

Product Contract

Blue

Product description: Variable buoyancy backboard for easier spinal injury water rescue

Intended customers: Public and commercial pool operators

Market: Water safety and rescue

	Customer Need	Product Attribute/ Metric	Units	Engineering Specs/ Values	Owner
Operation and Usability	Can be easily carried by a single lifeguard	Mass of board on dry land	lb	less than 18	Sam
	Can be easily positioned under victim during rescue	Minimum positive buoyancy	lb	acceptable range: 5-20	Mary Beth
	Inflation controls can be operated by a single lifeguard	Controls can be operated with one hand	binary	yes	Alex
	Inflation controls can be operated from either side of the board	Inflation/ deflation controls on both sides	binary	yes	Ryan
	Reaches maximum buoyancy quickly	Time to reach maximum buoyancy	seconds	less than 5	Chris
	Can support victims of varying weight	Maximum buoyancy	lb	at least 45	Levi
	Can support heavy patients out of water	Load capacity	lb	at least 400	Alice
	Intuitive to use	Time for user to activate	seconds	less than 10	Archi
	Easy for new lifeguard to master	Training time	minutes	less than 5	Archi
Maintenance and Financial	Easy to reset between usages	Reset time	minutes	less than 10	Jordan
	Provides indication of current product operability	Status indicator	binary	yes	Chris
	Inexpensive to maintain	Running cost	dollars per reset	less than 10	Chris
	Affordable to purchase	Initial product price	dollars	less than 1000	Sue
Medical	Allows for CT of patient while on board	CT translucent	binary	yes	Anup
	Sanitary	Can be decontaminated	binary	yes	Sue