

**HUNTSMAN**

Enriching lives through innovation

# GRANUMAT™ automatic dosing system

Colors, systems, solutions



# Driving performance in colored concrete

Huntsman Pigments and Additives is a leading supplier of inorganic pigments and functional additives for the construction industry. In addition to our high-quality pigments, our customers can rely on us for the following:

Pigment expertise and customer support:

we have more than 200 years of manufacturing experience, and now operate over 30 locations worldwide to serve our global customers.

- Color dosing systems performance and service: our color dosing systems are designed to meet our customers' needs by our in-house engineering staff and serviced by our own technicians
- Custom color: we have a team of color specialists who can match colors and develop recipes for custom colors to meet your needs. Many high profile projects have been built using Huntsman's color pigments.

Our product range includes:

- Iron Oxide pigments
- Titanium Dioxide white pigments
- Cobalt blue pigments
- Chromium green pigments
- Carbon black pigments
- FERROXIDE® iron oxide powders
- HYDROTINT™ liquid pigment slurries
- GRANUFIN™ granular pigment
- GRANUMAT™ and CHAMELEON™ dispensing systems

Huntsman combines the strength of a global US company with local proximity to our customers to help you achieve your business goals.

## **GRANUMAT™ Automatic dosing systems**

The GRANUMAT™ automatic dosing system is a modular machine that enables the easy, clean and accurate coloring of concrete in a wide spectrum of shades using free flowing GRANUFIN™ micro granules. We offer a wide range of GRANUMAT™ dosing units to meet your needs. Complete systems are configured to match production demands, color complexity and location constraints. We have also developed dedicated system controls that are easy to use.

Ancillary equipment includes a dust extraction unit and holding hopper cyclone.



# GRANUMAT™ automatic dosing system

## Efficient, flexible and fast

GRANUFIN™ micro-granulated pigment for colored concrete is best metered using the GRANUMAT™ automatic dosing system. Using four to six basic colors, an infinite number of shades may be created by additive weighing.

For reliably accurate color, nothing could be simpler. Just position the big bag and enter your chosen color recipes into the PC or PLC Control.

Due to simple gravity or low-profile fluidizing tubes, the granules require no additional mechanism to flow into the metering chamber and pneumatic transport system.

The free-flowing nature of GRANUFIN™ allows for:

- a compact dispensing system
- remote system location

Once the individual color components for each recipe are weighed in the scale unit, the full batch is pneumatically conveyed to the concrete mixer.

**Efficient** – our GRANUMAT™ units can be configured for up to three batching plants working in parallel – with each of these supplying four concrete mixers simultaneously.

**Flexible** - all GRANUMAT™ units are capable of storing more than 1,000 recipes.

The units allow:

- adjustment of tinting strength
- multi-color concrete recipes
- input in percentage, kgs or lbs
- provision of color consumption statistics

**Fast** – to keep up with fast cycle production plants, a holding hopper cyclone with dust extraction filter is positioned above the concrete mixer. This holds the pre-weighed color batch, ready to dump into the mixer.

**Clean** – our dust extraction filter delivers a low-dust environment.

# Customized GRANUMAT™ systems

## Designed to meet your application

We offer a wide range of GRANUMAT™ dosing units to meet your needs. Complete systems are configured to match production demands, color complexity and location constraints. We have developed dedicated system controls that are easy to use. Ancillary equipment includes a dust extraction unit and holding hopper cyclone.

### How to select your dosing system

**Number of colors** – our standard GRANUMAT™ system has up to eight colors. We can provide customized systems for up to 16 colors.

**Required accuracy level** – the available dosing time and the smallest amount to be weighed will determine the system type.

**Number of batching plants, production cycle and color requirement** – production demands and the complexity of colored products (such as brindled color) determine the number of conveying vessels and cyclones required. One conveying vessel is required per batching plant and up to four cyclones per mixer.

**Space and material handling** – factors to consider include available footprint and height restrictions, along with the big bag handling method (forklift or crane). The number of primary colors you are using will also impact on the area needed for the GRANUMAT™ system.

**Distance from mixers** – the standard distance between the GRANUMAT™ installation and mixers is up to 70m (230ft). We can, however, provide a customized solution that extends this distance to 100m (330ft).

Talk to us about your needs. We'll help you find the best system for your operations.



## System choice

Dosing system:

- GRANUMAT™ Color Synthesizer
- GRANUMAT™ Multicolor
- GRANUMAT™ Shorty
- GRANUMAT™ Maxi
- GRANUMAT™ Babymat
- GRANUMAT™ Micro
- GRANUMAT™ Colorsmart
- GRANUMAT™ Smarty
- GRANUMAT™ Microsmarty

System controls:

- GRANUMAT™ WinCC PC-Control
- GRANUMAT™ PLC Control with Touch Panel

Ancillary equipment:

- Vacuum Conveyor
- Holding Hopper Cyclone
- Dust Extraction Unit





## Global Business Center

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