Für ein ausgezeichnetes Grün

For An Outstanding »Green«
»A golf course is more than just another green field«

Taking care of a putting-green is very important. Indeed, carefully maintained surfaces are the key to promoting successful play and the enjoyment of the game. The investment costs of the machinery needed to keep the greens in order are quite considerable, so to keep additional costs down it stands to reason that the maintenance, i.e. the grinding of the grass mower blades, should be taken in one’s own hands.

How satisfying to putt your ball right on target thanks to a superbly trimmed putting-green!

»Machinery can only be considered complete once it is self-sufficient and can handle any circumstance without the need for other extras«
Flexible and accurate grinding of reel mower units

The machine conception of SBR 900 is based on a unique process (patent pending) which grinds mower spindles and bed-knives with highest precision in one single clamping operation by means of which the bed-knives support does not require dismounting. In addition to the work savings, thanks to the omission of large-scale dismantling and remounting operations, the stability of the frame is maintained and thus contributes to the precision of the parallelism. As a result, the grinding results are better, thus prolonging the service life of the spindles and bed-knives, and the grass-cutting results, too. The machine conception is suitable for almost all types of mowers.

Operating side with reel mower unit. Closed, compact design for permanent precision and easy access.

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The entire mower unit is lifted conveniently into the grinding position by means of the pivotable elevator. Mobile clamping elements permit a stable mounting of all commercially known types of mowers. It is even possible to grind manual putting-green mowers. The perfect fit in prisms and rigid column supports render the grinding operation vibration-free, thus enhancing the grinding results.

Facilitation of mounting operation thanks to pivotable elevator

One of the clamping devices

Manual putting-green mower clamped in position without needing to be dismantled
The machine was designed in such a way that the spindle bed-kife can be ground in one clamping operation without having to be reset or dismantled from the mower frame.

In view of the fact that the "single"-machine conception does not require the bed-knife to be removed, any distortions or deformations which would inevitably occur when removing and remounting the blade are avoided.

The SBR 900 operating sequence:
- Griding of front and top of bed-kife
- Sharp grinding of spindle blades
- Relief (free) grinding of spindle blades
A brief outline of the features of the SBR 900:

- Easy access
- Short set-up times for all operations
- Variable clamping possibilities
- Reliable and variable driving system
- Smooth grinding operation
- All grinding processes within a single clamping operation
- Superior cutting results thanks to high-quality grinding operation

»A single clamping process saves time and is much more economical«

A sharp grinding operation is possible on any mower grinding machine – a free grinding operation only on a few. Grinding bed-knives in one clamping operation is only possible on the SBR 900 made by System Ettrich – a world novelty«
A special driving technique was conceived for rotating the mower spindle in order to enable it to be ground. A synchro motor which is tuned to the specific requirements is responsible for the clockwise or anticlockwise rotation. It is fitted with a precision concentric chuck which drives the mower axes either direct or via special adapters.

Other special merits of this superior construction are the extremely quiet running performance and the variable speeds.
Dismantling the bed-knife is always a rather complicated process and remounting it requires a lot of time, effort and skill if you want the bed-knife positioned in perfect line with the mowing spindle. With some mower designs the frame becomes deformed when dismantling the bed-knife, causing further inaccuracies. This cannot happen with our "SINGLE"-machine conception.

»The finest grain of the high-quality CBN grinding wheels guarantees perfectly smooth and straight knife surfaces«
The correct free grinding is a true technical advantage.

The free grinding of the spindle blades is effected after the circular grinding operation in the same clamping position. The free grinding angle (see sketch) is selected within a range from 20° to 50° by setting the support pin accordingly. The support pin secures the exact position between the grinding wheel and spindle blade and guarantees that the contact width is evenly ground over the entire width of the spindle. The support of the spindle blades on the support pin is safeguarded via an electronic spindle drive control.

Free grinding between 20° and 50° reduces the contact surface of the spindle and bedknife decisively (see sketch) and decreases the squeezing and fraying of the grass to a minimum. The result is not only an outstanding appearance of the green but also a reduction in the susceptibility to discolouration and the build-up of fungous etc. This is desirable as far as the ecology is concerned and saves the use of chemicals.

Another attractive feature is the lower amount of energy required during the cutting operation and the inferior fuel-consumption.
Technical data

- Grinding length up to 1066 mm (42”)
- Spindle diameter from 120 to 280 mm (5” – 11”)
- Precision grinding unit, grinding spindle 4,200 RPM, grinding wheel diameter from 120 – 150 mm, grinding motor 0.75 kW (1 HP)
- High-speed grinding unit for grinding bed-knife, grinding wheel diameter 50 mm (2”), grinding spindle 12,000 RPM, grinding motor 0.25 kW (0.35 HP)
- Infinitely variable mower spindle drive
- Adapter for driving mower spindle
- Infinitely variable advance speed of grinding unit
- Trueing system for grinding wheel (with angle adjustment)
- Wet grinding device
- Clearly arranged control panel
- 220 to 450 volts, 50/60 Hz, connected wattage 3 kW
- Pivotal elevator, one speed
- Conforms with CE
- Weight approx.900 kg
- Dimensions: W 1.2 m x L 2.8 m x H 1.8 m