

Application Sectors of the TURF-Components

Application Sectors of the TURF-System

The TURF-System consists of different components which can be applied individually or combined with each other in multiple ways. In the following, an overview of the using possibilities of the TURF-System is given:

1. Grassing of sterile, biologically dead and anti-cultivable virgin soils or substrates

The TURF-System has an effect of biological soil amelioration and slow-release fertilization to the soil. Therefore it is especially suitable for the optimization of subsoils in a way that a settlement of vegetation becomes possible.

- **TURF activates the soil organism**
- **TURF starts the humification**
- **TURF supplies the plants with nutrients during a long time**
- **TURF achieves an extensive root growth**
- **TURF supports a vital plant growth**
- **TURF ameliorates the water supply of the plants**
- **TURF protects the soil from erosions**

Within the following fields, TURF can be used:

- mining areas
- industrial areas
- disposal sites
- ashes areas
- slag heaps
- desert areas
- newly constructed ski-runs in the high mountains
- slopes in the areas of road construction
- slopes in the areas of hydraulic engineering
- grassings on airports

Contacts:

mining authorities, mining companies, mining ministries, communities, industrial companies, energy supply industries, disposal site operators, road construction administrations, civil engineering companies, airport authorities, steel works, ski-run operators, landscape architects

2. Application of erosion protective measures

The TURF-System can be combined with various erosion protective measures. In the following, some examples:

- TURF grassings combined with the installation of erosion protective mats made of straw, hemp, sisal, flax, jute or coir fibres
- TURF grassings combined with the installation of fascines
- TURF grassings combined with the putting-up of gabiones.
For this, the gabiones need to have a certain content of fine soil.
- TURF grassings to avoid wind erosions
- TURF grassings combined with the putting-up of lattice walls (mostly tublike concrete elements)

Contacts:

mining companies, civil engineering companies, road construction authorities, ministries, architects

3. Revitalization of vegetation areas

Due to its characteristics, the TURF-System is very suitable for the revitalization of badly growing vegetation stocks as there are:

- degraded forest areas
- karstified grassing areas
- sports fields (fields, horse-race courses, golf courses)
- parks

Contacts:

forestry authorities, gardening authorities, sports clubs, communities, rehabilitation companies, sports fields constructors

4. Preparation of new planting areas

During the laying-out of planting areas, very often the soil has to be treated mechanically and meliorated or fertilized. The TURF-components can be applied individually or in combination for the soil melioration as well as for slow-release fertilization. Some examples for this:

- afforestation programmes
- planting of coppices in road construction
- planting of coppices in parks and touristic grounds

Contacts: landscape architects, forestry authorities, ministries, road construction authorities, gardening authorities, hotels

5. Laying out of lawns

For the laying-out of lawns or sports fields, a good rooting and a dense vegetation covering is requested. TURF establishes ideal prerequisites for the achievement of these aims. The application of TURF proved itself in the following areas:

- laying out of sports fields
- laying out of golf courses
- laying out of parks

Contacts:

sports fields constructors, sports fields architects, gardening authorities, sports clubs, communities

6. Fertilization of plants

Due to the effectiveness of TURF the plants grow faster, become more lush and vital, and have more root mass. That is why the use of TURF is recommended for the following sectors:

- coppices in tree nurseries
- production of house plants
- planting tubs in cities
- fertilization and revitalization of old trees
- fertilization of transplanted trees (big trees, palms)

Contacts:

tree nurseries, plant producers, gardening authorities, special companies for tree transplantations

7. Fertilization of cultivated plants with high capitalized value of potential yield

In the agrarian sector, plants are fertilized regularly. The sales price decides also which fertilizer is used and in which quantity. TURF is superior to common fertilizers in many aspects because of its biological effectiveness. Compared to simple mineral fertilizers, TURF is more expensive. That is why it is only profitable for cultivated plants with high capitalized value of potential yield. Within the following sectors, the application of TURF proved itself from the economical and the qualitative point of view:

- asparagus
- berries, fruits
- bananas, kiwi
- high quality wine

Contacts:

wine-growers, fruit producers, asparagus producers, producers of high-producing plants