Categorie Premio	Accessibilità	Sostenibilità	Qualità della vita

Product Name	CPR pad
Designer	Ryan Helps
Company Name	De Montfort University (university project)
Entire Address	Adress... Faculty of Art + Design De Montfort University The Gateway Leicester City…leicestershire.....Post code.... LE1 9BH.....Country …England
Telephone	+44 (0) 116 257 7570
E-mail	mmarsden@dmu.ac.uk
Website	
Italian Dealer	
Entire Address	Adress……..ZIP Code…….. City……..... State/Province …… Country ……..
Telephone	
E-mail	
Website	
Referring contact for the Award	Ryan Helps
Company	N/A
Telephone	0116 2696277 07590574852
E-mail	Ry designer@hotmail.co.uk
Referring contact for possible exposition in April	As above
Company	
Telephone	
E-mail	

Categorie Premio	Accessibilità	Sostenibilità	Qualità della vita

Description of innovation social values - product category - formal and functional features - problems solved by innovation - user - field of application	-Healthcare, public heath and safety, -90,000 people die of Heart attack every year in the UK alone. -Three main problems with performing cardiopulmonary resuscitation; people, public and sometimes healthcare professionals (JAMA medical research) do not; 1-compress the chest in the correct position on the body, 2-compress the chest hard enough (or too hard), 3-compress the chest at the correct rate per minute. -Form and graphical **communication** of product communicates to the user how and where the product needs to be positioned and aligned on the victim/patients body. Product needs to be in the centre of the chest, product has an extruded form on the bottom to help it sit in between the chest on the sternum, the wing like forms help guide the users positioning of the product towards the nipples, which in turn ensures the user will compress between the nipples in the centre of the chest, as the current resuscitation guidelines state you should. The product has an over moulded mechanism, which when compressed by the user at the correct force/depth will 'click'; this is the users **feedback** to tell them they have compressed the chest at a sufficient force. The product has an on/off button, this turns on a light, (again with graphical **communication** to say what it is for, e.g. push) this flashes at the correct rate of compression (approx 2per second) so that the user is compressing the chest fast enough. -user; public sector, healthcare professionals, training purposes, trained first aider. -in public places, e.g, next to fire extinguishers, workplace, hospitals elderly homes...
Description of technical features - operations - technology	-1shot over moulded exterior form, silicon allows product to sit over any body shape. -internal over moulded mechanism; consists of two snap fit injection mouldings (allows for the pressing to have its own air pocket to compress and retract within), containing a spring steel pressing. -Pressing is based on a jam jar lid type principle of operation, so when it is compressed sufficiently enough, it will click (providing the user with there feedback), then when released it pops back to its original position ready to be compressed again. -button, simple circuitry, encased in two injection mouldings, one injection moulded button, mouldings are snap fittings, which are able to be taken apart to replace battery, or unit can be discarded and replaced entirely. -scaleable technology, the product is based on the average heart attack victim, the product could be scaled down for children/schools etc.
Dimensions	H- 228mm W- 326mm D- 31mm
Materials	Outer; 40 shore silicon (white) Mechanism casing (and button); polypropylene (possibility for recycled material) Internal pressing; spring steel
Certifications	None applied for.
Benefits for environment	-Product primarily is entirely mechanical, rather than being a heavily electronically based design, which costs more money, more energy, more components, and does not enhance the products performance -Product uses minimal material, components, and minimal operating energy. -several components could be manufactured in recycled material.
Benefits for human being	Product can prevent sever injury to patient/victim; correct positioning stops ribs being broken, prevent the xyphoid process being compressed on which causes major organs to be ruptured, greatly decreasing the patients chance of survival. Prevent brain damage, by correct compression rate + force, the brain is nourished by sufficient blood flow. Allows untrained persons to have a greatly increased chance or saving a patients life, or preserving it until medical help arrives. **Simple effective CPR can save lives**.