

ReCon 300



Makes great hay *fast!*

**Unique crushing action-
Every other inch of
stems is split-**



Moisture only has short distance to exit

- **Cuts drying time in half- more in coarse stemmed crops**
- **Alfalfa stems dry nearly as fast as leaves**
- **50% of nodes in grasses are smashed**
- **Coarser stems (eg. Sudax - hay-grazer – cornstalks oats) are split full length – cows love eating it.**
- **Little or no moisture rebound after baling**
- **Uniform drying prevents hot spots in larger bales – no more reject bales or barn fires**

Hay stays fluffed for best air flow



ReConned

**Not
ReConned**

Airflow is the main hay drying mechanism

- **Mower conditioner swaths collapse after 4-5 hours**
- **ReCon reconditions and refluffs swaths to promote airflow**
- **Thoroughly conditioned stems move moisture to the open air quickly**
- **At this time, partially dry hay will stay fluffed longer to let hay dry *FAST***

Combine swaths instead of raking



**Two 12 ft windrows conditioned &
combined in one pass**

Save time and money

- **On cuts up to 12 ft, eliminate a rake pass**
- **Saves one piece of expensive equipment**
- **Saving a pass saves time and fuel**
- **With no pickup, old brown material doesn't contaminate the fresh hay like a rake does**
- **Eliminating ground contact keeps dirt out of the hay – dairy managers love the lower ash content**

Rolls designed for high speed operation

- **Spiraled bars are solid steel – base tube is 5/16 wall - rolls weigh 395 lbs (180 kg) each**
- **Rolls are machined true within .005 inch**
- **Dynamically balanced to 1000 RPM (30 MPH surface speed)**
- **Roll clearance can be as small as .040 inch (basic factory setting) to properly condition fine hay**

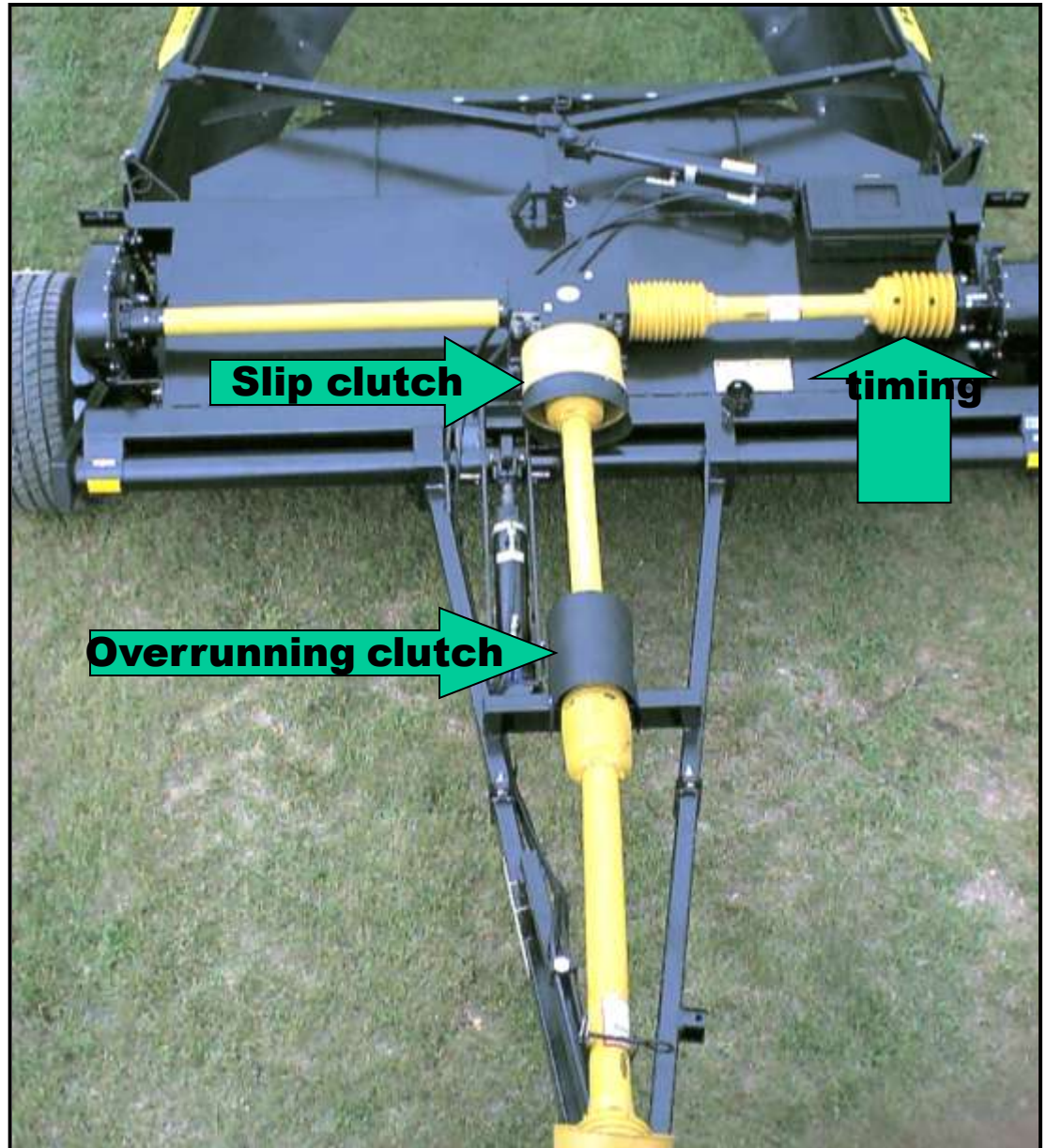


Built to perform

- **It's your grampa's old hay conditioner on steroids - except it DOESN'T wrap**
- **Rolls do the picking - set to just brush stubble - 30 MPH surface speed picks cleaner than most rakes or pickups**
- **Rolls are large diameter - hay won't wrap**
- **Rolls open when machine raises to clear wads.**
- **Heavy rolls aren't hurt by rocks - spiral rolls kick most rocks out of the windrow - protects balers and choppers from rock damage**

Heavy Duty drive train

- **Each roll driven separately**
- **No. 80 drive chains run enclosed in synthetic gear oil**
- **Heavy duty gearbox**
- **Slip clutch protects ReCon**
- **Over running clutch protects tractor**
- **Front CV joint permits sharp turns with no driveline or tractor PTO damage on narrower swath spacings**



Designed to work

Minimum service needed - easy to do

- **Simple timing adjustment standing by machine**



- **Easy access to clutches, grease points**
- **and quick adjust roll spacing**



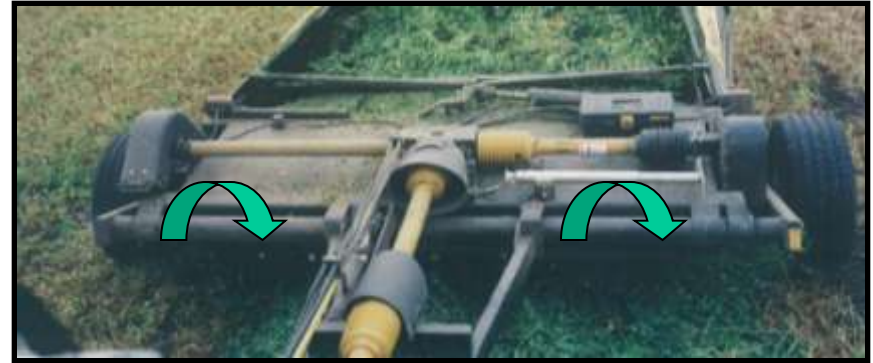
- **2 way top deflector easily adjusted to make good swaths in many crops**

Smooth ride

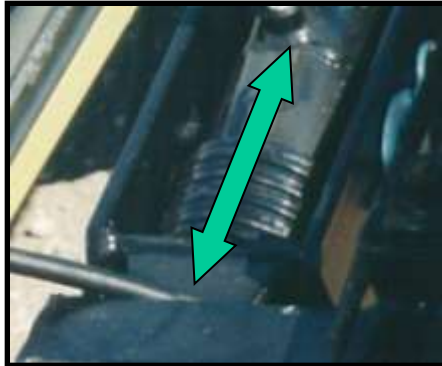
Wide radials at low pressure flex over small bumps



Rock shaft is actually a torsion spring to assist in handling large bumps



Bellville (spring) washers soak up higher speed shocks



Optional tandem wheels available for very rough conditions



High speed operation

- **Get over acres quickly and get on with other jobs**
- **Keeps the ReCon pass on time**
- **One ReCon can often keep up with 2 cutting machines**

Two spreading options



Spinner spreader operating in alfalfa

Two ways to spread swaths

- **Spinner spreader**
 - **Spread 8 - 20 ft**
 - **Low cost tedder replacement**
 - **2 operations 1 pass**
 - **Save time and fuel**
- **Bolt on deflectors**
 - **Spread 8 - 10 ft**
 - **Lower investment**



Reconditioning Ag Shield Recon 300

- **Cuts drying time in half**
- **Reduces bleaching and RFV loss**
- **Softens hay to make it more edible - stems get devoured**
- **Coarser hay is more palatable**
- **Less time in swath = higher RFV**
- **Leaves surface wax on stems to repel dew**
- **Cuts wilt time for balage- choppers operate one day closer to cutters**

What is great hay?

Know what YOUR buyer values

Quality is determined by buyer

Dairy hay

- **Quality usually measured by RFV (Relative Forage Value)**
- **Price often determined by RFV**
- **Protein levels are important**
- **Ash (mineral) content low with no ground contact of Recon**
- **Usually want large squares (3 tie ~130lb in some areas west)**

Horse hay

- **Appearance is VERY important**
- **NO MOLDY SECTIONS EVEN-**
- **Clean –no dust or weeds**
- **Good color – should smell fresh**
- **Not coarse stems - horses leave stems uneaten**
- **Some owners prefer straight grass, some alfalfa, some mixed**
- **High protein not best for health**

ReCon 300 pays for itself 2 ways:

- 1. Tonnage increase covers operating costs to recondition the hay**
- 2. Improved quality covers the capital cost very quickly**

ReCon pays for itself

with extra tonnes and higher RFV!

- **You're selling tons of feed at a price set by quality**
- **Hay quality is always better the sooner it's baled**
- **There is a 2% (or more) loss of dry matter for each day the swath is in the field over 35% moisture (some research shows much more!)**
- **At 2% & \$100/ton, one day = \$2/ton-- gain 2 days = \$4/ton= \$8/acre on a 2 ton crop. ReCon costs less than \$5 per acre for parts fuel and operator – the dry matter increase pays for it!**
- **RFV values can lose 10-15 points per day laying in windrow**
- **Bleaching increases severely with each day of exposure – horse/ dairy owners buy green hay for a big premium**
- **ReCon gains 1-2 days in most crops - improves all of above quality factors. RECON 300 COVERS IT'S OPERATING COST from dry matter increase alone.**

ReCons have been used around the world to increase the value of 31 different hay crops by to \$40 - \$70/ton

\$50 per ton x 500 tons = \$25,000 EXTRA value for your crop- the capital cost of machine is recovered in less than a season



ReCon 300 vs Macerator



- **They have often run side by side in the same field**
 - **Under good conditions both dry hay at the same time- if there's heavy dew the macerated hay is slower**
 - **Recon travel down the same swathes 1.5x as fast.**
 - **ReCons cost about 2/3 the price of Macerator.**
- 1.5 x the capacity for 2/3 the cost is 2 x greater value.**

ReCon 300 vs Macerator

- **ReCons seldom plug**
- **Raise the ReCon - rolls open - wad usually just drops out – 8 sec.**
- **ReCons can run at higher field speeds –up to 50% faster. Speed limited by only by rough fields**
- **ReCon picks 7 feet wide - picks clean even on corners**
- **ReCon has a simple heavy duty drive train with CV joint for long life and low maintenance**
- **Can handle any crop with minimal crop damage – just run soon behind cutter or with dew – ReCon keeps feed value better**
- **Stem cracking gives moisture lots of exits – enough wax left to repel most of the dew**
- **Macerators plug EASILY**
- **Unplugging a Macerator is a real chore 20 – 30 minutes**
- **Macerator pick up forces much slower field speeds and a lot more maintenance**
- **Macerator pickup is 5.5 feet wide- can miss some hay (heavy swaths don't fit)**
- **No CV and with 2 sets of rolls and a pickup, drive train very complex - high maintenance**
- **Differential rear roller speeds on Macerator can rip leaves and branches off alfalfa and other non-grass crops – there goes the protein.**
- **Macerator's surface wax removal lets plants suck up a lot of water from dew.**

ReCon 300 vs. Accelerator



Accelerator is a low cost copy of the original **ReCon 200**

- **540 or 1000 RPM choice - more capacity @1000 RPM**
- **Adjustable 2 way (clevis or pintle) hitch**
- **Quick Adjust gives positive roll clearance settings**
- **Only 540 -may have to change tractor shaft over from baler**
- **Light folded metal non – adjustable deflector**
- **Small stop bolts can get out of line easily**

ReCon 300 vs. Accelerator

- **PTO has CV joint for smooth running even on sharp turns**
- **Heavy duty gearbox made in USA for long trouble free operation**
- **Dual super duty 80 chains run enclosed with oil for long life**
- **2 inch bearings on super duty rolls**
- **Pressure of 2400 lbs holds top roller to properly condition heavy swaths**
- **Bars are spiraled to prevent vibration as the machine works**
- **ReCon bars 1" wide machined true they crimp 54% of length of stems**
- **3 (or 4) way suspension gives smooth ride even in rough fields**
- **Long hydraulically operated fins can combine or invert windrows, as well as move the swath to drier ground. Plastic is much more durable.**
- **No CV joint - the chattering can damage tractor PTO – can't follow narrow width cutter**
- **Underspec'd gearbox failure prone**
- **Single open 80 chain drives both rolls and back wraps one sprocket gives poor life and heat build up**
- **Lighter bearings and rolls**
- **Only 2-300 lbs pressure on rolls - much less conditioning.**
- **Straight across bars generate a buzz as the are trying to condition hay**
- **Agway bars are $\frac{3}{4}$ in wide not machined. Not enough pressure to open stems. Only bruises 36% of stem**
- **Only suspension available is optional walking beam – transmits twice as many bumps $\frac{1}{2}$ as high**
- **Short metal deflectors are manually adjusted - don't do much except crack from roll vibration – no combining or inverting swaths**