



HSE Fatigue and Risk Index

Managing the risk of fatigue among employees is an important safety consideration for individuals involved in shift work and/or irregular duty schedules. Tools are now available that combine scientific understanding of sleep and circadian rhythms in an easy-to-use electronic format that output estimates of the risk of fatigue associated with duties in a proposed programme of work. One such tool is the HSE Fatigue and Risk Index, which was developed by QinetiQ, in collaboration with Simon Folkard Associates.

The Fatigue and Risk Index requires users to input the duty start and end times along with some details about workload and breaks within a duty. The task can also be automated (reducing data entry) and linked to rostering software so that the risk of fatigue can be minimised at the planning phase.

Contact IPlicensing@qinetiq.com to discuss licensing of FRI software.

FRI DLL (CP), Version 1.02

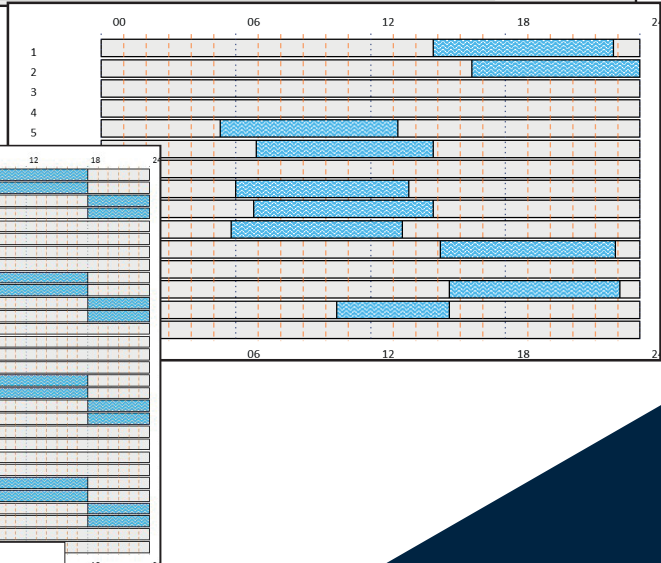
Day	Start	End	JD	JA	Break Freq	Break Avg Len	Con Work Len	Break After Con	Comm	Duty Length	Rest Length	Avg duty / day	Cumulative Duty Timing	Job Type / Breaks	Fatigue	Risk	Error	
1	14:51	22:50	2	2	105	30	255	0	40	07h 59m	Fully Rested	07h 59m	0.06405	1.12382	3.36131	4.546307	0	0
2	16:33	23:59	2	2	210	20	225	0	40	07h 26m	17h 43m	0.36918	2.01410	9.42734	11.76838	0	0	
5	05:17	13:15	2	2	225	20	270	20	40	07h 59m	2d 09h 10m	0.41668	1.23989	2.50799	4.240521	0	-203	
6	06:52	14:40	2	2	105	25	225	0	40	07h 45m	17h 37m	0.41084	0.76210	1.40762	6.189412	0	0	
8	05:58	13:43	2	2	225	20	285	20	40	07h 45m	1d 15h 00m	0.46133	2.06622	0.96798	1.99436	4.589348	0	-203
9	06:50	14:50	2	2	135	45	240	0	40	08h 00m	17h 07m	0.51444	5.98063	0.76580	0.79541	7.449505	0	0
10	05:50	13:22	2	2	210	20	270	20	40	07h 32m	15h 00m	0.66767	1.03602	1.82871	11.30352	0	-203	
11	15:07	22:53	2	2	120	50	180	0	40	07h 46m	1d 07h 45m	0.48862	1.25904	1.58737	6.811083	0	0	
13	15:29	23:07	2	2	465	0	465	0	40	07h 38m	1d 16h 36m	1.45989	1.35891	11.40151	14.03402	0	-205	
14	10:30	15:27	2	2	300	0	300	0	40	04h 57m	11h 23m	0.59121	2.46278	0.43809	0.64524	3.519436	0	-205

Load Duty Details Duty Details represent a single shift No Error Save Calculations

Default Workload

Change Workload

FRI DLL v2.0004, Release Build



Read the manual before using! <http://www.hse.gov.uk/HSESEARCH/word/H448a.pdf>

Assessor: _____

Display schedule Display charts

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On Duty	Off Duty	Workload	Constituting Times	Duty Length	Rest Length	Average duty period	Constituting component	Duty length component	Workload Break component	Fatigue Index
06:00	18:00	Default	Default	12h	Fully Rested	12h	0.1	1.0	4.1	5.1
06:00	18:00	Default	Default	12h	12h	12h	2.4	1.0	4.1	7.3
18:00	06:00	Default	Default	12h	1d	1h	15	15.0	22.8	38.7
18:00	06:00	Default	Default	12h	12h	3h 36m	6.5	15.0	22.8	41.8
06:00	18:00	Default	Default	12h	4d	6h 40m	0.4	1.0	4.1	5.4
06:00	18:00	Default	Default	12h	12h	7h 12m	3.0	1.0	4.1	7.9
18:00	06:00	Default	Default	12h	1d	7h	1.9	15.0	22.8	38.3
18:00	06:00	Default	Default	12h	12h	7h 23m	6.8	15.0	22.8	42.0
06:00	18:00	Default	Default	12h	4d	8h 21m	0.4	1.0	4.1	5.5
06:00	18:00	Default	Default	12h	12h	8h 40m	3.0	1.0	4.1	7.9
18:00	06:00	Default	Default	12h	1d	6h 36m	1.8	15.0	22.8	38.3
18:00	06:00	Default	Default	12h	12h	6h 51m	6.8	15.0	22.8	42.0
06:00	18:00	Default	Default	12h	4d	9h 16m	0.4	1.0	4.1	5.5
06:00	18:00	Default	Default	12h	12h	6h 28m	3.0	1.0	4.1	6.0
18:00	06:00	Default	Default	12h	1d	6h 26m	1.8	15.0	22.8	38.3
18:00	06:00	Default	Default	12h	12h	6h 37m	6.8	15.0	22.8	42.0

