

OVERLAP during SPLIT RUN

- IMPROVE PRACTICAL EFFICIENCY -

Prepared by JAPAN

22nd WLTP IWG

April 2018

[CONCERNS]

Time Consuming with Few Improvement

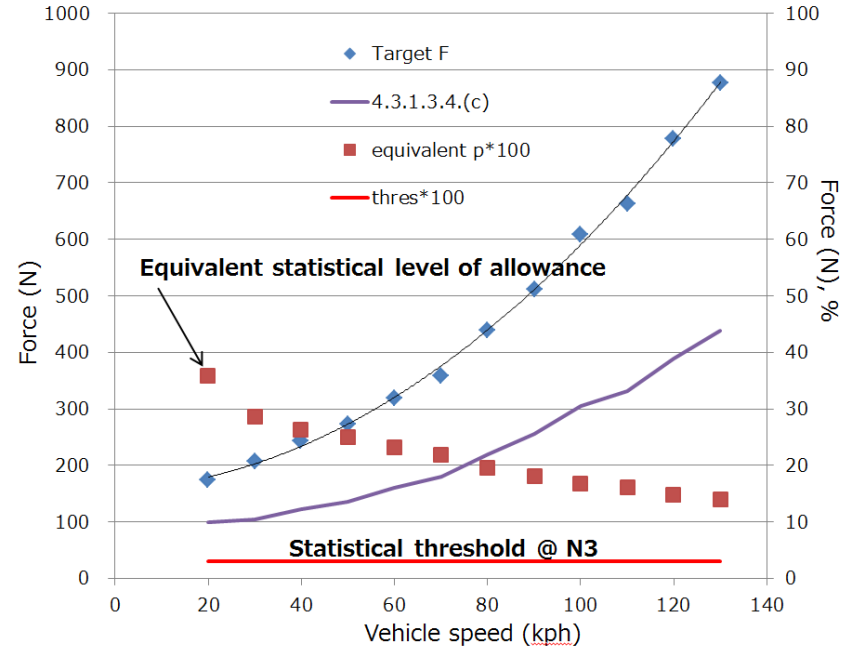
6 split run → 11 split run
(approx. 2.5hours) → (4.5hours + more)

#

#

Run	Start Time	135-125 (s)	125-115 (s)	115-105 (s)	105-95 (s)	95-85 (s)	85-75 (s)	75-65 (s)	65-55 (s)	55-45 (s)	45-35 (s)	35-25 (s)	25-15 (s)
reference speed		130	120	110	100	90	80	70	60	50	40	30	20
pre-stable run		2.416667	2.25	2.083333	1.916667	1.75	1.583333	1.416667	1.25	1.083	0.916667	0.75	0.5833
distance		0.192	0.196	0.210	0.214	0.225	0.228	0.250	0.239	0.240	0.212	0.189	0.153
1	21:39:21	5.327											
3	21:44:37	5.379											
5	21:49:42	5.222											
7	21:54:51		5.865	6.852									
9	22:00:47		5.888	6.789									
11	22:06:00		5.847	6.938									
13	22:22:4				7.595	8.796							
15	22:28:2				7.650	9.013							
17	22:34:13				7.891	9.197							
19	22:54:09						10.293	13.084					
21	22:56:36						10.139	12.683					
23	22:59:07						10.404	12.828					
25	23:01:41								14.086	17.242			
29	23:08:04								14.367	17.318			
31	23:11:09								14.573	17.376			
33	23:14:15										19.805	23.403	28.246
35	23:25:16										19.175	22.617	26.790
37	23:30:11										18.826	22.742	27.458
39	23:35:06										18.655	22.167	27.941
Direction + Avg		5.309	5.867	6.860	7.712	9.002	10.279	12.865	14.086	17.312	19.115	22.732	27.609
2	21:42:00	5.791											
4	21:47:07	5.787											
6	21:52:15	5.885											
8	21:58:04		6.810	8.004									

(c) by ±10 N or ±5 percent, whichever is greater



[**initial PROPOSAL**]

4.3.1.3.4. Although it is recommended that each coastdown run **shall** be performed without interruption, split runs may be performed if data cannot be collected in a single run for all the reference speed points. For split runs, the following additional requirements shall apply:

- (a) Care shall be taken to keep the vehicle condition as constant as possible at each split point;
- (b) At least one speed point shall overlap with the higher speed range coastdown;
- (c) At each of all overlapped speed point, the average force of the lower speed range coastdown shall not deviate from the average force of the higher speed range coastdown by ± 10 N or ± 5 percent, whichever is greater;
- (d) If the track length does not allow fulfilling requirement (b) in this paragraph, one additional speed point shall be added to serve as overlapping speed point.

Instead of (b), (c) and (d), manufacture is able to omit the overlap run by providing the technical evidence for continuity of vehicle condition at each split point

Further discussions regarding warm-up procedure between each split run and/or overlap criteria (± 10 N or ± 5 percent) are under way in JAPAN