

Abstracts

A Microwave Irradiation Chamber for Scientific Studies on Agricultural Products (Short Papers)

R.G. Olsen, G.A. Geithman and D.H. Schrader. "A Microwave Irradiation Chamber for Scientific Studies on Agricultural Products (Short Papers)." 1977 Transactions on Microwave Theory and Techniques 25.5 (May 1977 [T-MTT]): 428-433.

The design and testing of a chamber for uniform heating of objects with an intense microwave field is described. Methods for direct and inferred measurement of temperature in the microwave field during irradiation are discussed. A theoretical analysis was made to determine the range of electrical parameters for which heating will be uniform. This analysis was verified experimentally. Curves for determining the rate of energy absorption in cylindrical posts are given for a wide range of electrical parameters.

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