

Profile View

Details

Title: Ceramic filaments for 3D-Printing and manufacturing agreement based on provided granules

POD Reference: TRDE20211123001

Summary: A Bavarian start-up, founded in 2020, offers various services for the development of technical ceramic products according to the ideas and needs of customers. But as a small company does not have its own capacity to process granules into filaments. The company is looking for a manufacturer of ceramic filaments. The granules for the production of the filament are available and can be supplied. A manufacturing agreement is being sought.

Description: The filaments for ceramic 3D printing available on the market so far are unfortunately not suitable for processing in larger quantities. Together with a German partner, the Bavarian company has developed a granulate from which ceramic filaments can be produced and processed in the same way as filaments made of plastics. Initial samples have been enthusiastically received by customers. So far, however, these samples could only be produced on a laboratory scale. Now, filaments are to be produced initially in small to larger quantities. Smaller quantities mean 10kg per order after successful sample production and larger quantities 25kg to 50kg per order. However, the Bavarian company does not have the necessary know-how and production facilities for this type of production. They are looking for a manufacturing agreement. Attempts to produce the granulate on equipment for making plastic filaments have failed because the hot ceramic filament becomes brittle when cooled with water. The standard process in the plastics industry is however water cooling.

Technical Specification or Expertise Sought: The Bavarian company provides the granulate of various ceramic types. The partner processes it into filaments and provides spools and packaging. The ceramic filament itself must have a standard diameter of 1.75mm. A tolerance of +/- 50µm is acceptable. In the first stage of the cooperation, larger tolerances of up to +/- 0.1mm are conceivable, too. In addition to the production of standard quantities of 1kg per spool, it should also be possible to supply spools with 500g filament as a special production. The prices are based on the sales prices of the plastic filaments.

Stage of Development: Field tested/evaluated

Keywords

Technology 02007003 Ceramic Materials and Powders
 Keywords: 02007005 Composite materials
 Market Keywords: 08003007 Other industrial equipment and machinery

Partner Sought

Type and Role of Partner Sought: The client is looking for an SME with experience in the production of filaments from all kinds of materials for a manufacturing agreement. Furthermore, the company is open for participation in a research project.

Type and Size of Partner Sought: R&D Institution
 SME <10
 SME 11-50
 SME 51-250
 University

Type of Partnership Considered: Manufacturing agreement

Client

Type and Size of Client: Industry SME <= 10
 Year Established: 2020
 Turnover (euro): <1M
 Already Engaged in Trans-National Cooperation: Yes
 Languages Spoken: English
 German
 Client Country: Germany

Dissemination

Relevant Sector Groups: Materials

