

SUMMARY OF FORMULATION LOGIC FOR AATRIZINVENTOR SOLUTION

Work Paper

If you applied summary or abbreviated descriptions, have them available to review this logic.

Objective of the Innovation Challenge

Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch

Evaluated Object S1

CARGO SPACE WITH WATER, (Stationary relative to the Ferry) - Type: Stationary

Object S2 interacting with S1

FERRY (stationary relative to the Cargo Space) - Type: Stationary

Physical Variable or Characteristic

Ability to avoid impact of water entry

the undesirable

With Less Ability to avoid impact of water entry there is undesirable effects, then there is More difficulty to :

Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch

the desirable

With More Ability to avoid impact of water entry there is desirable effect, then there is More ease to :

Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch

TRIZ Innovation Parameters Evaluated

TRIZ Innovation Parameters	Undesirable Effect (UDE)/ Desirable Effect (DE)	Evaluate
2. Heaviness of stationary object	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Increased weight resulting from water entry</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. Volume of stationary object	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Increased cargo volume due to water entry</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
12. Shape / composition / configuration	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is Less Appropriate form to handle water entry</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
24. Loss of Information	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Loss of information due to not detecting water entry</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

TRIZ Innovation Parameters	Undesirable Effect (UDE)/ Desirable Effect (DE)	Evaluate
29. Fulfillment of desired outcome	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is Less Compliance with load balance due to water entry</p> <p>Effect : undesirable</p>	<input data-bbox="1360 216 1471 302" type="checkbox"/> Yes <input data-bbox="1360 306 1471 392" type="checkbox"/> No
31. Object-generated harmful factors	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Harmful factors generated by water entry (loss of stability)</p> <p>Effect : undesirable</p>	<input data-bbox="1360 594 1471 680" type="checkbox"/> Yes <input data-bbox="1360 684 1471 770" type="checkbox"/> No
35. Adaptability or versatility	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More difficulty to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Adaptability to variability of water behavior</p> <p>Effect : undesirable</p>	<input data-bbox="1360 966 1471 1052" type="checkbox"/> Yes <input data-bbox="1360 1056 1471 1142" type="checkbox"/> No
34. Ease of change, repair or maintain	<p>CARGO SPACE WITH WATER, (Stationary relative to the Ferry) : There is More ease to Improve Ferry stability affected by water entering the cargo space due to the breakage of the locking pin of the cargo space inspection hatch because there is More Ease to change to avoid the impact of water entry that affects the Ferry</p> <p>Effect : desirable</p>	<input data-bbox="1360 1337 1471 1423" type="checkbox"/> Yes <input data-bbox="1360 1428 1471 1514" type="checkbox"/> No