

# ***HOLLOW TINNING OF THE GREEN***

The difference between a green and plant at home is that the green is continually suffering the player's footsteps, the weight of heavy machinery of the golf course and the aggression of the golf balls hitting and compressing the ground. **Therefore it is very important the use of the pitch-repairs.**

This soil's compaction makes the dump less soft, less fluffy, and therefore the water stands on the surface and does not reach the deeper layers, those in which the plant roots, and the same happens with the air.

The hollow tinning is a work of aeration of the greens, they are two different ways to do it depending on the type of spike, hollow and solid: The micro one is where tubes clumps of small arms are used and does not affect the game, and the major one which is normally called hollow tinning or spiking works, and it affects the game on the green.

The aerification is a mechanical process that creates more air space on the soil and benefits deep rooting, helping the lawn to stay healthy. By eliminating the thatch layer (organic matter) prevents that it concentrates on the surface, which predispose to soft and slow greens. It also promotes the development of microorganisms that benefit the growth of grass; and finally provides good drainage and water infiltration.

Depending on the purpose you search at a golf course, should be performed in a monthly basis with the micro-hollow tinning and twice a year with the major hollow tinning one.



## ***WHAT TIME OF YEAR SHOULD BE DONE AND WHY IT IS NEEDED?***



Normally the major spiking works of the greens (which we will notice in the game), takes place before the arrival of high summer temperatures (spring) and before the arrival of the low temperatures of winter / fall, to give the course of best possible previous to the harshest seasons conditions, extreme temperatures and varying periods of rain.

The green soil must have a balance between solid (50%), air (25%) and water (25%). Due to the player's traffic that supports the golf course this balance is lost, and therefore it also loses the space available for oxygen and water (compaction). With the hollow tinning works that balance is restored and the inlet water and nutrients, that are so necessary, are produced.

In winter these ducts are good to facilitate the entry of rain water and wipe excess of accumulated salts due to the use of reclaimed water. In summer they are necessary for the water to reach the roots and prevent the least amount of water, loss through evaporation.

Every golfer should understand that to aerate (hollow tinning) the greens of the golf course at least 2 times a year is essential to achieve good maintenance and a healthy grass. The benefits of the spiking works are unquestionable.

The grass that makes up the green, like any other plant and as it is a living being, requires an optimal combination of water, sand and air, because if we compact the soil too much the plant may die.

In addition, the hollow tinning is the most effective way to minimize the undesirable effects of excessive accumulation of mattress.

## ***DEVELOPMENT & PROCEDURE***

The hollow tinning is basically a stick in the ground with some hollow tubes, which will produce the small holes that are covered afterwards with sand (top dressing). These little holes will allow air filtration and descompaction of the ground around it.

The first thing it should be done is fertilize the green in order the plant takes strength and hold the process. Subsequently, the green is treated with a specific machine, which removes small plugs of soil 2-3 cm in diameter and 5-6 cm deep. Once the green has been punched, the surface must be cleaned and it will proceed to spread a layer of sand (commonly called re-priming) which will serve as a new substrate to cover the holes.

This sand will benefit the filtration of air and water, essential for the appropriate development of the grass.



The green recovery process usually takes between 7-12 days (depending on weather conditions) and is usually done only twice a year, to have 48 weeks of perfect, firm and fast greens. After this recovery time, the greens of the course will be again in perfect conditions, and we will be able to enjoy this wonderful sport that inspires us every day to improve ourselves.