

## Positioning of Grodan

Grodan is focused on the professional horticultural sector; the company supplies the glasshouse industry with innovative cultivation solutions comprised of clean and controllable stone wool substrate, in combination with advice and support services. In professional horticulture, Grodan substrates are the ultimate alternative for soil. This environmentally friendly cultivation method provides higher yields and better quality as well as savings in nutrients, water and energy; in brief, total control of the crop. The solutions as provided by Grodan are predominantly applied to cultivation of vegetables and flowers, such as tomato, cucumber, pepper, egg plant, rose and gerbera. Grodan was established in 1969 and is active in over 60 countries worldwide. The Grodan head offices are in Roermond, the Netherlands.

## Rockwool Group

Grodan is an integral part of the Rockwool Group, worldwide market leader in stone wool products. Being a prominent player in the insulation market, Rockwool provides durable solutions for energy efficient, fire-resistant buildings, with optimum climate control and soundproof qualities. Furthermore, the group provides products and solutions for sectors such as industries, petrochemistry and shipbuilding. Worldwide, the company employs over 8,500 people. Rockwool Group has over 20 factories in Europe, North America and Asia and in 2008 achieved a net turnover of 1.8 billion Euros. Under the name Rockwool International A/S, the Rockwool Group is listed on the Copenhagen Stock Exchange.

## Grodan core values

Grodan provides its customers with innovative, certified and environmentally friendly products, advice and services and in doing so wishes to contribute to, increase the yield, as well as improve the quality of products. Corporate social responsibility is high on the agenda; Grodan pursues a durable way of doing business, in which economical, social and environmental interests are in balance. Over the years, this pursuit has yielded the company many system, quality and environmental certificates. Anything from ISO 9001 and ISO 14001 to KIWA (Dutch quality standard) and the European Ecolabel.

## Solutions

Grodan supplies innovative cultivation solutions comprised of clean and controllable stone wool substrate in combination with advice and support services. The main starting point in this is to assist growers in increasing the yield of their crop, in improving the quality of their products, in limiting their business risks and in improving their business result.

### a) Stone wool products

In 2007, Grodan introduced the patented Next Generation technology. Thanks to the use of revolutionary hydrophilic fibre, substrate slabs and blocks produced by means of this technology, provide users with considerable advantages. These vary from better root development to better uniformity and resaturation, better control range, to more even water distribution and EC distribution.

A few examples:

Slabs for the cultivation of vegetables:

Grotop Master<sup>®</sup>, Grotop Master<sup>®</sup> Dry, Grotop Expert<sup>®</sup>, Grodan Vital<sup>®</sup>, Grodan Vital<sup>®</sup> Dry, Grodan Classic<sup>®</sup>, Grodan Classic<sup>®</sup> Multi Year

Slabs for floriculture:

Flortop Rosa<sup>®</sup>, Grodan WFL, Growcube<sup>®</sup> Gerbera

Blocks for propagation:

Plantop Delta<sup>®</sup>, Plantop Vitagreen<sup>®</sup>, Plantop Rosa<sup>®</sup>

**b) Knowledge and consultancy services**

Grodan's 6 phase model<sup>®</sup> is a blueprint for an optimum growing result, for each individual cultivation phase and for the cultivation as a whole. Each phase is characterized by a specific crop development, which entails specific requirements with regard to the substrate. Each phase therefore requires appropriate advice, taking the crop and root climate into account.

Grodan advisors have a large degree of expertise in horticulture and provide growers with tailor-made advice. Grodan operates worldwide, which means that the organization is able to bring together the knowledge and experience of thousands of growers all over the world. In addition to personal advice and training, the company also uses things like brochures, (digital) newsletters and the internet.

**c) Support services**

Grodan supplies various different services, which support its products and advice, such as:

Water Content Meter

The WGM control (a hand held meter) and the WGM Continu (connected to a climate control computer) give an insight into changes in water content, EC and the temperature in the slab.

Gronow<sup>®</sup>

Gronow is a digital tool, which provides the grower quick and easy insight into water management on the basis of figures and graphs. This enables him to adjust the irrigation strategy where necessary and this increase the yield. Furthermore, the software package includes two other modules: one for climate control (Gronow Climate) and one for crop registration (Gronow Crop).

Recycling

Grodan's professional recycling service takes care of the safe processing of used stone wool products. The recycled stone wool is next processed by Grodan (Rockwool) into a base material for the production of new stone wool products or for example for bricks that are used in building. Grodan is actively involved in the 'cradle-to-cradle' principle, meaning that ultimately nothing goes to waste.

**How is stone wool manufactured?**

Stone wool is a natural product consisting of volcanic rock (also known as diabase or basalt). The production process simulates a volcanic eruption and takes place at temperatures of over 1500 degrees Centigrade.

**Some of the advantages of stone wool**

The use of stone wool provides many advantages. Its controlled manufacturing process makes this a growing medium of consistent high quality. Sterile production at extreme high temperatures guarantees a clean product without any pollutants. Furthermore, the use of unique hydrophilic fibres means that cultivation on stone wool substrate is extremely controllable. The grower is able to water and fertilize specifically in order to achieve the optimum growing result. There is no longer any waste. Because of an efficient use of water and nutrients, the yield per square metre is high and the energy consumption per product unit is low. Moreover, the material is light in weight and therefore easy to handle. And last but not least, stone wool can be reused simply. In brief, it is durable as well as an environmentally friendly product.

**More information:**

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