## INTRODUCING:







## ARE YOU LOOKING FOR A BETTER & MORE ECONOMICAL WAY TO DEAL WITH:

- > MAIZE & CORN STUBBLE?
- > GORSE AND BRACKEN?
- > CALLIES, BULL RUSHES?
- > PASTURE TOPPING?
- > PULVERIZING KAIKIHUA?
- > REJUVINATING PASTURE?
- > SLASHING RANK & ROUGH GRASS?
- > RECLAIMING UNPRODUCTIVE PASTURE?

## **MULITI-CUT ROTARY MULCHER**

(It's the Farmers new versatile '3 n 1' machine!)

## GRAIN AND SILAGE MAIZE MULCHING



## THE "GMM" MULITI-CUT ROTARY MULCHER



#### Multicut Rotary Mulcher knives cut in 3 heights and in 2 steps.

This way you obtain the best possible pulverization compared to the power requirements. Knives point slightly downwards giving a close ground cut. The design of the knives creates a powerful suction which mixes dust into the remains of the cut material. By that, a quicker rotting effect takes place

This information has come from 4 years of intensive work on the theme of Stubble Management. The concept of a Multicut Rotary Mulcher is developed during this process; and companies in the UK have been working with large farmers in Denmark, Germany and Poland, where many field tests have been run to test this concept, as well as close cooperation with two knowledge centers in Germany, experiment universities in Dresden and Soest, where tests on capacity, diesel consumption and disease transmission have been carried out.

We are pleased to present the result of a new Multicut Rotary Mulcher for Stubble Management with working widths of up to 3.0m at this stage (with development on larger folding models in process). We know that the new Multicut Rotary Mulcher series can help to optimize and make more effective with better earnings as a result.



#### STUBBLE MANAGEMENT SYSTEM

- Stubble management is a term that covers the pulverization and decomposition of the remains of stubble in almost all types of crop
- The purpose of Stubble Management is to optimize and make the cycle of operations much more effective and as a result much better business economics.



#### Stubble Management is carried out among other in connection with:

- High Stubble with the combiner: Multicut Rotary Mulcher pulverization of stubble remains gives a quicker decomposition. Reducing disease, more humus.
- Medium Stubble: Cut material lies higher, faster drying. After that pulverization with a Multicut Rotary Mulcher.
- Normal Stubble: Multicut Rotary Mulcher pulverization for a quicker decomposition of stubble remains and reduces disease.
- False seedbed: Multicut Rotary Mulcher flails are designed to create a suction effect, which adds dust to the pulverized stubble. On some types of crop an effective projection of waste corn and weeds is obtained
- Wheel tracks: Multicut Rotary Mulcher helps with the pulverization and distribution of the stubble – especially on wide ploughshares where it can be difficult for the combiner to distribute the cut straw.
- Corn Stubble: An effective pulverization that makes subsequent work on the fields easier prevents the over wintering of pest and grubs.

- Rape Stubble: By effective pulverization close to the ground and break down remaining rape stubble the rapes waste seed is activated. Reduced fungus, less use of pesticides and a better change of seed.
- Grass seed: Effective on time trimming in the recommended cut height with a perfect pulverization and distribution.
- Reduced soil treatment: Multicut Rotary Mulcher gives and effective pulverization and guarantees a quicker decomposition of any remains, reducing disease.
- Image improvement: As an extra bonus there lays an image improvement as stubble management often gives a reduced use of diesel and pesticides and a better utilization of the plants nutrients.

Multicut Rotary Mulcher is a complete new rotary mower, developed for Stubble Management.





### *High stubble test in 2007. Yield approx. 6 T wheat per hectare. Measuring diesel consumption, pulverization and capacity.*

- > Test of a 'drum type flail mower' verses a Spearhead 'Rotary' Mulcher.
- Both machines worked in stubble height of 25 and 36cm respectively, compared to a normal stubble height of 14cm from the combine harvester.
- > Tests were run by Farming University of Dresden in Germany.

#### FACTS ON HIGH STUBBLE

- For every centimeter the cutter bar is raised the capacity of the combiner is increased by 2% (10cm = 20% higher combine capacity).
- ▶ High stubble: up to 50% less straw through the combiner.
- The total machine costs are reduced with up to \$50.00 per hectare with a stubble height of 35cm.
- > Diesel consumption for the combiner is reduced with up to 10 liters per hectare.
- Risk of stones in the combiner is reduced, fewer operations stops longer life span.
- Better seed separation due to less straw.
- Harvest during sunshine. Reduced drying costs and better logistics.
- > Water percentage is 2% lower on high stubble.
- At higher stubble the cut material is laying higher and therefore drier. The pressed remaining straw that passes through the combiner dries much faster, stubble remains that decompose for soil improvement.
- At higher stubble and the following pulverization with the Multicut Rotary Mulcher results in a much faster decomposition of the stubble making sowing easier.
- At high stubble especially with wide cutter bar followed up with Multicut Rotary Mulcher pulverization, much better distribution is obtained of the cut material.
- In years with difficult harvest conditions the Multicut Rotary Mulcher opens the possibility or increasing the combiners' capacity.

#### NORMAL OR SLIGHTLY HIGHER STUBBLE HEIGHT

The organic material is pulverized and added dust particles.

- Micro organisms start working straight away, stubble starts to rot.
- Reduced pesticide requirements.
- Healthier plants.

#### By decomposition of the stem mass nutrients are released:

- By Multicut Rotary Mulcher pulverization, a faster decomposition of the organic material is guaranteed and therefore release of nutrients.
- Better utilization of the consisting nutrients in the growing season especially nitrogen.
- Fewer washouts of nutrients.



#### **Optimizing, better economy!**

#### CORN STUBBLE:

- > The left behind corn stubble can be very irritating for the subsequent soil handling.
- Corn stubble contains nutrients.
- > The purpose of the Multicut Rotary Mulcher is the pulverization of stubble.

- Snails, slugs and beetles or grubs have made its entry into stubble and are growing rapidly.
- > To avoid this corn stubble must be pulverized.
- > The purpose of pulverize stubble, and is very effective on corn stubble.

#### FAST DECOMPOSITION:

It is important the cut material is decomposed fast – this prevents the sun rays reaching the new plants.

#### REDUCED SOIL TREATMENT:

- Reduced soil treatment gives many advantages, but also the risk of increased DTR and fusarium.
- Multicut Rotary Mulcher guarantees a quicker decomposition of all stubble remains.
- By decomposing the stubble disease carriers disappear and the fungus is reduced the following year.
- Giving a reduced use of pesticides and easier choice of seed.

#### RAPE STUBBLE:

- Rape crop often leaves behind many waste seeds. They can lie on the ground for up to 10 years and are referred to as weed.
- By effective pulverizing the remaining rape stubble close to the ground with the Multicut Rotary Mulcher, these waste seeds are reactivated.
- Less pesticide, better choice of seed.

#### IMAGE:

Stubble Management usually gives a reduced use of pesticides, diesel and at much better utilization. Better image, better economics!

#### DOES THE SEED STRAW REMAIN ON THE FIELD?

The grass seed straw which often is removed contains up to 20kg nitrogen per hectare. What about the humus valus

# WHAT CAN THE 'GMM' MULTICUT ROTARY MULCHER BE USED FOR?

The Fieldmaster GMM Series have proven to be a huge success nation wide in New Zealand because of its multipurpose, multi use practical solution for Farmers almost any where.

With a GMM Series Fieldmaster Rotary Mulcher, and its interchangeable blades system, it has multiple uses and you can do numerous different jobs such as:









Pasture topping "It's a good solid topper with clean cutting sharp blades"

Mulches and pulverizes kaikuia - Removes and scalps out matted grasses





Fantastic for mulching 'rank' grasses





Maize, Corn and silage stubble

Pulverizes Bull Rushes, Callies and other pasture damaging weeds





For Rugged Roadside mowing A Commercial and contractors mower -out front compact, or rear mounted!

A Rotary Slasher for rough and rubbish mowing









# SO, - WHATS THE BENEFITS?

- Gain productivity
- More land -> more pasture -> more money!
- Less maintenance than a flail drum mulcher > No rotors to unbalance!
- Low cost and Simple maintenance > low replacement cost reversible mulching blades, or small topping tips
- Faster ground speeds -> gets the job done quicker!
- > Less H/P required to run than a flail drum mulcher
- Less diesel consumption >more economical to run!
- Lower 'up front' purchase price
- Increased strength > HD twin 5mm skin monocoque deck and extra reinforced bracing below and above for long life and durability!
- Easy change blade system (just 2 x bolts per rotor)
- Multipurpose > Can be a topper, a slasher and a mulcher!
- Made in New Zealand > Made strong!!
- Available with multiple options of front and rear HD swivel/caster wheels, skid runners, rollers
- Better / cleaner cut finish than a typical flail drum mower!
- The multicut rotary mulcher features triple head flail knives six per rotor that are rotational and reversible, allowing the operator to achieve maximum cost benefit by swapping blades around from rotor to rotor.







# AND THOSE THAT HAVE ALREADY GOT ONE..... - WHAT DO THEY SAY?

- "This is a machine that can do 3 jobs in one and all you have to do is simply change the blades......Now that's a good machine!"
- "It's great to see such a heavy duty machine that will do a variety of tasks.
  We're tired of light weight gear that doesn't stand up to our conditions...I wanted a machine to tackle rushes, maize stubble and Callies as well as top my pasture; now I have got one!"
- "Most impressive the way it tackles our Kaikihua!! I started out with a good old 'FLAILMASTER' slasher years ago....since then I have had to buy a hay mower, and then a traditional mulcher. - Now I've got a 'FLAILMASTER' again!! It's interesting to see how things come in a full circle"
- "It's really good and strong; we've had enough rubbish on the market for too long – it's really good to see something good and strong that's built in New Zealand"
- "I have been able to use paddocks I've never been able to get into before!"
- "I am sick of hay mowers falling to bits; -I just want a good strong topper!"



## WHAT ABOUT VINEYARD PRUNINGS?



#### Well, - here's some fantastic news for vineyard owners....

Mulching prunings just got a whole lot easier with the GMM Series Gearmower, triple head, multicut rotary mulching blade system - it's just ideal for mulching vineyard prunings!

Successful vineyard trials with Gearmower & XHD 'rotary' mowers fitted with the new blade configuration have proven very effective.

This is particularly good news for those who only wish to use one machine to control grass and prunings.



By simply changing blade systems, Fieldmaster multicut rotary Gearmowers are transformed into a fast, effective rotary mulcher. This does away with need for a second slow, inefficient and expensive flail drum mulcher.



Fieldmaster developed this concept because of market concerns expressed about flail drum mulchers, specifically; very slow ground speed, expensive running costs, expensive maintenance bills – particularly downstream parts and service costs associated with rebalancing misaligned drum rotors.

In contrast the Fieldmaster rotary mulcher system offers; faster ground speed (up to 7 km/h, vs 3-4 km/h for flail types), less horsepower requirements, therefore less diesel, substantially cheaper parts and servicing costs, in a product proudly made and developed in New Zealand for our tough conditions.







Mulch cut quality is first class. Vine prunings being well and truly smashed, with the added benefit of being mixed with grass clippings to aid faster break down.

Rotary style machines can also direct grass and mulched material into the centre of the mowing strip, or side discharge under vine, making these versatile machines ideally suited to organic and non - organic producers alike.

# *The GEARMOWER series is a modular system and can be ordered to suit <u>your</u> conditions, and to suit <u>your</u> <i>application!*





