designsafe Report

Application: Helmet Temperature Sensor Analyst Name(s): Grace Murray, Tyler Perez, Norman Luc

Description: A system designed to monitor a football player's core Company:

temperature

Product Identifier: Facility Location:

Assessment Type: Detailed

Limits:

Sources:

Risk Scoring System: ANSI B11.0 (TR3) Two Factor

Guide sentence: When doing [task], the [user] could be injured by the [hazard] due to the [failure mode].

Item Id	User / Task	Hazard / Failure Mode	Initial Assessme Severity Probability	ent Risk Level	Risk Reduction Methods /Comments	Final Assessme Severity Probability	nt Risk Level	Status / Responsible /Reference
1-1-1	Football Player normal operation	electrical / electronic : energized equipment / live parts	Serious Likely	High	warning label(s), instruction manuals	Serious Unlikely	Medium	
1-1-2	Football Player normal operation	electrical / electronic : lack of grounding (earthing or neutral)	Moderate Unlikely	Low	Other design change - battery holder provides a ground, warning label(s)	Moderate Remote	Negligible	
1-1-3	Football Player normal operation	electrical / electronic : shorts / arcing / sparking	Moderate Likely	Medium	other design change - Battery holder prevents shorts	Moderate Unlikely	Low	I
1-1-4	Football Player normal operation	electrical / electronic : improper wiring	Moderate Unlikely	Low	warning label(s)	Moderate Remote	Negligible	
1-1-5	Football Player normal operation	electrical / electronic : water / wet locations	Serious Unlikely	Medium	warning label(s)	Serious Remote	Low	I
1-1-6	Football Player normal operation	electrical / electronic : overvoltage /overcurrent	Moderate Unlikely	Low	warning label(s)	Moderate Remote	Negligible	
1-1-7	Football Player normal operation	electrical / electronic : power supply interruption	Moderate Unlikely	Low	warning label(s)	Moderate Remote	Negligible	
1-1-8	Football Player normal operation	noise / vibration : noise / sound levels > 80 dBA	Moderate Unlikely	Low	warning label(s)	Moderate Remote	Negligible	

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1-1-9	Football Player normal operation	noise / vibration : equipment damage	Minor Likely	Low	warning label(s), instruction manuals	Minor Unlikely	Negligible	
1-1-10	Football Player normal operation	Other : Mold/Bacteria	Serious Likely	High	warning label(s), instruction manuals	Serious Unlikely	Medium	