RR08 UEM Standards for Dragstrips

RR08.1 GENERAL

RR08.1.1 Object and aims
The "General Dragstrip Standards for UEM Dragbike Championships" lay down the conditions that must be met by a dragstrip in order to obtain the homologation of the UEM. The Jury President must carry out an inspection of the strips before each European Championship event and look so all comments in the track license is full filled.

RR08.1.2 Field of application
There are three types of drag strips,
Type A: For all new constructed drag strips inspected after 1 Jan 2006 that are going to host a European championship
Type B: Drag strips that have a valid track licenses for an for European championship earlier than 1 Jan 2006.
Type C: Recommendations for other drag strip that not is going to host a European championship

A drag strip can be permanent, semi-permanent or temporary.

RR08.1.3 Date of application
The standards will come into force on January 1st, 2006
They replace and cancel all prior publications.
Changes may be made to these standards, each time the UEM, according to experience, technical evolution or safety reasons, deems it necessary.

RR08.2 DRAGSTRIP LAYOUT

RR08.2.1 General principles
The dragstrip should be straight throughout, with for drag race applications, two lanes clearly identified. The drag strip should be divided into a timed, the track and a braking or shutdown area, the braking area can be divided in a primary and an emergency area.

RR08.2.2 Length of the strip
The strip should have a timed distance of 201,16 m (1/8 mile) or a timed distance of 402,33 m (1/4 mile).
For type A: Should the minimum braking area for a 201,15m strip be 500m plus emergency area and for a 402,33m drag strip a braking area of minimum 700 m plus emergency area. If the braking area ends in a not movable object should the length be minimum 900 m.
For type B and type C: Should the minimum be 500 m for an 201 m drag strip and for and 402,33 m be 600 m. Final determination of the braking area is to be determined by the inspection of the track. This is recommendations changes can occur due to things around determined in the inspections off the track

Behind the start line, there should be an area for preparation, lining up and starting of at least 20 m..

RR08.2.3 Width of the strip
For a dragstrip, the minimum width is 7 m per lane, total 14 m. The centre of the dragstrip and the sides should be clearly identified with white or yellow lines of at least 100mm. The ideal width is 18
m total. Strips wider than 24 m should have some kind of border to make the racing area 24 m wide.

**RR08.2.4 Longitudinal profile**
The maximum longitudinal gradient for the timed area is 2% and for the braking area 10%. Transversal line between the two edges should not exceed 2%.

**RR08.3 SURFACE**
The surface of the track and the primary braking area should be of recognized road construction asphalt, high quality concrete or approved sealed bitumen surface with no holes or depressions. Shoulders and irregular joints are not permitted.
The surface of the track should be cleaned and in the best possible way prepared before the start of a race. The preparation should be made so that the best possible traction is from the start of a championship race until the finish of the race. The preparation should continue and degrease after the finish line of the race track
No water, oil or liquid should be allowed on the dragstrip surface. If the track or braking area is contaminated by oil or water shall the race stop for cleaning.

**RR08.4 Run off areas**
For type A should it be concrete walls from the starting area until 400 meter after finish line or to the end of the braking area. Tracks can also be inspected with guardrails of steel but this is not recommended on new tracks.

For type B should it be guardrails or concrete walls at least from the start line to the finish line. If there is no guard rails in the braking area must it be open and allow a bike to go out on the sides for 50 meter on grass or sand with a flat and smooth surface. It is highly recommended that the walls continue as long as possible after the finish line.

For both type A and B should any openings should be overlapped. The height of the walls should be 800mm or more. It is recommended that the height in the braking area is 1200 mm, and then guard rails are in use must the lower rail be placed as low as possible to prevent a rider to with any part come under it.

For Type C: Can the drag strip also be of the 'wide open' type. If so, then the run off areas should be as configured in Fig 1.
If a track has guardrails on one side but not on the other will it be classified as a Type C track.

No objects are allowed inside the run off area. The area most be smooth and without any objects.
It is recommended that run off areas terminate in further open areas or gravel traps.

**RR08.5 START LINE**
The start line should be clearly marked on the dragstrip. A white line should indicate the start line. It should be placed between the pre stage and the stage line. Behind the start line there should be an area designated for burnouts, and water should be available.

**RR08.6 FINISH LINE**
The finish line should be clearly and obviously marked. It is recommended that the speed trap in the finish line is marked with diagonal lines that have a different colour from the track.
Timing equipment should be of a safe design and safely located. No hard objects are allowed inside the track. All timing equipment shall be places outside or along the guard rail. In the middle are only light reflectors on foam cushions allowed.

**RR08.7 RETURN ROAD**

The return road should be a minimum of 3 meters in width and allows access to pit and starting area. The return road should also have the same standard as the primary braking area of the surface. It is recommended with two accesses from the braking area to the return road. If the return rod do not allowed meeting traffic should there be areas for meeting.

**RR08.8 CIRCUIT INSTALLATIONS**

**RR08.8.1 Drivers' paddock**

The surface of the paddock must be suitable for heavy vehicles to drive on, and if the surface is of grass or similar, this should be notified in the Supplementary Regulations. Access to the paddock should have a minimum clearance of 4,5 m high. Vehicles should be parked to allow free access at all times, and access for emergency vehicles. There should be access to the paddock for competitors/crew at all times throughout the timetable of the race.

The following facilities are required:

1. Toilet facilities for both male and female.
2. Water supply for both drinking and cleaning purposes.
3. First aid facilities.
4. Fire fighting facilities.
5. Waste and litter bins.
7. Official note board
8. Showers with hot water

The following facilities are highly recommended:

1. Electrical power supply.
2. Public telephones.

**RR08.8.2 Technical Inspection area**

There should be designated areas for technical inspection, where administration and technical checks can take place. A board for official notices should be located in this area.

**RR08.8.3 Timing equipment room**

The timing equipment should be located in a room close to the start area which should have clear and unobstructed view of the track, start line and line up area. The room should be restricted to authorised personnel only. Back up system for electricity shall be in place to prevent power shout downs

**RR08.8.4 Race Secretary**

Competitors should be able to contact the Race Meeting Secretary at all times.

**RR08.8.5 Observation Post**

There should be an observation post or vehicle located safely in the braking/shut-down area for fire and emergency purposes. They should also be able to help riders to quickly come of the track. There should be telephone or radio links to the start area or the clerk of the course.
RR08.8.6 Communication Service
The Clerk of the Course should have radio contact with safety and medical personnel. There should be adequate public address system for the public and the competitors’ paddock, and any information should be given in several languages and at least in English.

RR08.8.7 Jury and Race Secretary Room
A room must be set aside for Jury Meetings, and must be accessible during the event to the competitors who wish to make a protest. The room should be clean and either have personal all the time or be looked. The room should be equipped with air condition if the weather is hot.

RR08.8.8 Press Facilities
It is highly recommended that facilities are made available for members of the press, including a room with tables and chairs. If possible should it be telephone and fax in this room.

RR08.8.9 Facilities for the Public
The facilities for the public must comply with national and local building and safety regulations, with particular attention to the following:
1. Car parking and Motorcycle parking
2. First aid facilities
3. Grandstands
4. Toilets
5. Water supply for both drinking and cleaning purposes.
7. Fire and safety
8. Restaurants and catering
There should be signs on the road to show the access to the track from the day of the event starts to the end of it to allow both riders and public to find the track.

RR08.9 EMERGENCY EQUIPMENT

RR08.9.1 Medical Services
All events must have their own medical service, headed by a Chief Medical Officer who is answerable to the Clerk of the Course. This officer will position any medical or paramedical personnel and vehicles where he judges necessary. One ambulance is mandatory and a second ambulance is highly recommended. One of the ambulances should be also placed so that public can get access to it. For more details see the UEM medical code.

RR08.9.2 Fire-Fighting Service
A fire-fighting service must be provided on the dragstrip and in the competitor’s paddock. Each post along the track must be provided with a portable fire extinguisher. One rescue vehicles should be placed at in the braking area. One or two man with extinguisher should be place in the starting area. Fire fighting personnel should also be situated in the location of braking area where bikes typically come to rest at end of their run.

RR08.9.3 Tow-Away Truck
A truck or other vehicle for moving broken vehicles should be available. It should have a rope that can be given to the rider and help him tow safely from the track.

RR08.9.4 Medical room
A room must be at the track that can take care of easier medical problems. The room shall be quiet so it is possible to use medical equipment.
RR08.10 Inspection and homologation procedure

RR08.10.1 Definition
An inspection is a visit by a delegate of the UEM road and Drag racing commission or the UEM sporting commission in order to:
- establish the level of safety of a strip and make recommendations in accordance with these rules
- Or to verify or approve work performed on the basis of such recommendations.
- Or to grant a homologation license

RR08.10.2 Inspection requests Deadline
A FMN must request the inspection of a strip to UEM Secretariat at least two mounts before the first UEM race on the track.

RR08.10.3 Delegations of inspection
The delegations of the inspectors are composed in the following manner:
- one member of the UEM road and Drag racing commission or the UEM sporting commission
- a qualified member of the FMNR
- a driver of the FMNR

RR08.10.4 Expenses of inspections
The FMNR will cover the expenses of the inspector appointed by the UEM to carry out the inspections, using the method of paying established by the UEM. If not the FMNR directly pays the inspector should the expense form be send to UEM.

RR08.10.5 Inspection procedure
At all inspections it shall be the duty of the inspectors to examine all the installations and the safety features at the circuit and make recommendations where required to ensure that these and the necessary services conform to these rules.

RR08.10.6 Inspection report
The appointed inspectors will draw up, sign and send to the UEM Secretariat within the 15 days following a circuit inspection, an inspection report in which he will write down the remarks and proposals, or improvements to be made. The result of an inspection if it is approved or approved with remarks must clearly be in the report.

RR08.10.7 Homologation of a circuit
A circuit complying with all recommendations and conditions of a final inspection report will receive a UEM drag strip license valid for 3 years. The license could be valid from the date of the inspection until first of January 3 years later or from the first of January the next year and 3 more years.

RR08.11 TIMING EQUIPMENT

RR08.11.1 Aim
The aim of the timing equipment is to measure the time that it takes for a bike to travel over the length of the dragstrip from it starts until it breaks the finish line. The time should be measured in sec and the top speed should be measured in km/h (if the general speed in the country is measured in miles/hours can this be used, but all records will be calculated in km/h buy the formula m/hr * 1.609 rounded to hole km/h)
**RR08.11.2 Starting area**
The starting area should have 3 photocells: Pre stage, Stage and Start or Guard. The distance between Pre Stage and Stage should be 175 ± 10 mm, and between Stage and Start/Guard 400 ± 10 mm. All cables should be placed in such a way that they do not interfere with competitors or the running of the race.

**RR08.11.3 STARTING TREE**
Distance from start line to tree: 11,5 – 12,5 meter.
Height of tree: 2300 mm ±100 mm from ground to centre of pre-stage bulb.

**RR08.11.4 Finish area**
The finish line photocells should be 402,33m ±100mm (1/4 mile) or 201.16 m ±50 mm (1/8 mile) from the start line. The difference in length of each lane should be 20 mm max. The terminal speed measurement should take place before the finish line preferably, but a speed trap that straddles the finish line is acceptable.

**RR08.11.5 Photocells**
All photocells at the start line should be set so that at the centre of each lane the timing beam operates between 30 and 60 mm above the track surface. In cases where there is difficulty achieving this, the 60mm height should take priority.
Photocells for 60 foot time should be 250mm ±20 mm above the track surface.
All other photocells should be 150mm ±20 mm above the track surface. All interval increments and quarter-mile finish lines are measured from the guard beam.

All timing equipment placed in the middle of the track after the 60 foot timing should be made without metallic construction. Foam is recommended. The equipment should be constructed and attached to the track surface in such way that it can be run over or kicked out of position without causing serious damage to the rider/ vehicles.

**RR08.11.6 Registrations of times**
All times shall be registered and stored under the qualification and race.

**RR08.11.7 Starting tree**
For each lane the Starting tree should have:
1 or 2 Lamps to indicate Pre Stage position (white or yellow)
1 or 2 Lamps to indicate Stage position (white or yellow)
3 countdown lamps (yellow)
1 Start lamp (green)
1 Foul start lamp (red)
It should also be lamps on the spectator side to make it visible to the public what is happening.

**RR08.11.8 Function**
Pre Stage: When Pre Stage beam is broken, the Pre Stage lamp lights.
Stage: When Stage beam is broken, the Stage lamp lights.
Start/Guard: If the Stage beam and the Start/Guard beam are broken at the same time, the Stage lamp should turn off.
Pro Start: All 3 count-down lamps should light 0,4 seconds before the Green Start lamp.
Timing: Timing for each lane should be completely separate. Once the Start sequence has been started, the timing should start when the Stage beam remakes or the Start/Guard beam is broken.

Foul start: If the Stage lamp remakes or the Start/Guard beam is broken before the Green Start lamp is on, a foul start is indicated by the Red light on the Tree and the Green lamp should not light. In eliminations, it should be possible for only one lane to have a Red light. In qualifying, it should be possible for both lanes to have Red light.

Reaction time: Is the time between the start signal being given and the competitor starting the clock, and may be measured either from the Green light signal - where zero is the perfect reaction time - or from the count-down signal - where 0,4 seconds is the perfect reaction time.

**RR08.11.9 Specification and accuracy**

Pre Stage and Stage Lamps: Should light 0,1 sec maximum after the beams are broken.
Count-down: Should have an accuracy of ± 0,01 second.
Timing: Should have an accuracy of ± 0,001 second.
Top speed: Should have an accuracy of ± 1 km/h.
Win indication: Should have an accuracy of ± 0,001 second.