DENSTONE SUPPORT MEDIA

Loading Guidelines

Size Gradation

Denstone® support media layers are graded by size to prevent migration of the catalyst or adsorbent through the bed supports, screens and bottom distributor/collector.

Denstone® spherical support media is typically loaded so that the diameter of the media in each layer is no greater than 2x the diameter of the media in the adjacent layer. Using this concept, the size of the catalyst or adsorbent determines the smallest support media diameter needed. A minimum depth of 100mm (4") is recommended for each layer of support media.

Denstone® **deltaP**® **support media** is typically loaded so that a 100mm deep layer of size P1 is adjacent to the catalyst or adsorbent and a second layer of size P1.4 or size P2 is used in the bottom of the vessel if necessary.

Packaging

Denstone® support media may be packaged in bulk supersacks, polymeric bags, steel drums or in cardboard cartons. All packaging is plastic-wrapped and palletized.

Handling

Use a forklift or other appropriate handling equipment to load/unload pallets into and out of trucks or shipping containers. Use suitable pallet handling equipment when moving pallets.

Do not open packaging until the goods are ready for installation.

(continued)

Saint-Gobain NorPro DENSTONE® Support Media

Denstone® Spherical Support Media

1/2" Spheres

Catalyst

1/8" Spheres 1/4" Spheres

1/2" Spheres



Denstone® deltaP® Support Media

Size P1

Catalyst

Size P1

Size P2



Typical support media loading examples.



DENSTONE SUPPORT MEDIA

Loading

Use proper personal protective equipment and safe handling procedures in accordance with the Denstone® Support Media Safety Data Sheet/ Product Information Sheet. Minimize dust formation and physical handling of the support media during loading. Follow good practice and observe local laws in handling and disposal of support media.

Inspect the packaging for physical integrity prior to lifting or movement to ensure that it has not deteriorated. Damaged or deteriorated packaging can create hazards to personnel or to equipment.

Before loading, inspect the vessel and remove any foreign material. Inspect fixed bed supports and screens to make sure they are intact and firmly secured. Remove any particles lodged in the support grid, screens or bottom collector/ distributor. The support media may be loaded by means of buckets, chutes, socks or telescopic sleeves. Limit the free-fall distance of the media to less than two feet. After the first 10% to 15% of the support media has been loaded, carefully inspect the loaded media to verify that no breakage is occurring. Periodically level the media as the loading proceeds. Level the bed after loading each layer of support media.

Visit <u>www.denstone.com</u> or contact one of our Saint-Gobain offices for more information on the selection of Denstone® support media products and sizes.

North & South America

+1 330 673 5860

norpro.ceramicsales@saint-gobain.com

Akron, Ohio USA

Europe & Africa

+49 6435 9657 0

norpro.steinefrenz@saintgobain.com

Steinefrenz, Germany

Russia

+7 812 332 56 60

norpro.stpetersburg@saintgobain.com

Saint Petersburg, Russia

Asia, Oceania & Middle East

+65 911 61119

norpro.singapore@saintgobain.com

Singapore

norpro.saint-gobain.com denstone.com



The information herein does not constitute a guarantee or warranty. Saint-Gobain NorPro's warranty is set forth in its standard terms and conditions which govern sales of Saint-Gobain NorPro products. The standard terms are set forth in Saint-Gobain NorPro quotations and acknowledgements and are also available upon request.

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