

30lb Sportmans Class:

The rules in this section apply only to the 30lb Sportsmans Class. These rules do not apply to the full combat 30lb Featherweight class or any of the other weightclasses. A bot that qualifies for the Sportsman's Class is not restricted to that class. It may be entered in the Open Class if the builder desires. However you may not enter the same bot in both the Open and Sportsman's classes during the same competition.

The rules listed below are not exhaustively written to account for every possible circumstance. We will do our best to explain our intent, and it will be your job to remain within that intent. If we feel that a design or feature is exploiting the intent of the rules or the spirit of the class, we will disqualify it without hesitation. Certain requirements or limitations are intentionally vague. You should not design your bot to push the limits of the rules. But rather, you should intentionally build with the following simple guidelines in mind:

Must have active weapon or device

Your bot must include an active weapon or device. These include but are not limited to lifters, hammers, clamps, spinning weapons (within limitations, see below), etc. Weapons such as a fixed spike that require the movement of the bot to function do not qualify as active weapons.

Nerc reserves the right to disallow any robot that is deemed to have an ineffectual or token weapon.

In summary the robot's drive train is not the weapon.

Wedges and wedge like features are now permitted in the sportsman class.

However wedges will now be divided into 2 types. Active and passive wedges. An active wedge is a wedge that is articulated in some means other than the drivetrain to control the target robot. A passive wedge is any wedge that does not fit into the active type.

Active wedges have no restrictions on shape or design.

Passive wedges are restricted in the following way. Each robot may only have a single passive wedge like feature where the leading of the wedge or tip of the wedge-lets form a single straight line. The other faces of the robot shall either provide a ½" ground clearance or be perpendicular within 1" of the floor.

Examples:

Dustpans made of a multitude of spikes (Megatron, passive forms of stinger the killer bees lifter forks) are now permitted

Multiangle plows like those of karcas or whoops(anti last rights attachment) would only be allowed if they complied with the ground clearance or perpendicular requirements on the side faces.

Biohazard skirts would not be allowed.

Tazbot outriggers would only be allowed if the tips formed a straight line. Otherwise the outriggers would need to comply with the clearance or perpendicular requirement.

Multi segment wedges like raging Scotsman or original sin are permitted.

Multi angle wedges like those on many vd type bots (Algos, Mr. Croup, Big Ripto, also riptoff and d2 kits) would only be allowed if the side angles complied with either the clearance or perpendicular requirements.

Do not attempt to skirt the spirit of the class or your bot will be disqualified.

Limitations on spinning weapons

Another goal of this class is to eliminate the high energy destructive spinning weapons and to encourage robots dedicating their weight allowance to more complex and creative weapons that typically cannot survive in the traditional weight classes. Weapons that have portions that are exterior to the robot envelope and rotate more than 360 degrees are limited to rotating at tip speed of less than 21ft/sec or storing no more than 200 joules of energy. Below is a table showing the different RPM limits of weapons of various weights and diameters.

Weight	Diameter															
	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"	15"	16"
0.5lb	44736	22368	14912	11184	8947	7456	6391	5592	4971	4474	4067	3728	3441	3195	2982	2796
1lb	31598	15799	10533	7900	6320	5266	4514	3950	3511	3160	2873	2633	2431	2257	2107	1975
2lb	22331	11166	7444	5583	4466	3722	3190	2791	2481	2233	2030	1861	1718	1595	1489	1396
3lb	18230	9115	6077	4557	3646	3038	2604	2279	2026	1823	1657	1519	1402	1302	1215	1139
4lb	15786	7893	5262	3947	3157	2631	2255	1973	1754	1579	1435	1316	1214	1128	1052	987
5lb	14119	7059	4706	3530	2824	2353	2017	1765	1569	1412	1284	1177	1086	1008	941	882
6lb	12888	6444	4296	3222	2578	2148	1841	1611	1432	1289	1172	1074	991	921	859	806
7lb	11932	5966	3977	2983	2386	1989	1705	1491	1326	1193	1085	994	918	852	795	746
8lb	11161	5580	3720	2790	2232	1860	1594	1395	1240	1116	1015	930	859	797	744	698
9lb	10522	5261	3507	2631	2104	1754	1503	1315	1169	1052	957	877	809	752	701	658
10lb	9982	4991	3327	2496	1996	1664	1426	1248	1109	998	907	832	768	713	665	624

If you have any questions about the legality of a weapon you can read or post on the NERC facebook group

<https://www.facebook.com/groups/NorthEastRoboticsClub/>

or email NERC: robotconflict@gmail.com

Standard NERC rules apply

Unless otherwise stated, all other standard NERC rules will apply. This includes walkers and their weight bonuses.

NERC reserves the right to alter these rules at any time.

If you are uncertain whether your bot meets the requirements of this class, it is suggested that you contact NERC officials prior to building or entering your bot. Otherwise there is a strong possibility that your bot will not be allowed to compete even if it is registered and present at an event.
