

Coperion introduces MEGAtex cooling die series for plant-based meat

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Coperion introduces the latest model in its MEGAtex cooling die series for manufacturing plant-based HMMA (High Moisture Meat Analogues). The new MEGAtex R90 texturizing unit achieves throughputs of up to 500 kg/h and is optimally matched to Coperion's ZSK Food Extruders in sizes ZSK 43 and ZSK 54.

Used in vegan ground meat substitutes and chicken analogues among other products, HMMA is manufactured using plant proteins. The MEGAtex cooling die provides HMMA with its fibrous and meat-like textures.

Coperion has designed its MEGAtex series texturizing units, especially for use with the ZSK food extruder. The ZSK twin screw extruder and the MEGAtex cooling die are the core technologies within the high moisture extrusion process that generates meat analogues from plant proteins with a dense, fibrous structure that closely resembles lean animal meat.

The new MEGAtex R90 cooling die builds upon the principle of a round cooling die. Following discharge from the ZSK food extruder, the protein mass passes through a round channel in which the product is cooled to the desired temperature and the meat-like texture is formed to specification. For HMMA manufacturers, the cooling die opens up a broad spectrum of possible ingredients and textures – from smooth to loose, dense, foamy, large-pored and long- and short-fibered. The machine operator can precisely target process parameters such as temperature, pressure, shear rates and mass flow.