warehouse.

Unlike most feed mills, Eickholt says, this facility is heated through piping in the concrete floors, a practice that eliminates heating fans and cuts down on dust, noise, and energy usage.

The mill tower includes plenty of bin space, including 34 KC Mfg. ingredient bins holding roughly 1,300 tons and 20 finished product bins holding 500 tons.

The facility has no significant grain storage or grinding operations. "We're able to have corn ground for us at several local grain elevators," Eickholt says.

Major ingredients are delivered to the mill through a Schlager receiving leg rated at 6,000 cubic feet per hour, utilizing 12x7 Tapco heavy duty buckets mounted on a 13-inch Goodyear belt. A series of seven Schlager electronic rotary distributors send ingredients to the appropriate bin.

### **Milling Operations**

All milling operations at the facility are under the control of an Easy Automation batching system.



*Scott 2-ton horizontal double-ribbon mixer completes a batch in five to eight minutes.*



*EBM-designed tote bag filling system can handle various sizes of tote bags mounted atop Weigh-Tronix load cells.*

Feeds are mixed in a 2-ton Scott horizontal double-ribbon mixer, currently averaging five to eight minutes per batch. Eickholt notes that the average mixing time per batch should fall to around three to five minutes as mill capacity gets up to speed.

Feeding the mixer is a 60-bin Easy Automation microingredient system, and liquid fat can be added at the mixer, as well. "Currently, we can run 70% to 80% of our batches without hand adds," Eickholt says.

The plant currently has no pelleting equipment, since the customer demand hasn't been there for pelleted feeds. However, Eickholt notes, the mill has sufficient space and concrete cutouts for pelleting equipment, should demand arise.

McFleeg Feeds operates a fleet of five trucks, which are loaded manually through stationary spouting while parked on an 80-foot Weigh-Tronix truck scale.

Eickholt says about 95% of the mill's output is shipped in bulk, while the remainder is either bagged in 50-lb. bags on a Taylor bagger outfitted with Fischbein sewing heads or in bulk tote bags ranging up to 1 ton. Totes are loaded through an EBM-designed system atop Weigh-Tronix load cells.

*Ed Zdrojewski, editor*