
*

(// : // :)

()

DIN ISO

)

(

() :

...

()
()

.()

.()

()

* *

(())

)

%
% (

.()

	ME
	HPL
) (N
	WA
	TS
	IB

.()

.()

) ()
(

DIN

Burkle – LA

ISO

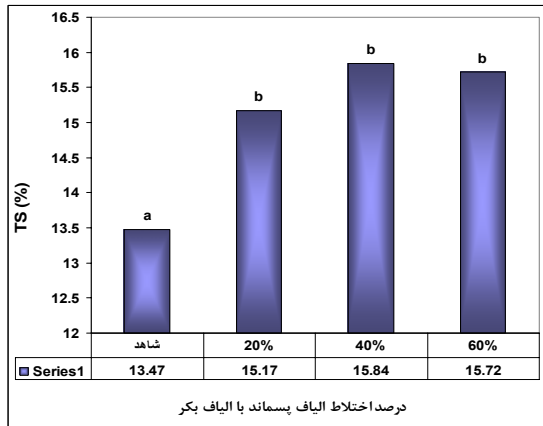
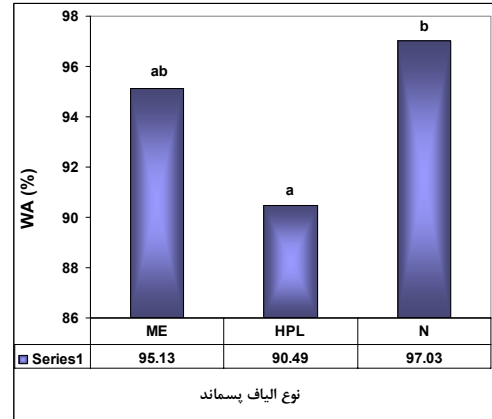
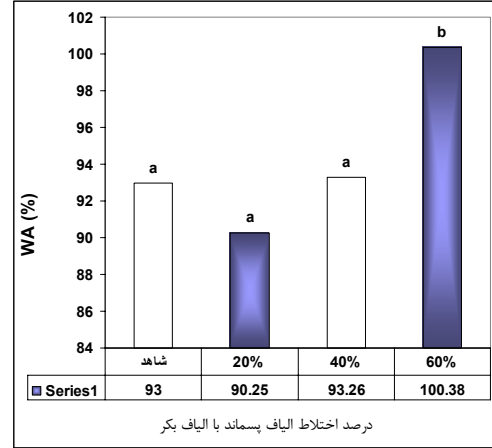
...

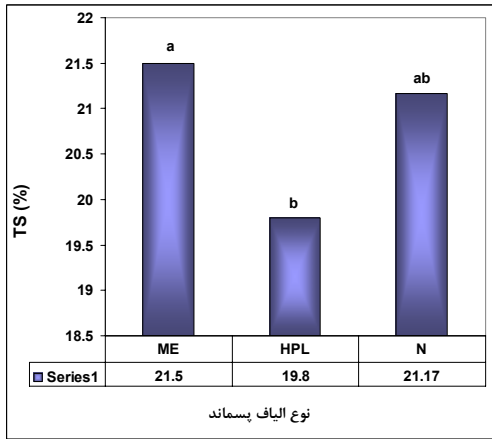
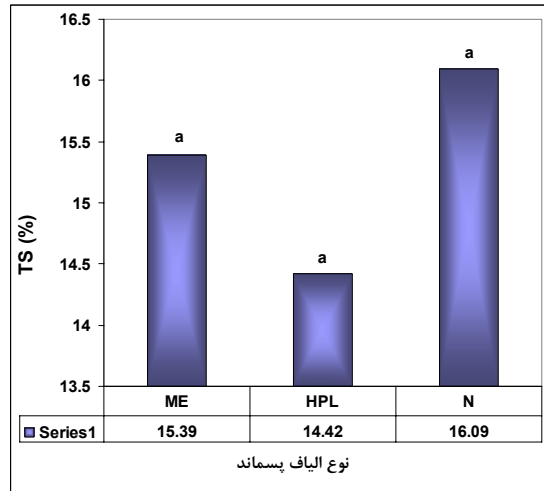
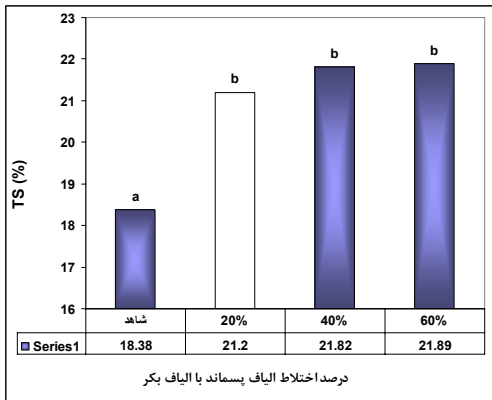
.()

.()

.()

.()



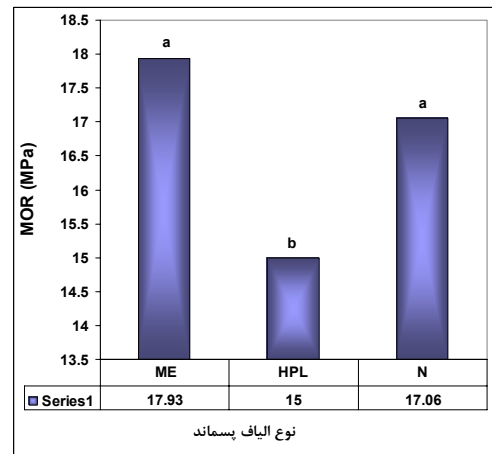
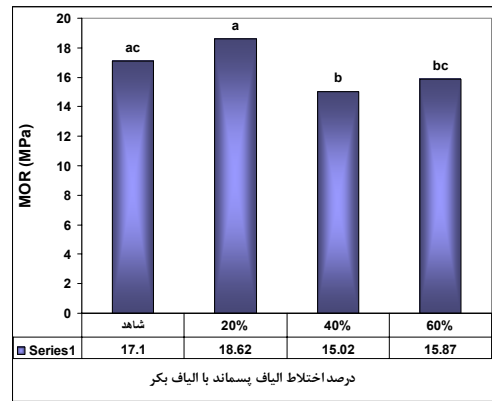
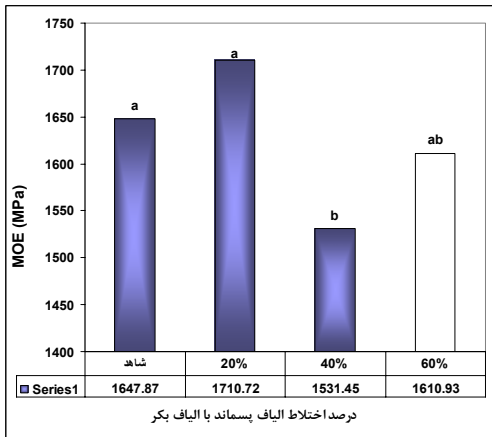


()

()

()

()



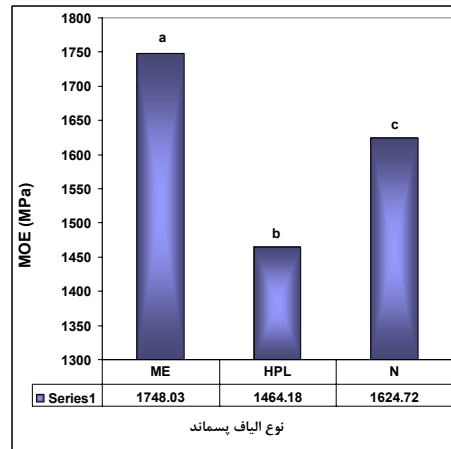
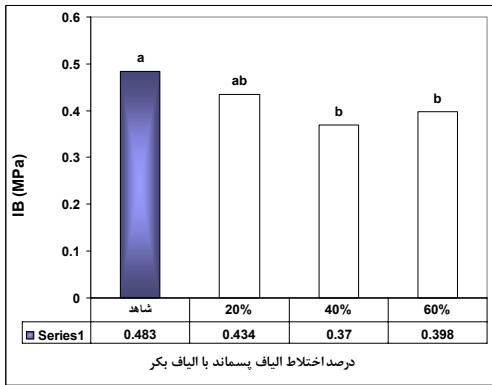
()

()

()

()

()



()

(.)

(.)

()

(.)

(.)

()

- 4- Czarnecki, R., 2003. The Use of Recycled Board as the Substitute for articles in the Centre Layer of Particleboard, *Wood technology*, 6(2):76-84
- 5- Hasim, R., 2005. Some of Properties of Flame Retardant MDF made from Rubber Wood and Recycled Containers Containing Aluminum Trihydroxid, *Biosource Technology*, 96(3):1826-1831
- 6- Pizzi, A., 2004. Recycling Melamine–Impregnated Paper Waste as Board Adhesive, *Holz als Roh*, 62:419-423
- 7- Roffael, E., 2003. MDF Board from Recovered OSB, *Holz als Roh*, 61(2):390-391

Investigation on possibility of utilization of MDF residues in its manufacturing process

S. Moradikia^{*1} K. Doosthoseini² and A. Jahan Latibari³

¹ Former graduate student, University of Tehran, I. R. Iran

² Professor, Faculty of Natural Resources, University of Tehran, I. R. Iran

³ Assistant Prof, Islamic Azad University, I. R. Iran

(Received: 15 April 2007, Accepted: 23 April 2008)

Abstract

In this study, possibility of using MDF wastes in MDF reproduction has been studied. Kinds of MDF wastes (HPL laminated, Melamine laminated and none laminated MDF wastes) and combination percent of MDF waste fibers with virgin fibers from MDF factory are assumed as variable factors in this research. After fabricating of MDF samples in laboratory conditions, the physical and mechanical properties of samples measured on the basis of the international standards. On the whole, results show that with increasing of average combination percent of waste MDF fibers, physical properties of MDF panels (especially thickness swelling) increase also. On the other hand, increasing of average combination percent of waste MDF fibers has definite effect on mechanical properties at 40 percent only. Based on the results, use of melamine laminated waste MDF and none laminated waste MDF is a most applied method in order to recycling of the MDF wastes.

Keywords: Medium density fiberboard, Waste MDF fibers, HPL laminate, Melamine laminate, Mechanical properties, Physical properties