considerably higher than that of E-glass, usually reported to be 70 GN/m^2.

Conclusions

Glass fibre technology has been adopted to form fibres from some basalt rock located in the Pacific Northwest of U.S.A. Not all basalts in this area seem to be good fibre formers, but those fibres that are produced have good physical characteristics.

It is anticipated that there exists several commercial applications which could, with benefit, draw upon the unique properties of this fibre. An insulation material for normal and elevated temperature use, a reinforcement fibre for concrete and a replacement for wood fibre to form building board or panelling are a few diverse applications which come readily to mind.

The question of whether the basalt fibre can compete economically with the extensively developed glass fibre industry in the U.S.A. remains to be seen.

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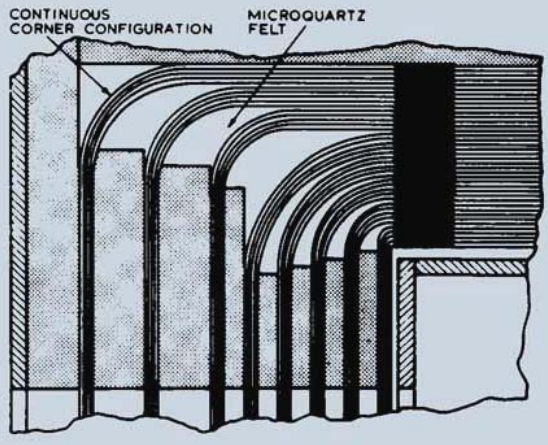
Platinum for High-Temperature Insulation

The properties of platinum have been utilised for a novel application, the thermal insulation of high-temperature systems, in work done by Andrew J. Parker of Hittman Associates Inc. for Goddard Space Flight Centre, Maryland, U.S.A. and outlined in *NASA Tech. Briefs*, 1976, **1**, (1), 74.

In the application, for which platinum was chosen because its high emissivity is stable at temperatures up to over 900°C in both air and vacuum, as well as being resistant to oxidation, forty layers of platinum foil 0.00025 inch thick are arranged as shown in the accompanying figure to form a laminated insulation. By such careful grouping it is possible to produce a linear temperature gradient through the thickness of the insulation.

While cost considerations are likely to restrict the use of platinum for this purpose it is probable that there are situations in the advanced technology industries where its use would be technically and economically viable.



Platinum foil used to form laminated insulation