RIPPER STP 300 – SEEDING MACHINE

FOR TECHNOLOGIES OF PASTURE AND MEADOW RENEWAL AND SEEDING
INCLUDING SEEDING OF CONVENTIONAL CROPS SUCH AS CEREALS, RAPE, LEGUMINOUS PLANTS ETC.

RIPPER STP 300
A special seeding machine for grass seeding on meadows and for renewal of permanent grassland, which may also be used for cereal, rape and leguminous plant seeding. The main structural element is represented by a massive frame as this is the fundamental prerequisite for quality work in the heavy, dry and stony soil of pastures and meadows. This technology is currently proven to result in the highest germination in comparison to other technologies.

MODERN SEEDING TECHNOLOGY

Permanent grassland and its care has gained importance and become the centre of farms’ attention for many reasons. To enhance this process and provide appropriate technologies for it P & L, spol. s r. o., Biskupice u Luhačovic invested in the development and testing of a special seeding machine for pasture and meadow renewal and seeding. The machine is identified as RIPPER STP 300.

Successful farmers are aware that investment in pastures and meadows by seeding the correct grass mixes suitable for the area, or seeding alfalfa or clover, significantly improves the quality of the harvested fodder or pasturing. Correct technology and intensive approach to this land allows to achieve the same level of yield per hectare as for example in the case of crops. Intensive farming of pastures and meadows pays back. In addition to fodder production, this land also performs a significant environmental function as a cleaning and biological filtration element of the water protection system, together with a water retention and accumulation function. Pastures and meadows also stabilise the environment and serve for phytosanitary and anti-erosion purposes.

These environmental aspects are almost irreplaceable by another farming system, which is often contradictory to the economical view of pasture and meadow farming. Farmers achieve much better economic results with land farmed by this seeding technology. This applies not only to pastures where correct growth composition affects farm animal performance but also to land used for hay harvesting. In these cases, farmers harvest much better quality fodder with increased yield, but with equal costs. The pasture and meadow seeding period depends on climatic and standing conditions. Generally, early Spring is considered optimum when the soil is moist, after the second mowing, or in Autumn "under the snow".
TECHNICAL PARAMETERS RIPPER STP 300

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RIPPER STP 300</th>
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<tbody>
<tr>
<td>Tool engagement [m]</td>
<td>3.0*</td>
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<tr>
<td>Row spacing [cm]</td>
<td>15.5</td>
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<tr>
<td>Number of seeding units</td>
<td>19</td>
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<tr>
<td>Seed container [l]</td>
<td>850</td>
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<tr>
<td>Weight [kg]</td>
<td>2200</td>
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<td>Required tractor output</td>
<td>90-120 Hp</td>
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* Shallower engagement machines are also available.

This seeding machine may also be used for improved or additional crop seeding in the case of irregular germination or growth damage. The seeding structure is also designed for leguminous and oil plant seeding.

Proven structural design
Mechanical roller seeding structure, exact seeding setting with transmission with fine gearing.

Universal use
Very good and reliable results for classical seeding as well as seeding into mulch or grassland.

Technological seeding procedure
The coulters create the seed bed and removes potential plant residues in the place where the seed is to be laid (A). The coulters replace the work of cultivators, hoeing machines and compactors. The compression of one coulter ranges between 180-250 kg for unrestricted seeding into difficult soil. The soil is only processed in the seed row and not between the rows (B).

The double disc row unit places the seed in the groove prepared by the coulter (C). Soil capillarity is renewed by the compaction wheel which, at the same time, provides the exact seeding depth setting (E). The processed soil strip (F) is warmed much more quickly and this supports quick germination.

The RIPPER STP 300 seeding machine does not destroy the turf as the soil is processed in strips for additional seeding. This prevents massive loosening of the soil horizon in the case of water erosion, and also scouring stones is prevented. This seeding achieves a high germination rate of up to 80%.