The capability of the reel grinder to perform relief and spin grinding operations is paramount to provide the highest quality cut and longest possible interval between grinding periods. Look for a precision grinder that has coolant to prevent overheating the metal, which could cause brittleness. The coolant also reduces the grinding dust. Among other key features to consider are plexiglass shields, machine "shutdown" capabilities, and cutting unit lift attachments.

To provide the best possible quality of turf, it's imperative that reel and bedknife maintenance operations be performed routinely with well maintained precision equipment and highly skilled operators. With tolerances of .001 to .002 of an inch between the reel and the bedknife, precision is a must.

Reel Grinding tips
1) "Dress" the grinding stone (per the manufacturer's recommendation) and replace it regularly to ensure precision grinding.
2) Make sure the grinding stone is entering from the back side of the reel blades to obtain the proper grind.
3) Inspect and/or replace the reel bearings and seals before grinding.
4) Perform the relief grinding operation first and then spin grind. Follow the manufacturer's specifications when performing these grinds. John Deere recommends 20 degrees relief on the reel blades and 5 degrees relief on the bedknife's top face and front edge.
5) Avoid rapid, quick grinding as this procedure may not provide a sharp edge (square corner).
6) If the metal becomes discoloured as you are grinding, too much material is being removed at one time.
7) After grinding, wash the cutting unit reel thoroughly to remove the grinding dust. It's essential the grinding dust be removed in the reel bearing journal areas to prevent premature reel bearing wear.

[Reproduced from Landscape Management, May, 1995, pp 36, 38.]