



thyssenkrupp

Insights_Uhde



Market-leading urea granulation technology: Boosts your competitiveness

There are many good reasons for choosing our benchmark-setting UFT® fluid bed granulation technology. Not least over 40 years of expertise in developing and licensing this technology and the practical experience

gained from 75 plants in operation worldwide. The best reasons are the benefits you get from our technology: low CAPEX and OPEX, high operational flexibility, high reliability, and superior product quality.

thyssenkrupp is the global market leader and an independent licensor for urea fluid bed granulation technology. Our leading-edge UFT[®] fluid bed granulation technology enables urea plant operators to deliver top-quality products by the most cost-efficient and environment-friendly means. This granulation process enables all the required product sizes (2-8 mm) to be produced in the same plant with only minimal adjustments. The urea granules are well rounded, very hard, and ultra-resistant to crushing and abrasion. As a result, these granules remain dust-free, non-caking, and completely free flowing, even after long storage, frequent handling, and shipping. The superior bulk transportability, bulk-blending suitability and greater agronomical efficiency of granular urea means it can replace prilled urea in all applications. The granulation mode is accretion, which delivers a very hard granule that is technically superior in quality to granules produced through layering or agglomeration-based processes.

The 97% urea feed solution concentration in this technology provides the best possible balance between excellent product quality, low investment and operating costs. Our UFT[®] fluid bed granulation technology also ensures that dust or gas emissions are not a problem. The unique granulator and a new nozzle design minimize dust generation. Moreover, the industry's most efficient and cost-effective gaseous emission control schemes help to lower production costs, as does the unique exhaust gas scrubber design.

UFT[®] fluid bed granulation plants are easy to operate and very reliable. The granulator contains no moving parts, which minimizes maintenance. Moreover, the number of solid-handling components is significantly lower than other urea technologies to maximize plant uptime and reduce investment costs.

At thyssenkrupp we have referenced concepts for plant capacities of 150-4,500 metric tons (mt) in single-line daily production – and this technology can easily be scaled up to single-line capacities of up to 6,000 mt per day. And the final good reason why this technology makes sound business sense is the ease with which your product portfolio can be diversified into sulfur-enhanced, technical and DEF-grade urea granules within the same plant.

For more information: <https://www.thyssenkrupp-industrial-solutions.com/thyssenkrupp-fertilizer-technology/en/products-and-services/uft-fluid-bed-granulation>

The bottom line: UFT[®] fluid bed granulation technology from thyssenkrupp offers urea plant operators a number of key benefits. Besides their high degree of operational flexibility, these plants will help boost an operator's competitiveness through a combination of

high product quality and maximized plant uptime. For any plant capacity between 150 and 4,500 mt per day thyssenkrupp is your best bet for manufacturing ultra-hard urea granules.
