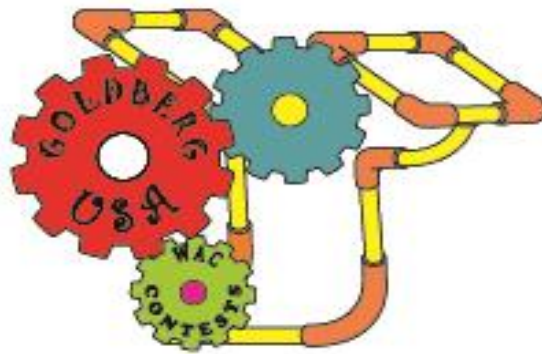




**Unlimited Imagination & Creativity!
Team Work! Problem Solving!**



2023 CREDECA Machine Challenge



World Association of Creativity

Machine Challenge

Mission detailed regulations

■ Performance ■

1. Final Mission : Putting the 'Tea bag'
 - a. The tea bag should be soaked in a teacup.
 - b. You don't need water in a teacup.
 - c. Tea bags are commercially available and must be identifiable by the brand or trademark.
 - d. The final mission shall be operated at the end after performing the following grade-specific steps.

2. The elementary school section shall perform at least five steps, at least six steps in the middle school section, and at least seven steps in the high school section.

Level Qualification	Elementary school section	Middle school section	High school section
Requisition steps	5 or higher	6 or higher	7 or higher

3. The device should be made with only the 'Goldberg Creation King' set, additional materials, and tools presented.

[Additional materials, and tools list]

Item Contents	Name	Standards	Number	Name	Standards	Number	
Materials	1. thread	X	Unlimited	2. cardboard	quarto paper	1 sheet	
	3. tongs	X	Ten	4. paper	A4	4 sheets	
	5. clip	X	1 carton	6. straw	X	Ten	
	7. beads	X	Unlimited	8. pearl pin	X	1 carton	
	9. foam board	half of the quarto paper	2 sheets	10. magnet	X	Six	
	11. tape	X	One	12. empty can	X	Two	
	13. rubber band	X	Ten	14. paper cups	X	Ten	
	15. glue (adhesive)	X	One	16. wooden chopstick	X	5 pairs	
	17. spoon	X	Three	18. tape measure	3m or less	One	
	19. CD	X	4 sheets	20. balloon	X	Two	
	21. no more than 2 PET bottles - water must be sealed with the lid closed.						
	22. CREDECA Mechatronics set, a computer capable of coding						
	23. 1 tea cup						
	24. 1 tea bag						
equipments	1. scissors	3. punch	5. gloves(for protect)	No limit to the size and number of tools.			
	2. ruler	4. pencils	6. Protective mat				

■ Matters to Note

- All materials and tools required to build the device must be prepared by the team.
- Because all of what is presented in the 'list' is the basis of what is used in the actual device, it is possible to prepare a larger amount than what is presented.
- It is not necessary to use all the additional materials provided, and it is okay to prepare as much as necessary.
- Even if the specification (type) is prepared differently, it is recognized as the same material (e.g., if 10 "tongs" are used; 5 plastic tongs, 3 wooden tongs, and 2 metal tongs can be prepared.)
- Tools can only be used as its own function, not as part of the device

■ Production ■

1. The team should prepare the necessary manufacturing tools and materials separately and assemble all related devices by themselves.
2. It shall be manufactured within 1.2 m (horizontal) x 1.2 m (vertical) x 1.2 m (height).
This specification shall be observed even after the device is activated and shut down.
3. 'Step' refers to the conversion of energy from one movement to another.
When energy is successfully converted, it is recognized as a single step.
That is, when energy is converted but energy is not converted to the next step, it is not recognized as a 'step'. In addition, when several conversions are made with the same object or the same method, such as dominoes, even if 10 conversions are made, only one step is recognized.
4. The device must stand on its own without external help.
5. The preparation time is given 30 minutes at the venue. It should be done within the preparation time so that the work that has been made can be demonstrated.

■ Evaluation ■

1. If the steps are not performed successfully, the device can be repaired or re-operated by the team member. However, this is recognized as 'team member interference' and becomes an element of deduction (5 points per session) and all of this must be done within the two minutes given for demonstration.
2. Each stage shall be operated accurately to be verified by the judges.

■ Additional Information ■

1. Participating teams cannot talk or discuss with anyone other than the same team member at the start of the competition (Disqualification of points and disqualification when external assistance is detected)
2. Participants agree to use the team's photos or videos to promote the competition.
3. The task resolution plan for the finals does not need to be the same as the task

resolution plan for the preliminary round.

4. Questions can only be asked through the team leader or instructor.
5. Questions about qualifying competitions and finals can only be asked twice in a set form, and can be attached only by e-mail (credecawf@gmail.com). At this time, the file must specify the rating and affiliation.

(e.g. : Elementary_Shooting Star Team_Questionnaire.docx)

■ Evaluation Criteria ■

Category	Evaluation Elements		Score	Total	
Production	Step-by-step creativity of the device		1~15 pts	30 pts	
	Completeness of the entire device		1~15 pts		
Performance	Performed step by step	Elementary School	(Number of Successful Steps) × 10 pts	50 pts	70 pts
		Middle School	(Number of Successful Steps -1) × 10 pts		
		High School	(Number of Successful Steps -2) × 10 pts		
	Creativity in how to perform the final mission		10 pts		
	Final mission success or failure		10 pts		
Total Score			100pts		
Deduction factor	External Help	• External Help and Interference	a deduction of 50 pts from one pt		
	Mission accomplished	• interference by team members	5 pts off each case		