Jure Kristan:

TEHNOLOGIJE IN METODE NA PODROČJU GAŠENJA IN PROTIPOŽARNE ZAŠČITE

Mentor: prof.dr. Franci Steinman
Somentor: Roman Udrih
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Povzetek

Požarno tveganje je danes večje kot kdajkoli poprej. K temu povečanju so botrovali novi materiali (sintetični materiali, ki ob požaru povzročijo nastanek strupenih snovi in dima), objekti večjih razsežnosti, povečan promet, večja naseljenost, idr. Vse prej našteto je prisililo ljudi odgovorne na področju protipožarne zaščite, da so se sprejeli novi zakoni, uveljavile nove tehnologije in metode, v uporabo prišli novi materiali in njih zaščita. Požarna zaščita mora vsebovati pasivno in aktivno požarno zaščito. V večini urbanih naselij v Sloveniji je javno vodovodno omrežje, razen za preskrbo s pitno in sanitarno vodo, tudi edini vir za gašenje. Zato nam dobro vzdrževano hidrantno omrežje, z zadostno količino vode in pritiska, predstavlja najpomembnejši vir vode za gašenje. Zahteve za hidrantno omrežje v strnjenih naseljih so, da nam le ta zagotavlja vsaj 10 litrov vode na sekundo pri dejanskem tlaku 2,5 bara na mestu odvzema. V industrijskih in v javnih stavbah z veliko požarno obremenitvijo je pogosto zahtevano interno ali suho hidrantno omrežje. Pomembno nalogo pri požarni zaščiti imajo vgrajeni sistemi za gašenje z vodo. Uporabljamo jih za zaščito prostorov in naprav, ki se lahko brez škode gasijo z vodo. Največ so v uporabi sprinkler in drenčer sistemi, ki jih uporabljamo predvsem v industrijskih in v javnih objektih. Da pa vsi ti sistemi aktivne požarne zaščite delujejo, moramo poskrbeti za zadostno in konstantno količino vode, ki jo v te sisteme dovajamo iz vodovoda, višinskega rezervoarja ali bazena s črpališčem za vodo. Skrb za vir gasilne vode je tema tega seminarja.

Ključne besede: požarno tveganje, projektna dokumentacija, požarnovarnostni ukrepi, konstrukcija, aktivna in pasivna požarna zaščita, hidrantno omrežje, vgrajeni sistemi, sprinkler sistem, drenčer sistem, vir gasilne vode

Abstract

Fire hazard is greater now than ever before. This is a result of new building materials (synthetic materials, which cause poisonous gases and smoke in fires), bigger buildings, increased traffic intensity, overpopulation, etc. All of the above has caused adoption of new laws, new technologies and methods in the field of fire protection. New materials are also being used, with new fire protection standards. Fire protection must be both passive and active. Most urban areas in Slovenia have a public water supply network, which is not only used for drinking and sanitary water, but also as the only resource for fire extinguishing. This is why a well maintained hydrant network with sufficient amount of water and pressure is the most important resource for fire extinguishing. A hydrant network in a condensed urban area must ensure at least 10 liters of water per second at the actual pressure of 2.5 bar. In industrial and public buildings with a large fire burden and high risk of fire, an internal or dry hydrant network is often required. Stable water-extinguishing systems have an important role in fire protection. They can be used for protection of devices and areas, in which a fire can be safely extinguished with water. Sprinkler and drencher systems are most commonly used, especially in industrial and public buildings, where there are many people. A reliable operation of these active fire safety systems requires sufficient and constant supply of water. Care for the fire water is the topic of this seminar.

Key words: fire hazard, project documentation, fire safety measures, construction, active and passive fire protection, hydrant network, stable systems, sprinkler systems, drencher systems, source of the fire water