



ROTATING VIBRO-GRANULATOR FOR NITROGEN FERTILIZERS FUSION



Rotating vibro-granulator is applied in the chemical industry and is intended for dispersion fusion of nitrogen fertilizers on uniform drops in the granulation tower with their following cooling and crystallization into solid granules/prills in the process of a free fall in the up-coming stream of cooling air.

Improved granulator has the following **advantages** over other granulator types:

- High safety in operation
- Production of more competitive uniform granules
- Removal of product's sticking in towers
- Decrease of dust arising
- Increase of agro-technical value of fertilizers

Modern rotating vibro-granulators for ammonium nitrate and carbamide are produced in Sumy State University and operate on nitrogen fertilizer plants in Bulgaria, Estonia, Qatar, Cuba, Poland, Republic of Belarus, Russian Federation, Tajikistan, Uzbekistan, Ukraine and other countries.

Comparison with world analogs by granulometric composition, %

Grain size, mm	Centrifugal granulator of firm "Kreber" (Germany)	Acoustics granulator designed by Research Institute at the Chemical plant (Russia)	Rotating vibro-granulators of SSU
1-4 mm	97-99	98-99	more than 99
2-4 mm	83-92	85-95	90-97
2-3 mm	75-90	80-90	more than 90
2-2,5 mm	40-50	45-65	more than 80
less than 1 mm	0,8-2,5	0,8-1,5	0,1-0,8