



GRASSLAND CARE

YOUR MEADOWS ARE SOME VERY CASH.

Greenland management: simple, economic, effective



As powerful single units or intelligent combinations - The independent 3-point devices from GÜTTLER offer you versatile application possibilities.

Greenland has enormous potential. Just only because of the high protein potential of green fodder. Compared to expensive purchased soybeans, the share of crude protein per hectare can reach the double. But yet: Only 5 percent of the best meadows are handled professionally.

But specific grassland management is worth the money. Intensively cultivated soil secures payment of the greening bonus*.

This leads to optimized feed utilization and to better health in the stable. As a result, the costs for concentrate feed and livestock replacement are significantly reduced. And: professional greenland care is much easier than expected.

Greenland management: simple, economic and effective - that is what GÜTTLER stands for. With a selected portfolio of high quality products. Our devices are among the most intelligent and most

innovative in the market. Starting with the revolutionary self-cleaning prism roller® - the trademark of GÜTTLER. Up to our snappy combs and smart combiners. Detailed elaborated agricultural machinery, which will be really helpful for you the same way on greenland as on arable land. On flat surfaces as in steep slopes. With unique advantages. First and foremost: outstanding plant stocks and high yields.



Devices from GÜTTLER can be combined with one another - for versatile application possibilities on arable and grassland.



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* Greening: Last regulation of the EU agricultural reform, valid since 01.01.2015. It says: 30 percent of the direct payments are only paid to the farmers if the operating enterprise promotes climate and environmental protection.

OVERSEEDING. ROLL ON. BENEFIT.

The roller with the Golden Hoofprint Effect® for successful greenland management.

**AERATE REGULARLY.
REPAIR MATTED TURFS.**



305 prisms tips per m² - the roller with the golden hoofprint effect® achieves the same ideal effect on grassland like a passing flock of sheep.

When a herd of sheep moves over pastureland, this has a highly beneficial effect. The soil is loosened and aerated. Grass-seeds are securely pressed into the soil. The same effect has the self-cleaning prismatic roller® from GÜTTLER. With its star shape disposed prism tips it opens the grass turf and aerates the ground. Simultaneously it provides the leveling and the necessary soil contact.

The hoof print-effect of the prismatic roller has been approved many times. For example in early springtime for the initial rolling on of high-frozen ground. For the

levelling of turf damages, mice repellent, molehills or boar damages. In autumn for after-sowing. The whole year, for the repair of lacks in cultivation fast and effective. Its impact was even proven scientifically. Thus is the result of a comparison test with a conventional drilling machine : " Even it has a lower seeding power, the GÜTTLER roller is as same effective as a slot-seed-treatment."

Modern management of pastureland is not thinkable without the operations levelling - afterseeding - rolling on. The roller with the golden hoof print effect contributes a



Erdrückendes Gewicht - Glattwalzen können zu Luftmangel im Wurzelraum führen. Das Wachstum stagniert.

precious part to this. By the way it was originally developed for the processing of arable land. And caused a real revolution. Only for test purpose it was even utilized on pastureland. The chance pays off for agriculture. Thus precious grass cultivations are saved. And this results in more healthy fodder, more protein, and finally more milk out of grassland.

* "Master-Thesis of Christina Grünewald, Insitute for cattle and greenland management Aulendorf, March 2005, on repair of lacks in grass turf through after-sowing: „Besiedelung von Lücken durch Nachsaatmaßnahmen auf Dauergrünland“



**TODAY WE RE
MILKING 5.050 KG
MILK OUT OF BASIC
FODDER.**



Mr. Matthias Heckenberger has improved the performance of its 60-headed dairy cattle herds steadily for around 3800 kg of milk. Without using more power feed. The increased performance comes mainly from the basic food.

How can the greenland yield be significantly increased? Matthias Heckenberger has shown it. The 26-year-old master of agriculture and winner of Ceres Award in 2015 (Category "Young farmer") operates a dairy cattle breed and arable farm in Biberach, South Germany. The highest increase of performance rendered the improvement of grassland.

Various methods were tested:

The most successful is described by the young farmer this way:

"We comb out the surfaces three times with the GÜTTLER currycomb. The Common Panicle is carried away. The oversowing is done after the first cut with the 6 m GÜTTLER-combination of currycomb and post-sowing unit and the GÜTTLER-roll". 222.2 dt of dry mass have been thus retracted in 2015 - compared to 99.78 dt per year in 2013. And also the efficiency of green fodder has been clearly improved.

„Today we get 5,050 kg of milk from the forage „says Heckenberger satisfied. „And are saving costs“. The consumption of concentrate feed has decreased from 430 g / kg of milk in the year 2008 to 225 g.

Welcomed side effect: healthier animals, replacement rate more than halved to 20%!



**HARROFLEX –
THE SHORTEST 4-ROW COMB
OF THE WORLD.**



Powerful and exciting flexible: the Ripperboard doubles the number of tines the two rows of the comb. Thus it makes a 4-row harrow out of the 2-row one. And the Harroflex to the shortest and most agile harrow in the market.

AERATE MATTED TURFS.



CLOSING GAPS.

Wintering, high-frequency scars, wild animals, mice repellents, molehill or lanes - Gaps have to get closed as fast as possible. In order to leave no chance to weeds. For the postseed the soil should be well-prepared. Aerate with the harrow is after winter often the first step.



OPTIMUM PREPARING

Modern harrows like the HarroFlex from GÜTLER can be used for a variety of tasks in the care of pastureland. they level, generate a fine-crumbly structure and open the ground for the seed embedding. In the old scar they provide a good ventilation and initiate the grass to tillering.



COMBING OUT THE COMMON PANICLE

The aggressive flat rooter can make your ground worthless in a short time. The musty tasting weed must regularly combed out, squashed and be driven off. Usually after the second or third cut at the end of August. For valuable grasses this means no danger. They are usually deeply rooted.



SOLID CULTURE

Dense grass turfs are the result of a scheduled and regular distributed treatment of soil throughout the year. The measures are complex - however therefore exist intelligent combined machines like the Greenmaster or GreenSeeder. With them many process steps can be combined in a single crossing.

STEPWISE TO A COMPLETE SOLUTION: THE MODULAR SYSTEM.

The more intelligent agricultural machines can be used the way you need it. In conjunction for combined operations. Or individually - device for device. These agricultural machines come from GÜTTLER.

Climate change, fluctuating weather conditions, diverse soil conditions – in agriculture you have to react to various restrictions. Often spontaneously. This we know. We see us as your partner, considering deeply your needs and soils. Always searching for new and better solutions. In order to support you to fulfill your tasks more effectively, lighter and easier.

The modular system from GÜTTLER is an example of these solutions. Our rollers and harrows are independent 3-point devices. They can be separated quickly by the instant coupler. With just two bolts. No matter, if they have a width of 3.0 or 7.5m. It's as simple as that!



Every HarroFlex-comb can be used optionally in front or rear.

And for the seed? Complete your prismatic roller® or the HarroFlex harrow by the suitable seeder. Just as required in tank size of 200, 410 or 660 Liters. With metering for grass, intercrop or other seeds. On demand with electronic seed rate calibration. Our robust pneumatic spreaders are little susceptible to wind. They work close to ground and with high precision. And: you save up seeds!

By the way: The modular system from GÜTTLER is unique. And the preconditions for our versatile. And very popular pastureland-combinations.



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Sow grass without risk of weather - Unfortunately this is not possible. When moisture is just enough, to allow the seeds to begin to germinate, but then is followed by a long dryness and heat period, you are powerless. Even with the best technology. A tried and tested tip: divide the yearly seed rate to spring and late summer - so to reduce the weather risks. And you remain on the safe side



CUMB + SOWING UNIT

For after-seeding and new sowing. For aerating and cumbing out the grass: The combination HarroFlex harrow and pneumatic seed spreader is the ideal entry into the professional pastureland care with GÜTTLER. Powerful and at any time expandable with one of our towed rollers.



ROLLER + SOWING UNIT

The hoofprint effect of the prismatic roller® has proved itself many times. For example, in early spring for the application of high-frozen swards or outwintered cereals. For the leveling of scar damage. In the autumn for post-sowing. Year-round, to repair gaps in cultivation fast and effective.



CUMB + SOWING UNIT+ ROLLER

Leveling, aerating, combing, sowing and reconsolidation in one system: The GreenMaster. The most varied device combination from GÜTTLER - whether it is used on grassland or arable land. By the way: the prismatic roller® can even be used as a front packer.

GREENSEEDER 600 AND 750. CLEVER AFTER-SEEDING.

Flexible, modular, and extremely affordable: the seeding combination HarroFlex harrow and sowing unit. It has proved itself many times. As clever entry into the GÜTTLER care program for pastureland.



**PERFECT FOR ENLARGEMENT OF
TOW ROLLERS.**

The low-cost series for pastureland care with their powerful components:

- HarroFlex harrow with robust 12 mm NonStop tines
- Pneumatic spreader EPS 5, optionally with 200 or 410 l of seed tank capacity

At first glance, the combination convinces with the outstanding characteristics of its HarroFlex harrow - the first harrow, which effectively fights the common panicle. At second sight through the range of versatile applications. The GreenSeeder is designed

for re-seeding and new sowing. To the aeration and clearing of the grass turf. And at third sight? There it's the amazing flexibility of the low-cost pastureland-combination.

Whether in working width 6,0 or 7,5 m - each GreenSeeder can also be used as front attachment (without sowing unit). And can be extended corresponding to your needs at any time. E.g. with one of our tow rollers. To a powerful 5-in-1 machine for year-round use.



The GreenSeeder 600 bzw. 750 can be combined at any time with our self-cleaning tow rollers Mayor, Offset or Master.



GreenSeeder 600 - under-sowing of grass in triticale



The Ripperboard - it makes the HarroFlex the shortest 4-row harrow in the world.

A FLEXIBLE MODULAR SYSTEM
Leveling bar or Ripperboard? You decide. The Ripperboard doubles the scarification effect. Sensitive adjustable from „zero“ to „maximum“. It is suitable to the incantation

of molehills. And can be retrofitted at any time. Even if the device was originally fitted with a leveling bar.



GREENMASTER. THE 5-IN-1 GENIUS.

The machine is astonishing effective. Unsurpassed versatile. And the only device combination at which harrow and roller can be used separately.

The intelligent device combination processes in a crossing, what usually means five work steps: leveling - aerate - straighten - sow - re-tighten. The unique 5-in-1 system brings a lot of efficiency in grassland care. And is thereby enormously effective in whole-year use. The application range starts at E such as evaporation of wet soils or rolling on up - frozen winter seed in early spring. But doesn't end at F such as fighting the European corn borer in the late year. In the meantime, boar damages are repaired, catch crops established, matted soils ventilated, winterseeds stimulated to tillering.

Equipped with HarroFlex harrow, different pneumatic sowing units and self-cleaning prism rollers type Mediana or Matador (working width

2,5 m or 3,0 m) alternatively type Master (working width 6,0 or 7,5 m), the flexible pastureland-combination can be configured at one's needs. For smaller and mediumsize surfaces the same way as for big enterprises or extreme soil conditions.



Even applicable with tractors starting 60 PS, e.g. on sports turf or at equestrian facilities.



Heinfried Sudmann, Managing Director of the enterprise Wiechring-Sudmann KG, Diepholz, North-Germany



By chance, I have detected the GreenMaster from GÜTTLER at an agricultural machinery exhibition. Even the show there convinced me for the quality of work done. In just one operation the machine fulfills the complete pastureland renewal: harrowing, sowing and rolling. That has also been shown in our practice. In a single crossing we harrow to aerate the grass turf, place new grass seeds and roll on. This saves working time and fuel. With the 7.5 m device we create so

4 ha hourly at 10-12 km / h driving speed. The machine leaves behind a first-class work result. And: through the regular grassland renewal we get measurably more milk out of the basic feed. Regarding the restrictions of the Greening- regulation we want to test the GreenMaster this year after the corn harvest on about 70 hectares with a seed-mixture according to this directive. We use also this device for fighting the European corn borer.

POWERFULL IN USE - ON PASTURELAND AS ON ARABLE LAND

What makes GÜTTLER a special partner? Among other things this: the depth with which we meet the requirements of our customers. This is how machines with unique features are made. An example: versatility. They are as valuable on pastureland as in field work.

What distinguishes the ideal pastureland-combination from the ideal machine combination for field work? Our answer: Nothing. Because the same devices you use on grassland for aerating and scarifying of grass turfs, for the leveling of molehills, for the loosening of the soil structure or for establishing seeds, you also use in agriculture. For good germination, vital plants and secure results.

No matter whether you sow grass, maize, rape and other varieties: It's always crucial to accomplish the ideal seed requirements. This is done on

arable land by ventilating wet soils with subsequent rolling on. This way, a fine-crumbly soil structure is established on the top. Below well moistened, aerated and roots can easily flourish. And the same on arable land: the hoof print effect of our prism rollers® provides the important reconsolidation after sowing.

The year - round range of usability of our rollers and harrows on all soils. The flexibility for use individually or in combination with sowing units: these are crucial advantages for the profitability of your machinery.



PROTECT FROM THE EUROPEAN CORN BORER. *

The most important weapon against the corn borer works completely without chemistry. The prism tips of the GÜTTLER rollers are really splicing the stubble - soil bacteria can enter easier and speed up rotting.



HarroFlex 600 can also be used with a front attachment installed (without sowing unit). Combined with a Matador roller, he becomes the GreenMaster 600 alpine - a powerful 5-in-1 machine for all-year use.



SAVING UP-FROZEN WINTER SEEDS
When alternating frosts lift up the topsoil and winter seed lose this way the soil contact and really die of thirst, the only help is rolling over: this way the closure to soil is restored, the soil better ventilated. How satisfied Gütler customers are confirming since decades, the roller with the golden hoofprint effect® provides an unmatched stimulation of tillering.



REPAIR BOAR DAMAGES
For boar damages and others is the rule: Close the gaps as soon as possible. Multiple flat harrowing cross-wise. And then re-seed immediately with the prism roller®.



CATCH CROPS OF GRASS IN CORN
Catch crops of grass are often useful: For more uniform root penetration of the upper soil and erosion protection, and for the better accessibility during harvesting.



MANAGE INTERCROPS
After a stubble processing with enormous impact and moderate costs. For secure germination.

* Awarded as the best machine in the system comparison of the top agrar-magazine: No room for borers! Edition Top agrar 5/20144.

GREENMASTER ALPIN 300 AND 600.

The Alpin type series has everything what the GreenMaster 5-in-1 combination has to offer. And even more: Possibilities for application even in cramped spaces through ditches, hedges or fences. And the good feeling of working safely even on steep slopes.

Depending on the state of the grassland, the afterseed can be worked on alone with the comb. Useful for strong matting or infestation with the common panicle. Or you do all operations in one crossing at once: leveling, airing, embedding the seeds deep into ground. Positive side effect of the rollers with the hoofprint effect: The tillering is additionally stimulated.

As excellent as the Alpine type series is proven on pastureland, it is also ideal for the arable land. For Corn sowing in the front. For the fight against the European corn borer in the front with simultaneous stubble processing and sowing of winter vegetation in the rear. To treat triticale. To integrate catch crops. To stimulate the tillering. And much more: The Greenmaster

Alpin is available in working widths of 3.0 and 6.0 m. Equipped with the self-cleaning prism rollers® type Mediana 30 or Matador 30 or Matador 610. With HarroFlex-Comb and pneumatic sowing Implement (200 or 410 L). Greenmaster Alpine 600 is hydraulic foldable down to 2.5m transport width.



FAST AND AGILE ON CRAMPED GROUND

A variety of uses, all-year-round utilization, fast amortization: The popular combination, even more among contractors.

Specifically steep slopes are often used as grassland. For this purpose, GÜTTLER has developed the machine combination GreenMaster Alpin. In the front: the snappy HarroFlex-Comb. In the rear hydraulics: the self-cleaning prism roller® and a

pneumatic sowing unit. This structure provides balanced weight distribution. Additionally is to mention the low point of gravity. This makes the Alpine reliable and sure. Even in steep slopes.



With Matador in front to fight effectively the European corn borer. With Super Maxx® and sowing unit in the rear: for stubble processing and sowing of greenery.



Intelligent Modular System: All Matadors can be used either in front or rear and can be changed over quickly.



Balanced axle loads, uniform seed deposition, secure field germination. Corn sowing with active roller instead of dead front weight.

THE PASTURELAND-COMBINA-TIONS. THEIR ADVANTAGES AT A GLANCE.

Fast and effective to healthy cultivation. To a better soil structure. And finally: To higher yields. With which machines from GÜTLER do you achieve this best? Choose according to the operated surface and soil condition. All remains open to all options for later customizations



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GREENMASTER 250 / 300
The unique 5-in-1 machine combination for smaller and medium-sized surfaces. Levelling, aerate, harrow, sow and re-solidify in a system. The versatile pastureland combination is made of self-cleaning prism roller® (Type Mediana or Matador), HarroFlex-Comb with robust Non-stop tines 12 mm and pneumatic spreader EPS 5 (200 L or 410 L). Optional extendable with levelling bar or Ripperboard. All system components can be used also independent of each other.



GREENMASTER 640 / 770
Four roller sections, unsurpassed ground adjustment, tight turning without erasing. Comb can be used optionally in front or rear: the systems with the heavy professional rollers are convincing also in large companies and on extreme soil conditions.



GREENMASTER ALPIN 300 / 600
Balanced weight distribution, lower point of gravity: The Alpin series is Reliable and secure under steep conditions. The modular 3 meter front/heck combination can be transformed at any time. On GreenMaster 300 with HarroFlex-comb in rear.



GREENSEEDER 600 / 750
Convincing and thereby really favorable in purchase: the low-cost seed combination for pastureland. Convincing with excellent harrow features and modular principle for extension: The HarroFlex-Comb is in its aggressiveness variably adjustable. With only four hand movements the entire machine can be adjusted in a moment. Just simple and clever: The tine loss fuse. **By the way: the combination can be combined at any time with a GÜTLER tow roller.**

THE PRISM ROLLER® AND THE HARROFLEX - HARROW.

Designed to make tillage and pastureland management for you more effective and successful.

And the trademarks of GÜTTLER: The roller with the Golden hoof print effect® And the Güttler-comb has been proven on a innumerable quantity of hectares of pastureland.

The self-cleaning prism roller® of Güttler is known as the roller with the Golden hoof print®. Or even as the roller with the sheep feet effect. With its point-shaped pressure impact of 305 prism tips per square meter it...

- Ventilates the soil
- Stimulates the tillering of grass
- Pushes broad-leafed weeds back
- presses the grass seeds into the turf
- Creates the necessary soil closure

and thus has the same positive effect like a flock of sheep. The prism roller® is now one of the most effective tools in the management of pastureland.

And the HarroFlex comb of Güttler? It is the most compact and versatile comb on the market. And the first to Combat really the common Panicle. Why? Because it un felts and ventilates soil extremely effective with only a few highly robust tines. Its harrow tines are with their 12 mm thickness 3 times stiffer than the 8 mm tines of conventional combs.

The large tine distance ensures good throughput without clogging. And for a compact design. Requirement for the popular roller- comb- combinations from GÜTTLER.



Matador, Master, Mayor – Güttler offers you for every scope of application the appropriate roller. In different dimensions and designs.



THE SHORTEST 4-ROW COMB IN THE MARKET
Ideal for un felting, ventilation and stimulating the tillering. With its highly robust, extended from two to four tine rows through the Ripperboard, the Harroflex is the first comb, that really tackles the Common Panicle. Compact and agile like no other comb in the market.



LEVELLING BAR
The perfect complement to the HarroFlex: to the levelling of molehills, the levelling bar is connected. Perfect ground adaptation and overload protection by parallelogram.



RIPPERBOARD
Snappy and powerful: the best choice in extreme matting, heavy soils, molehills, etc. Tine pairs of 12 mm spring steel double the number of tines. With the same compact machine length.



MAIN TINE ADJUSTMENT
Unusually flexible: HarroFlex-Combs offer a large adjustment. From gently stroking to aggressively snappy. Just simple and quick with few hand movements.

DOSING ROLLER - DOSAGE

Standard for all grass seeds up to max. 40 kg/ha, for green Rye and Greening-mixture. In addition four more dosing rollers from fine (Rape, Mustard) to coarse (Grass seeds up to 200 kg/ha or cereal grain up to about 160 kg/ha). The replace? Uncomplicated and toolless. At all rollers applies: Overdosing is impossible. Because the seed is dosed volumetric in 8 seed lines on cell wheels. Precisely and exactly repeatably.



CALIBRATION TEST

Our equipment can be easily calibrated. Like drilling machines, too. The setting of the seed quantity is done finely graduated with a gear. If wanted with electric seed quantity adjustment. It's adjustable from the tractor (retrofitting possible).



GROUND PROPULSION

The propulsion of the dosage is depending on the way distance. Just by spike wheel and mechanical drive side. Our sowing equipment is robust, reliable and easy to use. Especially interesting for contractors: the devices are available on request with electronics. For comfortable control and monitoring. And additional safety of operation.



SEED DISTRIBUTION

Extremely economical and precise: the seed is mechanically dosed. Passed to 8 seed lines. And blown from a booster to 8 impact plates. Of here, it is distributed wide-spreaded near the surface. Hardly susceptible to wind. Thus arrives your precious seed exactly to the point where it has to be.



THE SOWING EQUIPMENT. PRECISELY. ROBUST. ECONOMICALLY.

The sowing units of GÜTTLER have the quality seal „swissmade“. Because in our pneumatic small sow boards we rely on the expertise of a well-known partner from Switzerland.

Sow equipment can't be robust enough. Especially when it's in the use by many hands. Therefore we have decided to have a partner who has done pioneering work in terms of technology and processing quality. His solutions have become sophisticated during decades-long elaboration. Leading to mostly the best sowing equipment in Europe. Their peculiarity:

the Swiss precision. Their longevity. Their thrift. And an impressively simple operating concept. From driver's seat, the current filling level of the seed tanks can be seen. And also whether all seed lines are working. This equipment needs mostly no sensitive electronics. And the best: They are quickly paid through their economical dealing with expensive seed.

Our sowing machines are available for grass and intercropping. With 200, 410 or 660 l tank sizes. And with a large variety of optional equipment. For example with "Seed Control", the electronic monitoring system. Useful for example, at very high utilization.



PROFITABILITY CALCULATION

Sowing machines from GÜTTLER are economical in consumption. They are amortized in a few years.

A calculation example:

- 100 hectares of grassland: after-seeding with 15 kg / ha
- annual requirement: 1,500 kg of grass seed or 6,000 €

With only 10% less seed consumption, **savings of 600 € per year** are the result!

FAQ - FREQUENTLY ASKED QUESTIONS.

In every GÜTTLER agricultural machine are incorporated decades of experience in soil processing. And the claim, to offer you the best machines for your requirements. And unique ideas. Still questions? Find here the answers.

WHY THE GÜTTLER-ROLLERS ARE NOT AVAILABLE WITH LARGER DIAMETERS AND HIGHER WEIGHT?

Nowadays, soils are travelled by increasingly heavier vehicles. The result: Our soils suffer more and more from too much compaction in the root zone, not so much in a deficiency of reconsolidation - this have proved over 40 years experience in soil processing.

HARROWS ARE DRIVEN FAST; ROLLERS MORE SLOW, BECAUSE OF THE RE-CONSOLIDATION. IS THE COMBINATION OF HARROFLEX-HARROW WITH GÜTTLER- ROLLERS IN AN UNIT NOT A CONTRADICTION?

Apart from pure swamp soil, pastureland is densely layered by nature. In addition it's constantly travelled with heavy vehicles. When using a GÜTTLER roller on pastureland it's therefore less a question of re-consolidation. But rather, to use its golden sheep feet effect, to:

- to press down up-frozen grass turfs - and to re-establish thus the connection of the roots to capillary water (soil depth 10 to 15 cm) - the GÜTTLER roller also achieves this at 12 km / h
- to stimulate the tillering to produce denser grass turf
- to bring over-seeds onto the ground - easy to operate at up to 12 km / h; the strong harrow creates some fine dust and thus improves the seed embedding.

For pure use on pastureland the lighter Mediana is therefore already sufficient with its 33/38 cm diameter - just in alpine areas this opportunity is often used. For use on arable land the heavier Matador is recommended (diameter 45/50 cm). Its effect: finer crumbling on heavy soils, better unrolling on light ones.

CAN'T TRAMPLING DAMAGES BE BETTER REPAIRED WITH SMOOTH ROLLERS?

Certainly, trampling damage can be repaired with iron rollers on soft soils, as long as they are still moist enough. However, one has to be aware of growth depression at the same time. Because, literally spoken, the air to breath is taken away from the root zone of the grasses. Often, therefore it's more clever to repair trampling damages by leveling soil with a strong harrow and to sow immediately afterwards.

IS IT REALLY USEFULL TO COMB OUT MATTINGS OFF THE GRASS TURF AND TO PRESS IT DOWN IMMEDIATELY AFTERWARDS?

It depends:

- No, if the combed out „felt“ is still green. For this reason the GÜTTLER roller is simply to depend. The work is at first carried out only with the harrow. Then the combed out felt is left to dry and the over-sowing has to be rolled over.
- Yes, if the felt is already limp by



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dryness. Then you can harrow, roll and reseed without any problem - in one single operation.

DON'T STRONG HARROWS DAMAGE THE PRECIUS GRASSES?

No, you can use our harrows easily.

Because:

- 1.) You can adjust the aggressiveness of the HarroFlex precisely depending on the situation and shift quickly - from „gentle stroking“ to quite „snappy“.
- 2.) The strong tines remove only that, what

is flat-rooted. So: moss, Common panicle, dead plants. Dandelion is limited, clover can be combed out precisely (horse hay). If clover is desired, it should be part of the post-sowing mixture.

WHY GÜTTLER MACHINES HAVE LESS TINES?

A conventional grassland harrow must fulfill two contradictory requirements: On the one hand, grass seeds have to be brought onto ground (therefore are needed as many as possible, as far as flexible and

elastic tines, which open the grass turf as best as possible by spinning and vibrating). On the other hand you want to aerate matted grass turf (in this case not the number and flexibility, but the strength of the tines is in question. They have to pack the felt without avoidance).

To resolve this contradiction, GÜTTLER recommends:

- the GÜTTLER roller with the golden hoof print effect* for seed embedding.

Because since long time ago it's known: If after sowing the ground animals are grazing on it, their claws press the seed through the turf into the soil. The GÜTTLER roller has exactly the same effect. Investigations by the agricultural institute of Aulendorf prove: The result is comparable to slot-sowing devices*.

- the GÜTTLER-HarroFlex for unmatting. Its tines with 12 mm strength 3 times as stiff as the 8 mm tines of a conventional harrow. Thus, less can be more. Moreover, less but stronger tines have these advantages:
- Compactly built harrow is the basic precondition for coupling of a roller
- Less tines have more passage/ transition, the harrow does not achieves so quickly the stuffing limit.

WHY GÜTTLER DOESN'T PRESENT MACHINES WITH ONE OR TWO TINE ROWS WITH MORE FLEXIBLE TINES BEHIND THE TWO TINE ROWS?

The strong harrow tines loosen the felt - further bars with flexible tines aren't needed at all.

If fine tines would be used, one would have pressurized them to have an effect.

The result would be: the harrow fills quickly and is stuffed easily. To avoid this, the fine tines should be adjusted on little pressure and strongly on the scale point of „losing“. But then in turn they have no effect. Apart from a larger overall length and higher costs. The intelligent solution for strong mattings is the Ripperboard from GÜTTLER:

- It halves the line spacing or doubles the number of tines
- loosens the felt, the tines comb it out
- is installed instead of the leveling bar. Advantage: the compact construction remains intact.

* Master-Thesis of Christina Grünwald, Insitute for cattle and greenland management Aulendorf, March 2005, on repair of lacks in grass turf through after-sowing: „Besiedelung von Lücken durch Nachsaatmaßnahmen auf Dauergrünland“



Our experts in field service are where you are. Experienced consultants for all your questions about pastureland and agriculture, and the optimal processing technology.



RELY ON OUR PRACTICAL EXPERIENCES!

Agricultural machines from GÜTTLER are off practice made for practice. Since we are intensively involved since decades with that question: What is the most profitable, most economical and efficient processing technology for which soil conditions? And for decades we have been dealing with the practical requirements in agriculture. Searching together with you for the best answers to the challenges that are always coming from nature.

Thus we have accumulated an enormous treasure of experiences, which we gladly share with you. On the topic of soil treatment and pastureland management we are with you throughout the year in advice and action. You can only benefit.

Just give us a call: 07021 9857-0

Hans Güttler
Managing Director of GÜTTLER GmbH



SERVICE. WHERE`S PASTURE-LAND, THERE`S GÜTTLER.

What kind of soil structure? Which tasks? What possibilities and machinery? Good to have reliable answers. At GÜTTLER in Germany. In Europe. And on (almost) all continents of this world.

Service starts at GÜTTLER with „best advice as possible“. Why this is important to us? Because the best machine is only as good as it fits to your particular requirements.

The knowledge and experiences from over 40 years have made us to well-known experts in soil structure and agricultural technology. This know-how we are glad to spread. **Take advantage of this!**

Our machines are high quality premium products. Proven on a hundred thousand hectares of pastureland, arable land or row crops. On light, sandy, stony, heavy or clay soils. 10, 20 years long and often more. Why then service is necessary at all? Because despite the robust construction of our prism rollers and devices not every problem is presumably solved. Good to know that GÜTTLER is near you in this case. For this purpose we`ve

established a close-meshed service and distribution web. In Germany, Europe, in the US, in Japan and New Zealand. Thus we can support you in times of trouble. Just very fast!

GÜTTLER. LEADING IN SOIL STRUCTURE.

With the first reliable self-cleaning prism roller® we have revolutionized soil processing. Since then the name of GÜTTLER is synonymous with effective soil structure. And for a selected portfolio high quality products.

Machines and machine combinations from GÜTTLER offer you unique advantages in agriculture. In field work as in pastureland management. In Germany, Europe, Japan, New Zealand and in the US. Examples for this: the intelligent turning principle of our trailer-type rollers. Their perfect soil adaptation. The extremely robust holding down clamp of our front packers. The ultra -light star-like roller elements of the Simplex. The continuous modularity. And above all: our revolutionary self-cleaning prism rollers® - the particular trademarks of GÜTTLER. The roller with the golden hoof

print® has prepared the ground for a new form of arable and farmland processing: with the principle of reconsolidation. This was in 1976. Today we apply as a specialist for soil structure. With a particular range of solutions.

Our program of front packers is the largest in Europe. Our agricultural machines count among the most intelligent and innovative in the market. Because they implicate over 40 years of development know-how. This benefits your soils. Your yields. And thus especially you.



**THE ROLLERS WITH THE
“GOLDEN HOVES”**
DESIGNED BY GÜTTLER

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