

Karkusty, N. N.

The second fundamental coupled problem of the theory of thermoelasticity for an infinite strip. (Russian) [Zbl 1048.74512](#)

Vladikavkaz. Mat. Zh. 1, No. 2, 3-9 (1999).

The thermal field and stress states in an infinite thermally isotropic homogeneous strip of finite width are determined from displacements and temperature known on the boundary. By using integral Fourier transforms, a partial differential equation is reduced to a system of ordinary differential equations with constant coefficients whose solution is found by a well-known method.

Reviewer: [V. Grebenev \(Novosibirsk\)](#)

MSC:

[74F05](#) Thermal effects in solid mechanics

[74B05](#) Classical linear elasticity

Keywords:

[Fourier transform](#); [thermal stress](#)

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