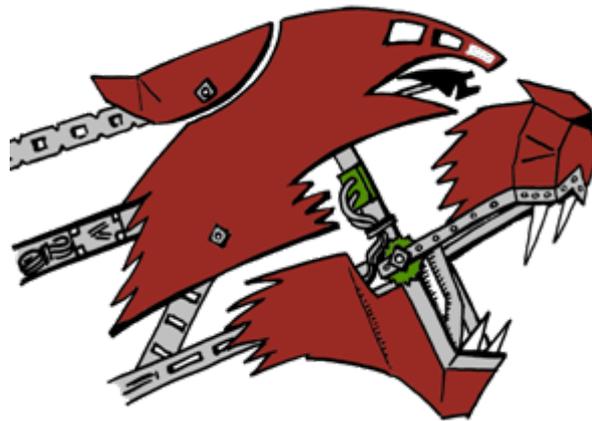




# **In The Name Of GOD**

## **Robo Skill Competitions Rule Book**



**League : Fighter Robots (Tv Show)**  
**Kerman- Iran**  
**2-6 MARCH 2020**

Version : 5\_2



## Introduction :

Warrior League competitions are held every year with teams from all over Iran and other countries in March. Wishing all teams success, the Executive Committee wants the teams to carefully studying the rules of the competition and obey the rules. Teams can contact the Executive Committee for more information and access to the rules of the tournament through the tournament site. The rules may change up to one week before the competition and the latest version is available through the competition site.

Registering and participating in the competition means accepting the rules and the teams are required to comply with the rules.

## League introduction:

In this league warrior robots compete in different weights. These robots are mobile base and are usually remotely controlled. Warrior robots usually have offensive weapons and defensive systems. Warrior robots are very dangerous because of their structure, and the team leader must take full care of the safety of the robot and take responsibility for everything that happens before, during and after the competition.

## League specification:

### Specifications of robots:

Group	Maximum weight in kilograms	Maximum dimensions (cm)
light	30	60x60x80
heavy	60	80x80x100

- 1 -Maximum tolerance at weight 5%
- 2 -Robot control should be wireless
- 3 -Teams are required to use an internal battery
- 4 -After the race start, the robot has no limitations at size
- 5 -Use of flying robots is allowed
- 6 -Each team must have a separate robot for each league. They can also participate in lighter robots, with dimensions and weights, in heavier leagues, along with a specially designed robot for that league.
- 7 -A team can use multiple robots on the field provided that the total dimensions and total weight are met. For example, at 60kg, it is permissible to use two 30kg robots that are in a 80x80x100 cm space.
- 8- How the robots are positioned is not important when examining

### Specifications of weapons:

Teams can use any kind of weapon or malicious system to disable an opponent's robot. Use of firearms (if it is safe), electric shock, magnetic, water, alcohol, solid fuel (only sugar and potassium nitrate combination up to 500 grams) is allowed.

\* Use of a towel or cloth to disable the opponent's robot spinner if it is installed directly on the robot is unauthorized and the robot is allowed to use the trick when it is possible to throw the net or cloth remotely.

\* The fire system with alcohol or solid fuel must have a remote control and automatic ignition system. The teams are not allowed to turn on the fire at the time of the preparation of the robot.



- \* Use of toxic and explosive gases and acids, alkaline or flammable liquids (gasoline - thinner, etc.) foam, glue, oil are unauthorized.
- \* The use of other solid fuel compounds is not permitted any way and will invalidate the robot

#### Competition arena specification

Arena Dimensions: 12 x 12 meters

Height above ground: 50 cm

Material floor: flat iron sheets and may contain roughness to the maximum height of 10 mm.

Interior walls made of iron

Height of internal walls: 30 cm

Race ground is 100 cm away from the outer guard.

The height of the outer walls of the earth: 6 meters

The external walls material: a combination of iron and polycarbonate sheet and metal lace

#### Team specification

Team's name:

- 1- Each team must have a proper, preferably short name when registering.
- 2- The name of the team should not be religious, valuable, political or unconventional.
- 3- It is suggested that the team name be written on the robot

Number of team members: Each team must have at least two members. No limits for maximum members.

Supervisor of the team: Each team must introduce one member as a supervisor.

Having expert and technical expert in the team: A member of the team must have full information about all technical parts of the robot to explain how the robot works if needed

#### Television broadcasting rules:

Professional warrior robots Iran will be broadcast by the Islamic Republic of Iran Broadcasting, called Battle Robots. Several national and international networks will record and broadcast so the teams are required to follow these:

Each team should have an exclusive flag with a logo and the name of the team exactly to the size of 50x70 Centimeters made of fabric or banner. Flag photos must be uploaded and verified at check-in.

Reminder: Wearing uniform and having a flag at the time of the competition is mandatory.

Promotion of sponsors on clothing, flags and robots is permitted in coordination with the competition committee.

#### The appearance of the bot

It is not permitted to place the flag of countries, national, religious, or political words on the body of the robot.

#### Leader of Team

It is recommended that the teams have one or more leaders to excite the competitive atmosphere of the competition to encourage and support their team.



## Competition officials:

### Referees:

The two referees supervise the affairs before and during the competition.

Tasks of the referees:

- 1- Announcing the start and end of the competition
- 2- Time out announcement
- 3- Announcing the winner of the match by a technical hit or knockout
- 4- Supervision of technical and safety issues
- 5- Judge the result of games

### Judges:

The announcement of the final result and the quick closing of the match will be made by judges.

### Logistics:

People doing field affairs.

Logistic responsibilities:

1. Control the arrival and departure of robots and rivals
2. Control of arena weapons
3. Perform technical and safety work on the ground

### Broadcasting members

Director and Producer, Schedule Manager, Scene Recorder, Reporter, Screenwriters and Schedule Assistants, and Military and Logistics Officers.

## General rules of the race:

### Accept the rules

Competition Registration and participation rules must be studied carefully and accepted by all members.

### Violation of the rules

Violations of the rules by the team members will result in the elimination, fining and return of the prize (before the donation).

### Observe the rules of the instructions and procedures

All competitors have a duty to observe and comply with all scheduling laws and procedures through communication channels such as the telegram channel and the competition website.

### Attending the meetings

Competitors are required to participate in all events and events that require their participation.

### Error repeating

If a team does something against the rules, team may be deprived from the competition even at the first step. Even it is possible that the other teams which the transgressive person is in, will be removed from competition.

### Uncontrollable and tolerant behavior

Fighting, hostility, threats, physical violence with any official tournament, team members and visitors will not be tolerated and will result in the immediate dismissal of the individual or team of the opponent from the tournament.

### Team or members expelled



If the team or members are fired for any reason, they must leave the tournament. A team or a disqualified member may be removed from the tournament and return to the competition subject to the permission of the executive committee.

#### **Safety of the robots**

All safety matters must be considered during design, construction, testing, transportation, maintenance and commissioning of the robot. The competition committee warns the general safety of visitors and participants with teams and individuals who do not observe safety considerations.

#### **Repair and test at the right place**

Teams must test and repair their robots in a safe place in such a way that robot testing and robot testing has no risk for team members and other participants. The venue is not a good place to test robots and weapons.

#### **Use tools and tools of teams**

Teams are not allowed to use robots and other rivals without permission. Protection and maintenance is the responsibility of each team members.

#### **Competition time information**

Teams must be present at the venue on time for the weighting and scaling. If team can't come on time, it can be present 10 minutes late. If team wants more time, if the other team and the executive committee agree, the match will be moved to another time.

#### **Announcing the tournament schedule**

Match timings are announced in approximately 8 hour or less. If the tournament schedule changes, some games will not be played and the other games are played as scheduled. Time of postponed games will announce a new schedule.

#### **Change times of two games**

Switching between two matches is only possible if after the announcement of the tournament schedule, the supervisors of the four teams participating in the two competitions have expressed their consent to move the tournament time to the organizing committee.

#### **Confirmation of tournament results**

Match results sheets are signed and approved by the team leader.

### **Exclusive Competition Rules:**

#### **The presence of the robot in the competition arena**

Before starting the race, all robots must be at a special place without moving and in off position.

**Robot preparation time:** 3 minutes

**competition time :** 5 minutes

#### **Operators**

Several members of the team can control the robot or robots and place them on the spot for operators. The number of operators is not limited, but the referee can limit the number of operators depending on the need to control the robot.

#### **The location of the operators**

Operators should be outsourced to a special place and have no right to enter the arena.

#### **Time out**



Each referee can stop the match by a maximum of 3 minutes depending on the circumstances. In time, operators should immediately shut off their robot and their weapons, and the flying robots should also land.

#### **Faults**

If the referees or judges find that the rules are violated by any team at the start of the competition, they can stop it and operators should turn off their robot and follow the instructions of the referees to restart. If a team misses more than two times at the start, it may be announced as a loser.

#### **Terms of attack and defense**

Robots do not score by hooking, lifting, locking and pushing the opponent.

Robots are allowed to perform these operations for 10 seconds. Then, the two robots should be separated from each other if the attacker's robot was able to do this but refrained from doing so. The referees will be reminded.

If the lifting robot is able to move the opponent's robot on the ground during the lift, the referees will increase the time by 30 seconds.

#### **Stuck robots**

1- If the robot stays in the first 60 seconds and remains in the same position for 30 seconds, the race will stop.

It is possible to release the caught robot, then the competition is resumed with the command to restart and re-timed.

2. If the robot lands at the arena, the operator must release the robot in less than 30 seconds, otherwise it will be announced as a loser.

3. If the robots of the two teams stuck, the referee will announce the time out.

4. If the two robots of the same team stuck on the ground, the referee will not announce the timeout.

#### **Responsiveness**

Each team must show that its robot is under control and active, and if the operator can not control the robot, team will be announced as loser.

#### **Radio interference**

If the team robot fails due to radio interference or incorrect control system operation, team will be announced as loser.

#### **No fire control**

The race will be stopped if the operator is unable to control the robot's fire system.

Depending on the circumstances, the match may be reset or the winning team may be declared.

#### **Robot on fire**

The race will not stop if the team robot is on fire until the referee announces the knockout.

The logistics team will shut down the robot if it is safe. The Organizing Committee makes no commitment to extinguish the fire or allow the equipment to enter the arena.



### **Determining the competition winner:**

#### **Violation of rules**

Competitors must accept all the competition rules, orders and oral and written instructions of the officials and organizers. A team that violates the rules will be declared as a loser.

#### **Lack of physical contact and conflict**

If the referee feels that the operator intentionally avoids attacking the opponent's robot, he will first be reminded of him and will be announced as a loser if it continues.

#### **Inability and ruin**

If a robot fails, the referee will allow 30 seconds (the last 10 seconds to count as a countdown) to allow the operator to show that his robot is moving and active. If the operator failed to control or show the robot's activity after finishing the countdown, it will be announced as a loser. It is also up to the referee to determine whether or not the robot is in control.

#### **The inability and destruction of multi-part robots**

Multi-part robots are considered to be inadequate if more than 60% of their weight is not able to move.

#### **Flying robots**

The flying robots will be declared to be inaccurate if they cannot fly or fly along the arena.

#### **The inability and ruin of many robots**

If two robots fail, but not simultaneously, the winner robot will be the one which is out of order later. A decision is made on which robot will be disabled later by the referee and judges after reviewing the contest video.

#### **At the same time failure**

If the robots fail at the same time, then the winner will be determined as one of the following:  
1- If a failure occurs at the same time, before the completion of 3 minutes, a retrieval will be considered.



2. If this action occurs after 3 minutes from the start of the match, the judges will decide which team is the winner.

### **Criteria for winning the competition:**

#### **Knock out (5 points)**

A robot that can withstand an opponent's robot.

#### **Attack (2 points)**

The invasion and attack of a robot are evaluated based on the number, severity, and effectiveness of the attack. The attack on the armor and protector of the opponent's robot is not an attack, and there is no point in any weapon attack.

#### **Control (1 point)**

The robot must move easily and all robot components are controlled by the operator.

#### **Having a strategy (1 point)**

A robot that has a specific plan to hit or hurt the opponent's robot or has a specific defense plan to cover its weaknesses.

Also, the use of arena weapons to hit an opponent's robot can also be considered a strategy.

#### **How to calculate scores**

For each of the above criteria, judges will consider the respective points for each team. If the judges determine that both robots have the same attack, then two attack points are given to both robots and the winning robot is the one that has won more points.

If the points are equal, the winner will be the robot which is lighter and smaller at the first step.

#### **Protesting and appealing**

The objection must be made in writing and only by the supervisor before the final decision is made. The teams are not entitled to protest the final decision of the judges, judges and the league executive committee.

#### **Unpredictable items**

Deciding on all unplanned cases is with the executive committee.

### **Important Note:**

**The deliberate damage to the arena will eliminate the robot.**

**The final verdict is not subject to appeal.**