MAINTENANCE OF FLEXIBLE ROAD PAVEMENTS
Distress, repair-rehabilitation methods, working sites protection

Angelos L. Nikiforidis

Abstract

On bituminous pavements damages occur in the form of rutting, various forms of cracking and, later on, potholes. Traffic safety and driving comfort are increasingly affected by these deficiencies. Preservation measures are necessary and must be appropriately applied.

If an embankment provides sufficient subgrade support, surface repair measures generally suffice for pavement rehabilitation. These can be mechanical or chemical surface treatments, applications of thin overlays or bituminous carpets, including the removal of ruts. However, if it is necessary to improve the bearing capacity of the pavement, additional courses will have to be applied (without removal of the existing subgrade) or one or several courses replaced by new ones (including removal of existing subgrade).

In recent years, repair or rehabilitation methods were developed with which it is possible to mill off the damaged wearing course, reprocess the material, and apply it once more. In this manner preservation measures can be carried out much more economically and with less damage to the environment.

Despite our technical advances, repair sites will stay with us in the foreseeable future. Adequate traffic regulation and guidance measures at sites of temporary obstruction are therefore still imperative.