

Skimmer - Rules & Regulations for National Olympics

The Skimmer Olympics offers teams an opportunity to engage in a friendly competition with students from other cities using SAE International's – *A World In Motion*® Skimmer program.

Materials & Vehicle Specifications:

1. Skimmers in the competition must be constructed on site, the day of the event using materials supplied only in an official Skimmer kit. All materials will be made available for Student team use by the organizers.
2. Teams may build multiple Skimmer vehicles to use in different events.
3. Teams can use only one sail per vehicle as propulsion system.
4. Different sail sizes can be used for different events.
5. No propulsion system besides the Skimmer sails may be used.
6. The test Skimmer size should be as specified in the manual, sail size can differ.
7. Teams are not allowed to use any external material for the construction, decoration & preparation of the concept car in presentation round. Any such external material usage if found will lead to the elimination of team.
However, teams will be allowed to use external material for demonstrating the concept in front of the Judges. E.g. Tub with water, Wooden ramps, Tables, Rope, etc.
8. Tampering of sails will not be allowed for the event.
9. Any kind of foreign material impacting the propulsion system may lead to disqualification.

Race Lanes:

1. The floor or Table used for the Race lane should be made from PVC Floor Coverings commonly known as Vinyl Flooring (Residential or School flooring material), with Gloss finish laminates or with similar surface finish –No other surfaces like rubber matt, etc. can be used. Development board committee will reserve all the rights to certify the floor for National event.
2. Teams will have to perform on the assigned race lane for the competition. This can be either team specific lane assignment or event specific lane assignment.
3. The race lane will be 3 meters length by 2 meters wide. For all events, points will be awarded after the Skimmer comes to a halt with the position of 50%+ of the vehicle marking the point the skimmer has traveled except for the speed event where the time will be noted at 1m mark.
4. For the speed event, if the skimmer does not cross 1m mark the attempt will be declared invalid.
5. During any attempt by the team, if the skimmer does not move from the start point even after release, the attempt will not be counted and the team will be given chance to inspect their toy again. Minor repair will be allowed and should be done in front of track judges (no external help allowed).
6. If a skimmer leaves the confines of the lane, points will be awarded at the location of exit, as per track scoring guideline.
7. Skimmer when released from the Start position during Speed test should travel without tipping. Additional attempt will be provided if the Skimmer tips. If the Skimmer is found to tip regularly, the event will be disqualified for the team.

8. While performing on the track, teams will be allowed to replace the adhesive Tape in case the tape is not able to hold the sail motor in place because of the following reasons,
 - a. the Adhesive Tape is old & does not have proper adhesive property or
 - b. in case the Adhesive Tape loses its adhesive property because of the high ambient Temperature at the venue on the event day.

Note : Teams should use the Tape provided by the Track Judges only.

9. Teams will be given three attempts during the competitions. Marking system is as in the table given below. Please refer to **Skimmer Olympics – Track Description & Scoring Guide** for specific event scoring details.

| Sr.No. | Performance | Skimmer |
|--------|--------------|---------|
| 1 | Distance | 09 |
| 2 | Weight (G1) | 09 |
| 3 | Weight (G2) | 18 |
| 4 | Accuracy | 10 |
| 5 | Turn test | 10 |
| 6 | Speed | * |
| 7 | Presentation | * |
| Total | | 56 |

**** (i) Points will be awarded for the event to decide the Winner for the specific event only & the team will be awarded for the event category.***

**** (ii) The points for event no. 6 & 7 in the table above will not be considered for deciding the overall “AWIM Skimmer National champion”.***

Conduct of the Competition:

1. Points can be achieved in 5 different events. Performance events include distance, weight-carrying ability (G1 & G2), Accuracy and turn test to become overall National Champions.
2. Points can also be acquired in Speed event and in Presentation round for winning individual award category.
3. Weights for the weight-carrying ability event will consist of 2 & 4 washers which are provided in AWIM Kit stacked & taped in a cylindrical arrangement and should be fastened securely in the skimmer.
4. Teams will compete to acquire the highest number of total points.
5. Only Test Engineer (2 nos) will be permitted at the starting line; one to operate the fan and give directions to other to hold and launch the skimmer.

All teams will be given a specific amount of time to complete their 3 attempts per event. Any trials that are not finished during the allotted time will be forfeited.