

GSE - Site Survey Result on Operation Time

ICAO Class	Aircraft Type Example	Operation Mode	Total Operation Time (Minute)								
			Aircraft Tractor	Baggage Tractor	Belt Loader	Cargo Loader	Catering Truck	Hydrant Truck / Water Truck	Lavatory Truck	Fuel Truck	Passenger Stands
Class F (Passengers)	A380-800, B747-8I	Arrival (operation)		55		60	96		10		
		Arrival (Idling)				23					
		Departure (operation)	5	35	10	65		7		43	
		Departure (Idling)	15			16					
Class F (Freighter)	B747-8F	Arrival (operation)		100	20	120			7		1
		Arrival (Idling)									
		Departure (operation)	5	140	20	120				85	1
		Departure (Idling)	15								
Class E (Passengers)	B747-400, A340-200	Arrival (operation)		75	32	32	76		10		
		Arrival (Idling)				12					
		Departure (operation)	5	92	50	68		7		46	
		Departure (Idling)	15			17					
Class E (Freighter) (747-400F only)	B747-400F	Arrival (operation)		100	20	120			7		1
		Arrival (Idling)									
		Departure (operation)	5	140	20	120				85	1
		Departure (Idling)	15								
Class E (Freighter) (Except 747-400F)	A330-200F, 777-200 Freighter	Arrival (operation)		100	20	80			7		1
		Arrival (Idling)									
		Departure (operation)	5	140	20	80				85	1
		Departure (Idling)	15								
Class D (Passengers)	A310-200, B767-200	Arrival (operation)		24	11		26		7		
		Arrival (Idling)									
		Departure (operation)	5	26	11	29		7		23	
		Departure (Idling)	15			7					
Class C (Passengers)	B737-100, A320-200	Arrival (operation)		31	59		21		7		
		Arrival (Idling)									
		Departure (operation)	5	24	59			4		30	
		Departure (Idling)	15								
Class C (Freighter)	B737-200F	Arrival (operation)		65		60			7		1
		Arrival (Idling)				55					
		Departure (operation)	5	90		60				85	1
		Departure (Idling)	15			55					
Class C (Business Jets)	B737-100, A320-200	Arrival (operation)		4							1
		Arrival (Idling)									
		Departure (operation)	5				20			45	1
		Departure (Idling)	15								
Class B (Business Jets)	EMB145	Arrival (operation)		4							
		Arrival (Idling)									
		Departure (operation)								45	
		Departure (Idling)									

Note:

- [1] The type of GSE serving different aircraft types are obtained from site survey
- [2] The operation time of GSE are obtained from site survey
- [3] The total operation time of the GSE is the sum of the operation time of numbers of GSE if there are more than one GSE serving the aircraft
- [4] GSE operations are divided between aircraft services after landing (taxi-in) and aircraft services before departure (taxi-out) to account for the difference in time period.
- [5] The operation time of GSE powered by electricity (aircraft tractor for class B business jets) is not shown in the summary since no pollutants emission from these GSEs.
- [6] The operation time of GSE of aircraft type with ICAO classes not included in 2031 flight schedule is not shown in the summary.
- [7] During the survey, the operation time in the whole LTO was considered. Sometimes, the operation time of the GSE for arrival and departure will occur simultaneously. Hence, they will enter either in the arrival column or departure column