

<Reference materials>

1) Details of the subject Japanese models

(1) Diesel engines for forklifts

Overview	1ZS model	1KD model
Year of certification application	2014	2014
Emission volume	1,795 cc	2,982 cc
Forklifts on which engines are equipped (carrying capacity)	GENEO (1.5 - 3.5t)*	GENEO (3.5 - 8.0t)
Sales volume in FY2021	8.0 thousand units	1.4 thousand units
Total (accumulated) sales volume (as at the end of February 2023)	60.6 thousand units	10.7 thousand units
Potential violation of regulations during deterioration durability testing	Yes	Yes
Excess over the emissions regulation values	Yes	Yes

(2) Gasoline engines for forklifts

Overview	4Y model
Year of certification application	2009
Emission volume	2,237 cc
Forklifts on which engines are equipped (carrying capacity)	GENEO (1.0 - 3.5t)*
Sales volume in FY2021	7.1 thousand units
Total (accumulated) sales volume (as at the end of February 2023)	88.3 thousand units
Potential violation of regulations during deterioration durability testing	Yes
Excess over the emissions regulation values	No

*1ZS model and 4Y model are loaded on "shovel loaders" in addition to the above forklift "GENEO" (Sales volume in FY2021: 0.1 thousand trucks; total (accumulated) sales volume: 0.9 thousand trucks)

2) Acts potentially in violation of the Japanese regulations during deterioration durability testing

Acts found during an investigation led by external lawyers so far, etc., and the main details presumed to be their background are as follows, which will be confirmed by the special investigation committee.

(1) Diesel engines for forklifts

- (i) Estimated exhaust gas component values were used instead of the actual measured values.
 - Because the PM values contained in the exhaust gas became high during the test, the fuel injector was improved; no re-test was conducted thereafter, and estimated values premised on loading the improved fuel injector were used as the test results.
- (ii) Operation mode for testing was achieved by changing the control software at engine side
 - The engine operation conditions required for testing should have been achieved at the equipment (test bench) side; however, since it was difficult due to equipment specifications, the test was conducted with partial change in control software at engine side (The same acts are also confirmed in the case of diesel engines for construction machinery).

(2) Gasoline engines for forklifts

(i) Parts replacement during tests was conducted.

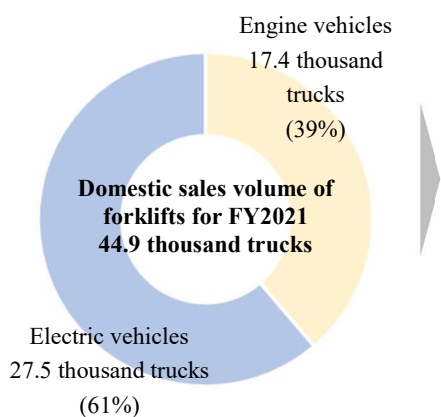
- Because the NOx value contained in the exhaust gas became high during the test, in order to check the effect of the O₂ sensor (sensor that measures combustion state), NOx value was measured by temporarily using an O₂ sensor of a different specification, and the tests were continued.

(ii) The actual measured values of exhaust gas component were not used as they were.

- Some of the measured values were considered outliers and therefore unused as they were; instead, measured values of the same model engine from another durability test were used as test results.

3) TICO's sales volume of forklifts (sales performance for FY2021)

(1) [Domestic sales] Breakdown according to power/engine model



* Subject to shipment suspension (Thousand trucks)

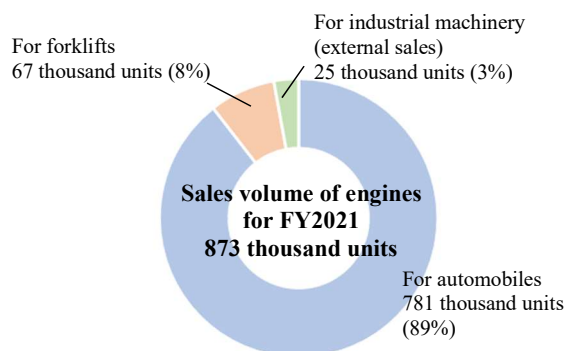
		Engine model	Number of trucks	
* Subject to shipment suspension	Gasoline vehicles	Microcars	WG972	0.1
		Small-sized vehicles	*4Y	7.1
		Medium-sized vehicles	1FS	0.2
	Gasoline vehicles			7.4
	Diesel vehicles	Small-sized vehicles	1DZ	0.5
			*1ZS	8.0
		Medium-sized vehicles	*1KD	1.4
		Large-sized vehicles	J08E	0.1
	Diesel vehicles			10.0
	Engine vehicles			17.4
Those subject to shipment suspension thereamong			16.5	
Electric vehicles			27.5	
Total			44.9	

(2) [World sales] Breakdown according to power/region

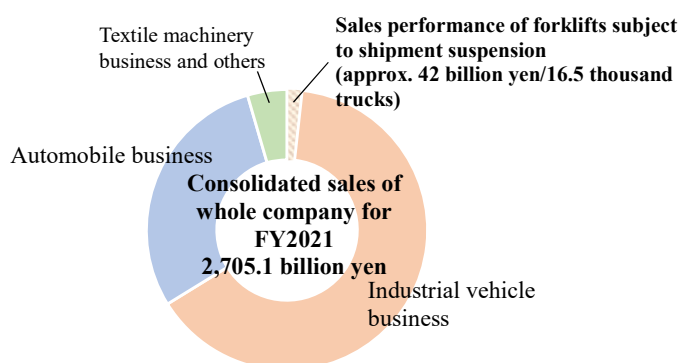
(Thousand trucks)

		Japan	North America	Europe	Others	Total (Composition ratio)
Gasoline vehicles	Gasoline vehicles	7.4	7.5	5.3	13.7	33.9 (12%)
	Diesel vehicles	10.0	4.4	6.3	21.8	42.5 (15%)
Engine vehicles		17.4	11.9	11.6	35.5	76.4 (27%)
Electric vehicles		27.5	64.0	80.8	32.3	204.6 (73%)
Total		44.9	75.9	92.4	67.8	281.0 (100%)

4) TICO's sales volume of engines (sales performance FY2021)



5) Sales-size of forklifts subject to shipment suspension



6) Japanese emissions regulations for forklifts

The “Regulations for Emissions from Non-Road Vehicles (the Primary Regulations)” have applied to diesel engine forklifts running on public roads (on-road vehicles) since October 2003. Since the Secondary Regulations that commenced in October 2006, the regulations have applied to gasoline engine forklifts and off-road vehicles that do not run on public roads as well. The latest regulations are the Fourth Regulations (since October 2014). There are no regulations concerning fuel consumption with respect to forklifts.

End