SAEINDIA TIFAN 2023-24

Technical Inspection- Self Assessment Sheet

Team ID & Name		**Date:**
College/ University name		**Location:**
S.No	**Rules / Criteria/Questions/Checkpoints**	**Requirements met (Yes/No)**
1	Do all team members undertaking undergraduate degrees (B. Tech / B. E) with no postgraduate team members?	
2	Is SAE India Membership available for all team members?	
3	Maximum No of team members are 25, Minimum nos is 15 Nos	
4	Is there a faculty advisor available for the project?	
5	Does the team have a member from a farming background?	
6	Have video clips/photos been provided that cover students fabricating the equipment using the facilities available in the college?	
7	If team is utilizing outside facility for manufacturing any components, Appropriate documentation with consent and approval from Faculty and HOD is available	
8	Does the team have PPE (comprising of but not limited to - Safety cap, Safety shoes, safety goggles, gloves) with bills for atleast 3 team members?	
9	Has a design deviation report been submitted if applicable?	
10	Is the sapling tray standard per the rulebook?	
11	If the sapling trays are customized, does the team have a minimum of four customized trays available?	
12	Can the implement hold atleast 4 trays (2 would be in use and 2 would be in reserve) while functioning ?	
13	Is the machine provided with at least three tie-down points as per rulebook specifications to enable lifting with a crane or other means?	
14	Does the track (tread) width fall within the range of 1300 up to 1600 mm?	
15	Is the overall length of the machine less than 2500 mm?	
16	Is the attachment width less than 1800 mm?	
17	Is the overall height of the machine less than 2000 mm?	
18	Is the attachment kerb weight less than 400 kgs?	
19	Is the attachment compatible with both ISO-730 CATI and CAT II hitch geometry?	
20	Is the team utlilizing PTO as a source of power?	
21	Is the team utlilizing Ground wheel as a source of power?	
22	Is the team utlilizing external battery as a source of power?	
23	Is the team using electric actuators?	
24	Is the team using hydraulic actuators?	
25	Does the implement has PLC based embedded system?	
26	Does the implement has Arduino based embedded system?	
27	After the implement is attached and ready to perform work, does it not have any connection/controls from the tractor other than speed change?	
28	Does the maximum voltage on board of any machine at any point not exceed 48 Volts, 88Ah nominal? (this includes on-board batteries, external batteries, Super Capacitors).	
29	Are the batteries mounted with sound engineering practice and not come loose during a roll-over of the machine?	
30	Has the team done any trial run attaching the implement with any tractor to ensure the implment does't interfere with any of the tractor components while functioning	
31	Is the battery safely placed and concealed to avoid contact with liquids?	
32	Are sealed connectors used for inline and at device termination?	
33	Are the wires properly insulated and not visible outside?	
34	Bare wires are not visible outside.	
35	Does the implement have safety cut-off switch for the battery?	
36	Does the implement use pneumatics for any operation?	
37	Is the team using trailing tires as attachment ?	
39	Does the implement have machine number mentioned at the rear & side of the implement?	
40	Is the machine number placement meet the specifications (size 25x105 mm & number painted with black letters on white background)?	
42	Does the structural members (primary/secondary) meet the minimum specifications interms of size(1 in) and thickness (2mm)?	
43	Are the fastners used meet the rulebook specifications?	
44	Does the implement have guards available for all rotating components accesible/exposed from outside machine?	
45	Does the team have trolley available for movement of implement?	
46	Does the team have provision to add Event sponsors logo on their implement?	
47	Has the team implemented minimum radius of 20mm at all sharp edges/points to prevent injury?	
48	Are all objects in the implement connected and secured safely to avoid looseing and falling off?	
52	Is the implement free from any leakage or seepage of fluid?	
53	Are material test reports or certifications specifying the carbon content and yield strength (primary structural members) available on demand by the technical inspection team at the site?	
54	When the machine frame is made of members which are made of multiple tubes joined by welding, is its reinforcement done using a welding sleeve?	
55	Are the sleeves designed to fit tightly on the inside of the joint being reinforced?	
56	Are external sleeves used in the machine frame?	
57	Did the team use any exernal sleeves for joining drives components?	
58	If a section other than a circular tube is used, have bending stiffness and bending strength calculations been done, and do they meet the rule book requirements?	
59	Are any rotating and/or reciprocating parts fitted with body panels/protective shields without hampering the functionality of the machine?	
60	Are the above panels securely mounted to the frame using sound engineering practices, without using zip ties/tie bands?	
61	Is the material for the shield steel made with a minimum thickness of 1.5 mm?	
62	Do threaded fasteners used have a minimum of two threads coming out of nuts?	
63	Do threaded fasteners used have a minimum of SAE Grade 5/Metric Grade 8.8?	
64	If any steps/footrest are used, are they rigidly attached to the implement?	
65	Are provisions made for jack points in the implement frame in case of any repair work?	
66	Does team has any innovative feature in their implement?	

Remarks:

Sr. No.	**Judge Name, Organization name**	**Signature**
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