

# **FUNDAMENTAREA DECIZIILOR DE MANAGEMENT PRIN ANALIZA INDICATORILOR DE FIABILITATE ȘI A MENTENANȚEI ELEMENTELOR DE CUPLARE A FURTUNURILOR PENTRU INSTALAȚIILE DE STINS INCENDII**

## **ANALYSIS OF THE RELIABILITY AND MAINTENANCE OF FIREHOSE COUPLINGS FOR ACCURATE MANAGEMENT DECISIONS**

**Ing. Cornel BĂBUȚ**

**Prof.dr.ing. Nicolae S. UNGUREANU**  
Universitatea Tehnică din Cluj-Napoca,  
Centrul Universitar Nord din Baia Mare

**Abstract:** Fire hose couplings are important parts, used in almost every emergency response action, from fire extinguishing to flood mitigation. These parts are used by firefighters to connect hoses to hydrants, engines and/or other hoses, to ensure the dousing of fires with water or other suppressing substances, in order to extinguish them. Reliability parameters were determined for the couplings and were found to be in good agreement with the theory. The analysis of the maintenance system revealed that it has to be improved and extended. It is shown that logistics management decisions must be made based on the findings concerning the reliability parameters' variation and a Total Productive Maintenance system has to be implemented, to ensure an increase of their availability.

**Keywords:** Management, reliability, maintenance, firehose couplings