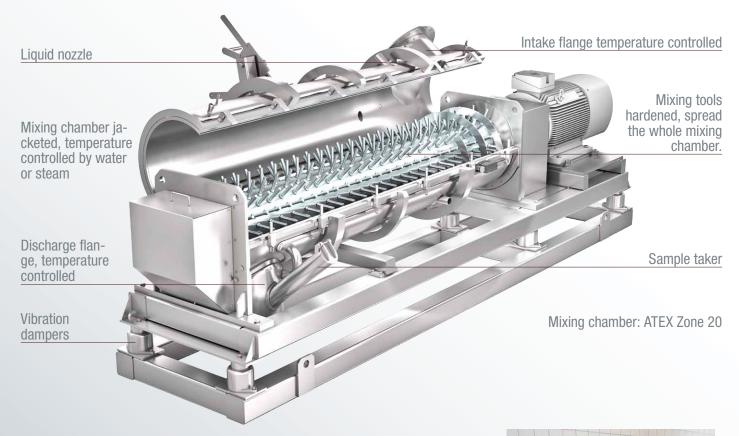


## **Ring-layer mix-pelletizer Type RMG**

# For the continuous build-up granulation of dispersive goods into round granules of similar size.

Typical applications: tablet masses, instant tea, baking agents, sugar substitutes, food colourants, cellulose derivates, building and insulating materials, hot glue, carbon black and black pigment derivates, detergents, pesticides, chemicals, toners, colour pigments, ceramic colours, sintered materials, cover powders for foundries, metal powder...



### **Function**

The goods to be granulated (dry, moist or suspended with binding agents if applicable) are continuously fed in. The fed-in components are accelerated in a rotating movement and cover the walls of the mixing chamber in the form of a ring layer. This layer is intensively mixed, deagglomerated, compressed and conveyed by the pin tools. Therefore, solid and liquid bridges are formed between the particles. Granulation seeds are created and grow to a certain size. If the granules grow beyond a certain size, they become fragile and disintegrate. Fine aggregate content formed in this way clings again and is rounded. A balance is created between grain build-up and grain destruction. With an ideal operating mode the RMG produces a stable granulate within tight corn limits. The peripheral speeds vary from approx. 8 to 35 m/s.





#### **User Benefits**

- ✓ Ring-layer mix-pelletizers are frequently operated at high rotational speeds. Therefore, the machines are of particularly solid design. They are easy to service.
- ✓ Larger RMGs are mounted on vibration dampers and dynamically balanced.
- $\checkmark$  The mixing chamber often has double walls. This enables the walls to be cooled or heated.
- ✓ The mixing chamber is machine-processed and particularly round. Therefore, the mixing tools have a uniform clearance to the walls, and a particularly narrow grain range can be achieved.
- ✓ The mixing tools can be made of hard metal and may also be equipped with ceramic plating upon request.
- $\checkmark$  Many special models are available.

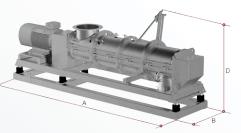
### **Piloting**

amixon<sup>®</sup> places special importance on the pilot phase in the test centre. Your mixing processes are simulated here. This way, we support you in your product development phase. amixon<sup>®</sup> has a main test center in Paderborn (Germany). Further test centers are situated in Japan, Thailand, India, South Korea and the USA.



#### **Technical Data**

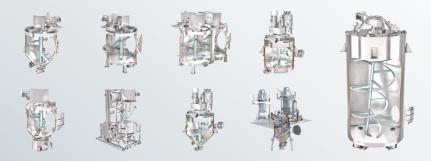
Vertikal- Einwellenmischer <b>Typ VM</b> Die Typbezeichnung entspricht der maximalen Chargengröße in Litern. Bereits bei geringem Füllgrad höchste	Ungefähres Brutto- volumen des Mischers	Ungefähre Abmessungen der Standardausführung Bitte fordern Sie detaillierte Maßblätter an!					Die benötigte Antriebsleistung kann stark variieren je nach Schüttdichte, Fließeigen- schaft, Drehfrequenz, Aufbereitungsaufgabe wie z. B. Desagglomeration.		Gewichtsangaben können erheblich variieren je nach Größe des Antriebes und der Art der Ausführung. Die dynamischen Zusatz- lasten sind sehr gering.
Mischgüten erzielbar.		Α	В	C	D	Ε	von	bis	
	[Liter]	[mm]					[kW]		[kg]
100	130	350	624	1200	620	145	1	5	560
200	260	420	774	1300	770	145	3	8	680
300	390	450	724	1400	900	145	5	15	720
4000	5180	750	1910	2900	1890	145	34	120	4240
5000	6470	850	2050	3200	2030	145	38	137	5840
40000	51210	1600	4300	5300	3844	145	121	436	33600



The particle size enlargement by buildup-granulation normally works fine in this type of ring-layer mixer pelletizer if the goods have granulating properties. Nevertheless, experiments have to be carried out to design the machine properly. To this extent, the throughput rates can extremely differ from these table values. amixon<sup>®</sup> provides test machines in its test laboratory.



amixon GmbH Halberstädter Straße 55 33106 Paderborn Germany +49 (0) 52 51 / 68 88 88-0 sales@amixon.com www.amixon.com



amixon® manufactures high precision mixers, vacuum mix-dryers, synthesis reactors and granulators with maximum fabrication depth. All components of the amixon®-mixers are made in Germany. The production of the machines takes place exclusively in the amixon®-factory in Paderborn, Germany.

© by amixon GmbH, Paderborn. Reprinting or transfer to electronic media only permitted after written approval. We reserve the right to make changes due to progress in process engineering and manufacturing technology.