POLITEKNIK MALAYSIA

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	DTP
Jabatan *Department*	KEJURUTERAAN MEKANIKAL
Semester/ Tahun *Semester/ Year*	LIMA
Tajuk Projek *Project Title*	THE STUDY OF IMPACT TEST ON 'COCOS NUCIFERA' COIR COMPOSITE FOR SHIN PAD APPLICATION
Jenis Projek *Type of Project*	PENYELIDIKAN
Kategori Kluster Penyelidikan *Category/ research Cluster*	SAINS SOSIAL
Ahli Kumpulan *Group member*	1. MUHAMMAD ABDIN SHAKIRIN BIN MOHD JOHARI 991205-04-5035 2. NUR NADHIRAH BINTI YUSRI FAIZAL 990228-10-5016 3. 4. 5.
Penyelia *Supervisor*	NOR HISHAM BIN SULAIMAN 860507-30-5429
Penyelia Bersama *Co-Supervisor*	
Abstrak *Abstract*	The paper focuses on the mechanical characterization of composite material made of epoxy resin reinforced with coconut coir. The mechanical behavior of composite material was analyzed by using impact test (Charpy&Izod). Suitable with the environment of the world right now and the demand of product that towards to green technology and easily disposed for reducing waste. Coconut coir also one of the best composite. For this project, the coconut coir was covered with epoxy resin to amplify the strength through the process of hand-lay-up method. This project was applied with the Impact test that is Charpy (ASTM D6110) and Izod (ASTM D256) to measure the mechanical properties of energy absorption. The 1x1 and 2x2 woven coconut coir that laminated with epoxy resin

	that sized 64mm x 12.7mm x 3mm has been tested. It is found that the woven coconut coir with 2x2 specimen in the Charpy and Izod tests give the highest value, it is 3.46 joules energy absorption more than the 1x1 woven coir specimen just only 3.25 joules energy absorption also in both test. It is shown that when the number of woven coir increases, the impact absorption also increase.
Keyword *Keyword* (max 5 word)	Impact test on sample of woven coir.
Objektif Projek *Project Objectives*	i.To study the effect of impact energy from various type of woven coir. ii.To analyse and produce a shin pad based on the best woven coir result.
Skop Projek *Project scope*	To achieve project objectives, the scope of our project includes the following items : i.Only impact test will be tested toward the material. ii.The parameter involved was the number of woven. iii.A prototype of shin pad will be produced from the testing result.

IP No		
Dapatan *Finding* (*500 words max*)	Result impact test	
Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	Add more strips of coconut fibre 3x3, 5×5 or change the angle of woven to 45°.	
Gambar berkaitan projek *Picture related to project* (700kb)		
Rating/Level	JABATAN	

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Borang ini perlu diisi oleh pelajar dan dihantar kepada penyelia/ penyelaras projek dalam bentuk hardcopy dan softcopy (borang LAMPIRAN J) dan gambar hasil projek dalam format jpeg/bitmap) bersama laporan akhir dan hasil projek.