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 Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates

Evaluated Object S1

STRIPPING ROBOT - Type: Moving

Object S2 interacting with S1

COPPER SHEETS - Type: Moving

Physical Variable or Characteristic

Stripping quality

the undesirable

With Less Stripping quality there is undesirable effects, then there is More difficulty to:

Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates

the desirable

With More Stripping quality there is desirable effect, then there is More ease to:

Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates

TRIZ Innovation Parameters Evaluated

| TRIZ Innovation Parameters | Undesirable Effect (UDE)/ Desirable Effect (DE) | Evaluate |
|---|--|----------|
| 10. Force/ Intensity | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is Less Force of stripping Effect: undesirable | Yes |
| 12. Shape / composition / configuration | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is Less Appropriate form to stripping Effect: undesirable | Yes |
| 14. Strength / Resistance | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is Less Strength of stripping Effect: undesirable | Yes |
| 26. Quantity of substance / Capacity gains | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is Less Amount of stripping completed Effect: undesirable | Yes |
| 29. Fulfillment of desired outcome | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is Less Compliance of desired stripping Effect: undesirable | Yes |
| 31. Object-generated harmful factors | STRIPPING ROBOT: There is More difficulty to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is More Harmful factors generated to copper sheets Effect: undesirable | Yes |

| TRIZ Innovation Parameters | Undesirable Effect (UDE)/ Desirable Effect (DE) | Evaluate |
|----------------------------|--|----------|
| 27. Reliability | STRIPPING ROBOT: There is More ease to Improve Robotic stripping of copper sheets from titanium plates affected by strong adhesion of the sheets to the plates because there is More Productivity of stripping Effect: desirable | Yes |