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(  $\text{g/cm}^3$  )

(Nilsen & Landel, 1994) (Behnia,2007)

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Nilsen & Landel, )

(1994

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(English et al.,1997)

(Felix et al.1993)

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| ASTM-D790  |
| ASTM-D638  |
| ASTM-D256  |
| ASTM-D2240 |

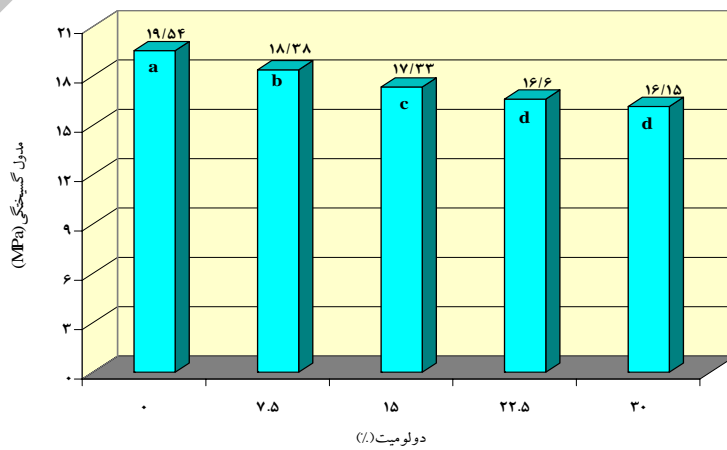
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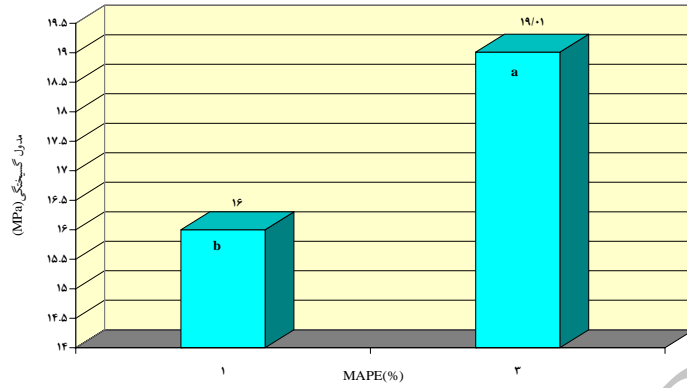
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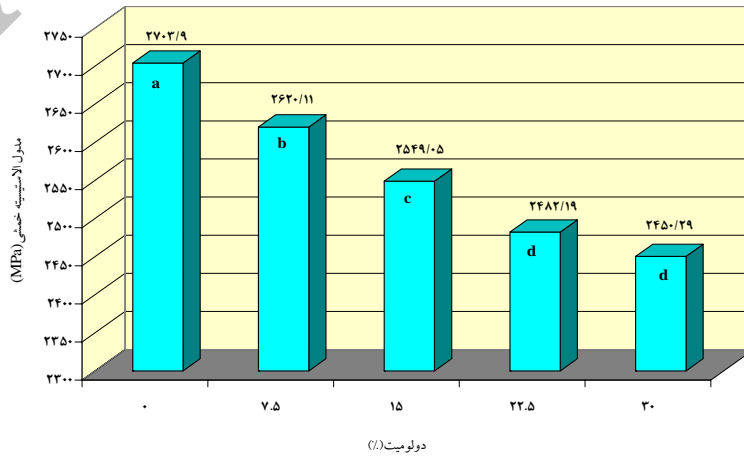


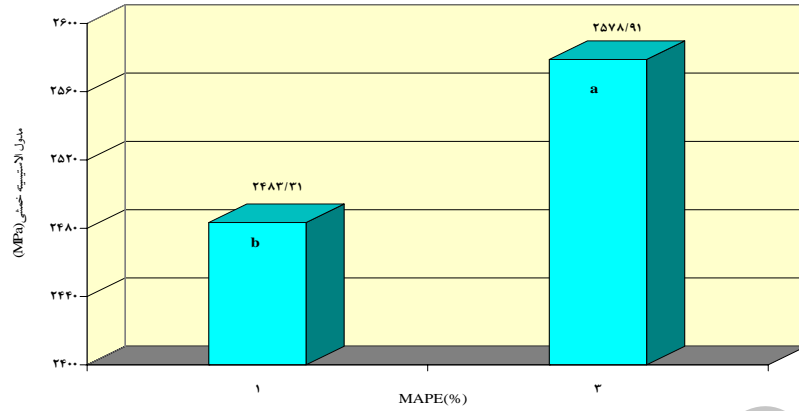
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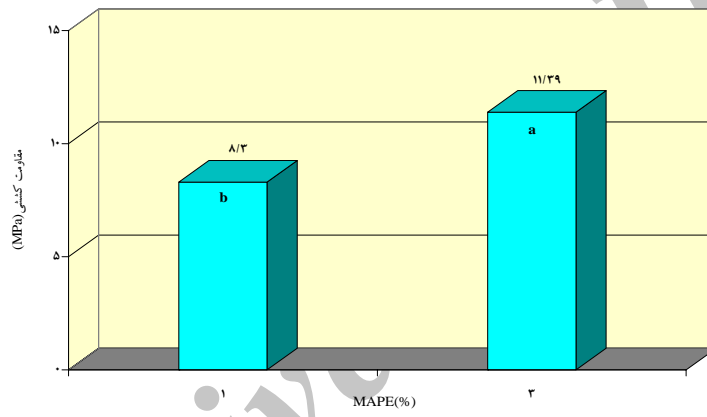
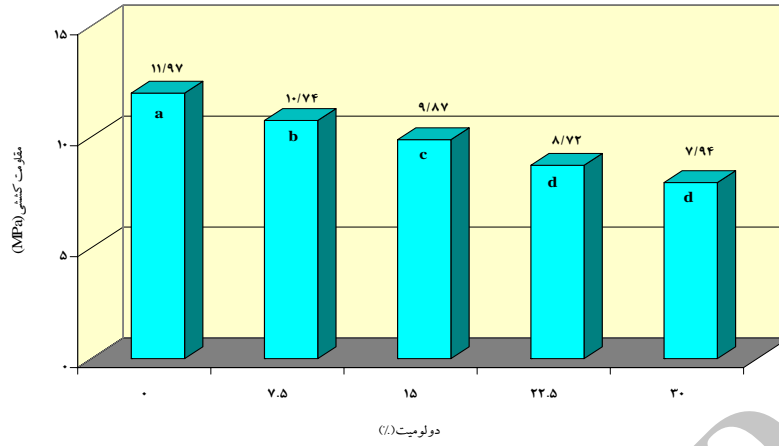
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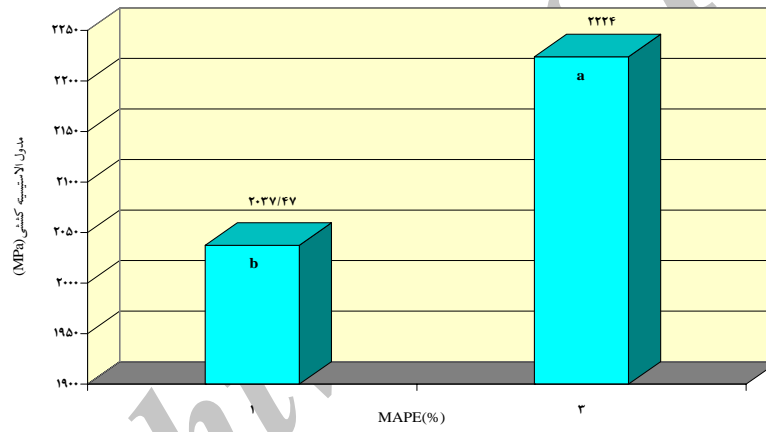
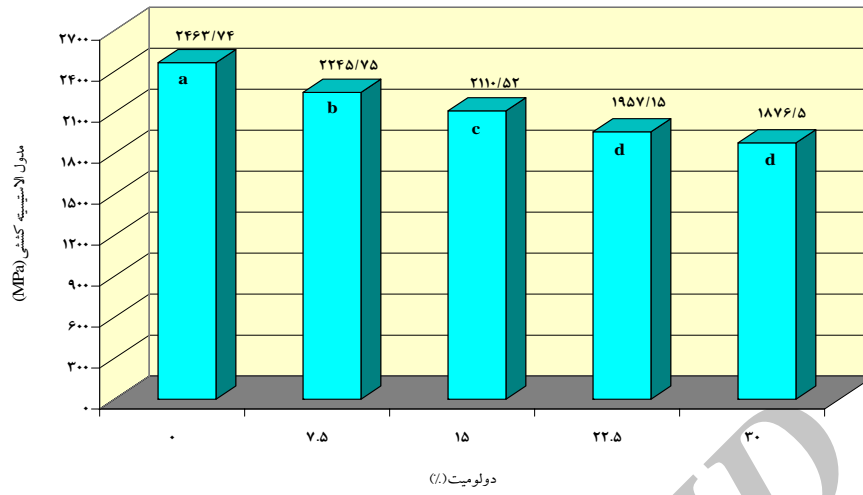


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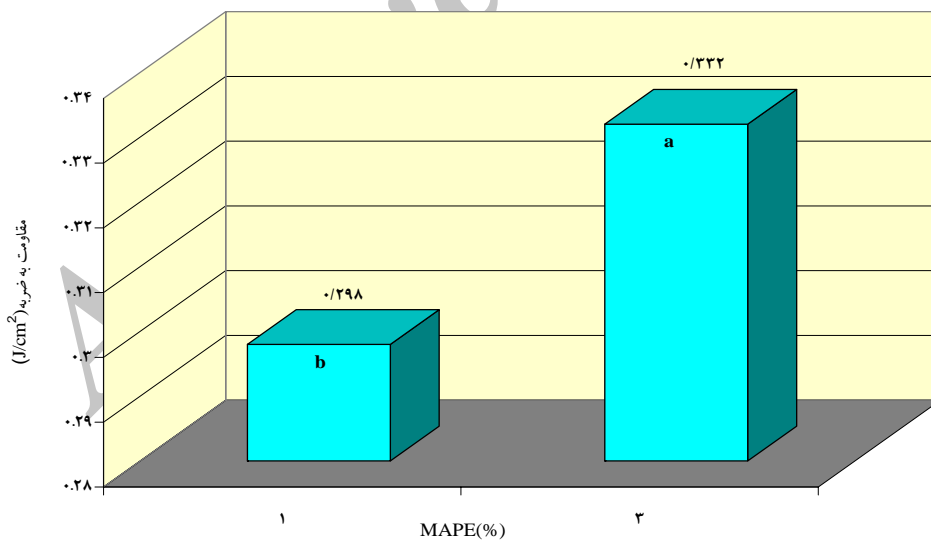
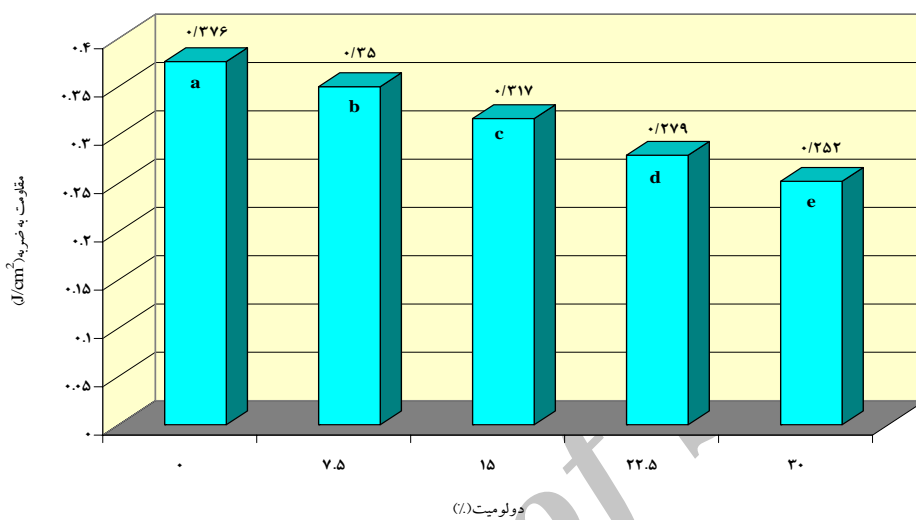


| Sig | F  | M.S | df | S.S |       |
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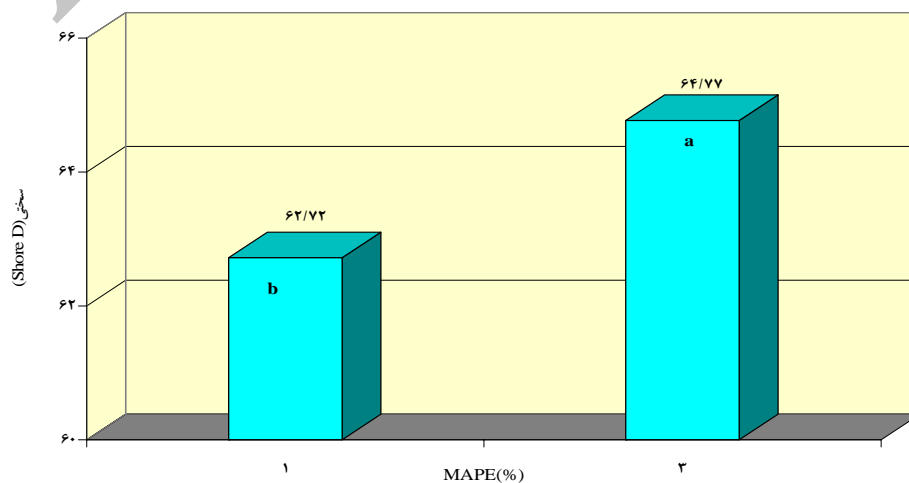
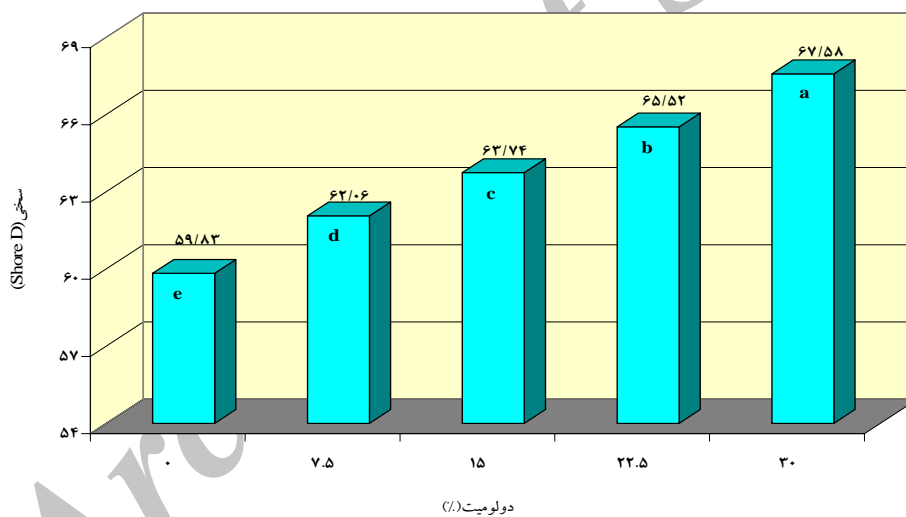
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| / ns | / | / × |    | / × | * MAPE |
|      |   | / × |    | /   |        |
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| Sig  | F | M.S | df | S.S |       |
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g/cm<sup>3</sup>)

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(Touyserkani,2003)

(English et al.,1997)

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Felix et )

(al.,1993

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<sup>1</sup> English  
<sup>2</sup> Felix

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(Behnia,2007)

(Touyserkani,2003)

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## Influence of Mineral Filler (Dolomite) and Coupling Agent on Mechanical Properties of Beech Wood Flour-Polyethylene Composites

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### Abstract

In this research, the effect of Dolomite mineral filler on mechanical properties of composites produced from beech wood flour and polyethylene using hot pressing method was examined. In order to evaluate the effect of coupling agent on bonding between cellulosic fibers phase and the matrix, two levels (1%, 3%) of polyethylene grafted with maleic anhydride were used. Standard experimental samples were prepared and properties such as static bending, tension, impact and hardness, were measured. The results showed that, when the mineral material content was increased, all mechanical properties except hardness decreased. In principle, addition of MAPE to the compound improved mechanical properties.

**Keywords:** Beech Wood Flour-Polyethylene Composite, Dolomite, Maleic Anhydride Polyethylene, Mechanical Properties