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عنوان مقاله:

Experimental Investigation on Flexural Properties of Sandwich Panels with FML Face Sheets Reinforced by SMA wires

محل انتشار:

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خلاصه مقاله:

Nowadays, sandwich composite panels are widely used in various industries like aerospace, construction, shipbuilding, armors due to their specific strength and stiffness. Because of the materials which are used in these kinds ofstructures, many useful properties can be achieved. Sandwich panels which investigated in this study consist of FMLface sheets reinforced by shape memory alloy (SMA) wires bonded to PVC foam. Three types of sandwich panels aremade including panels without SMA wire, two SMA wires with 0% pre strain and two SMA wires with 5% pre strainfor the same cross section. Due to the significant bending strength in structural applications, the specimens aresubjected to flexural test according to ASTM standards. The results represent advantage effect of SMA wires .oncomposite sandwich panel s strength. The details of the results are presented in the full length paper

كلمات كليدى:

Composite Sandwich panel, FML, SMA, Bending test

لینک ثابت مقاله در پایگاه سیویلیکا:

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