

332. DEPOSITION AND CHARACTERIZATION OF CHROMIUM NITRIDE COATING ON AISI 420 STEEL

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This paper deals about the analyzation of non-coated and coated Chromium nitride on AISI 420 steel die for EPDM rubber component. CrN was coated on AISI 420 steel through cathode arc vapor deposition technique CrN coating is promising for processional forming and molding. In this paper, the importance of chromium nitride coating was proved successful for hardness, oxidation and corrosion resistance of AISI 420 steel. The properties and characteristics of chromium nitride coating were analyzed by XRD, SEM, scratch testing, hardness testing. The CrN coating on AISI 420 steel die has more life time when compared to non coated

Keyword: EPDM, CrN coating, XRD.

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