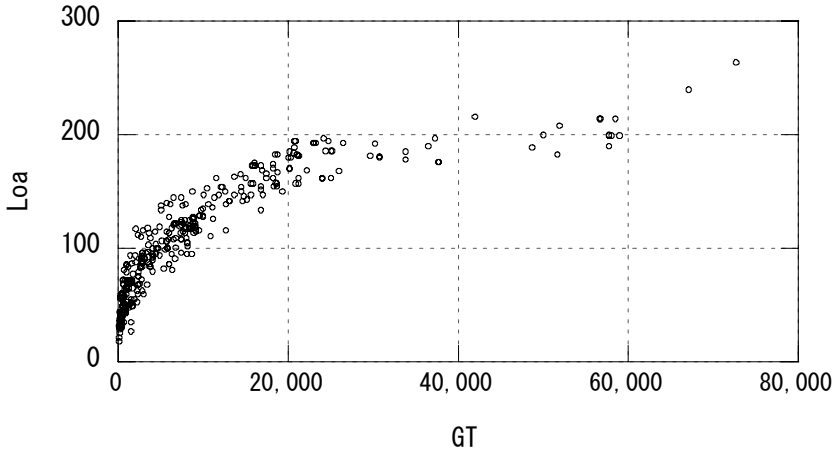


Figure 3-71 Roll-on/Roll-off Ship Loa-GT

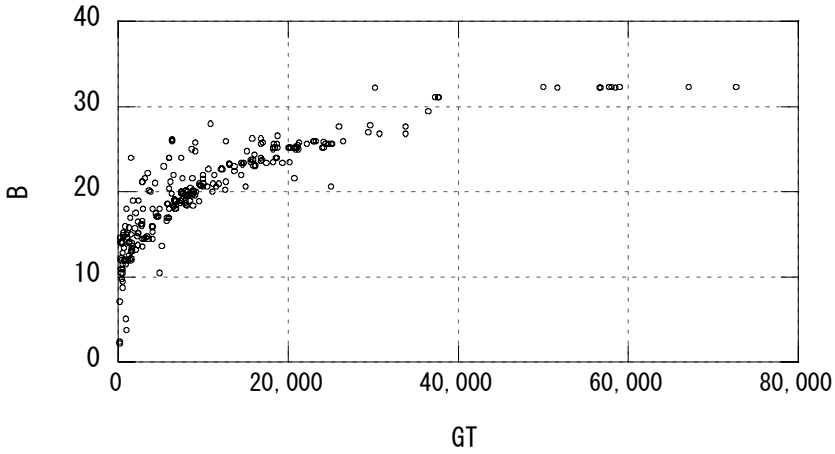


Figure 3-72 Roll-on/Roll-off Ship B-GT

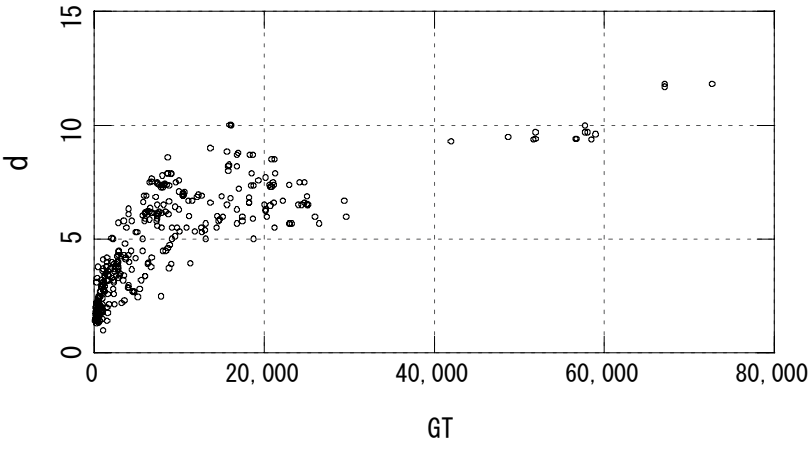
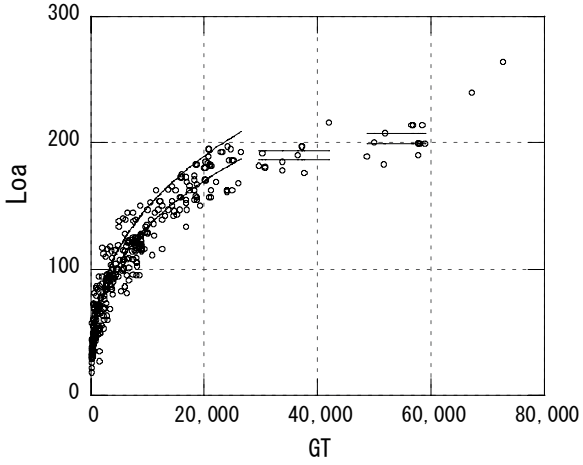
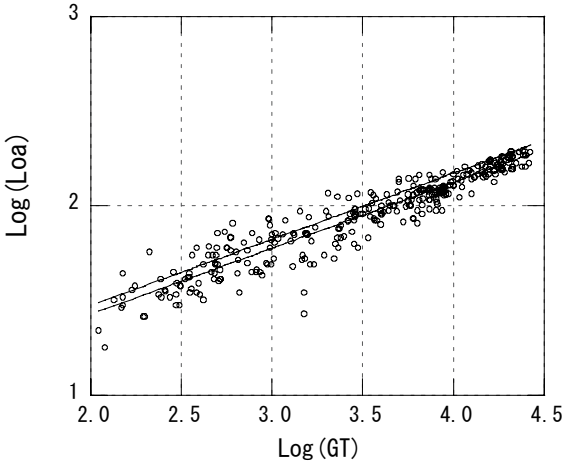


Figure 3-73 Roll-on/Roll-off Ship d-GT





・～Less than 30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	5.3729	5.9914
β	0.3487	0.3487

logY=a+blogX

(R^2= 0.906 , σ= 0.070)

	50%	75%
a	0.7302	0.7775
b	0.3487	0.3487

・30,000GT～40,000GT

$Y=a_0$

（σ= 10.643 ）

	Average	75%
a_0	186.82	194.00

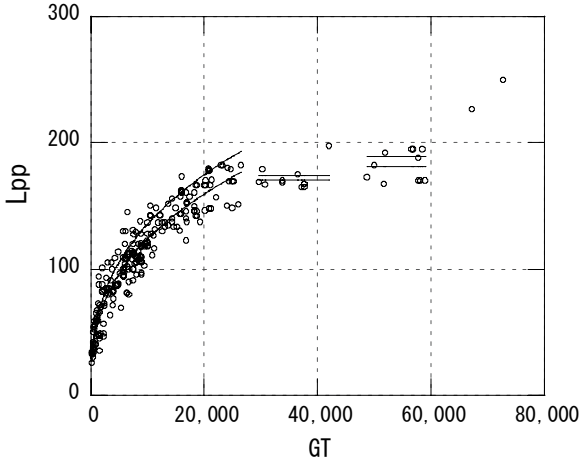
・Greater than 40,000GT～60,000GT

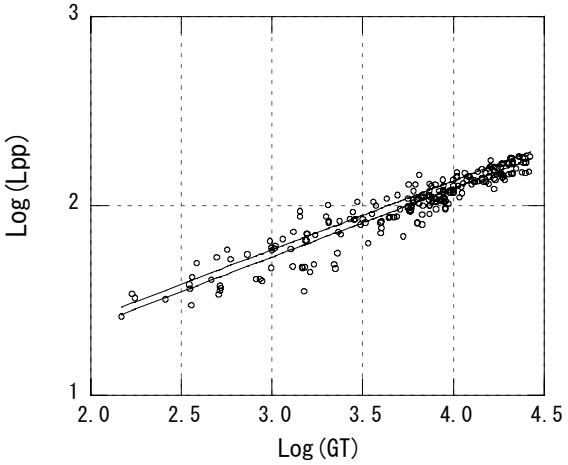
$Y=a_0$

（σ= 10.783 ）

	Average	75%
a_0	199.32	207.55

Figure 3-74 Roll-on/Roll-off Ship（～60,000GT）Loa-GT





・～Less than 30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	4.3514	4.7649
β	0.3636	0.3636

logY=a+blogX

(R^2= 0.900 , σ= 0.058)

	50%	75%
a	0.6386	0.6781
b	0.3636	0.3636

・30,000～40,000GT

$Y=a_0$

（σ= 4.918 ）

	Average	75%
a_0	170.47	173.79

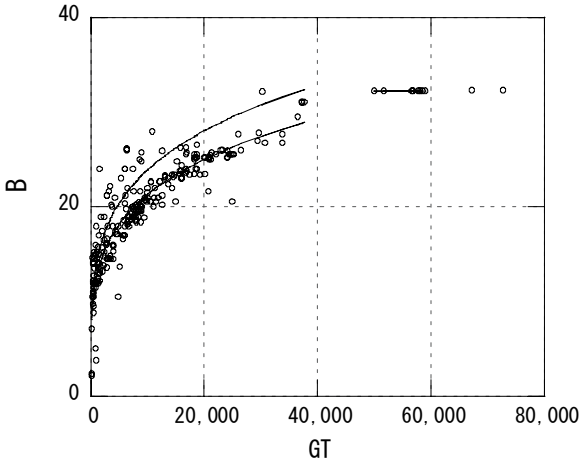
・Greater than 40,000～60,000GT

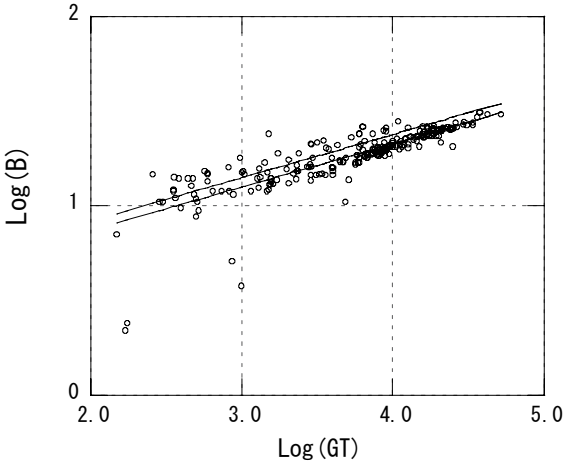
$Y=a_0$

（σ= 11.993 ）

	Average	75%
a_0	181.13	189.22

Figure 3-75 Roll-on/Roll-off Ship（～60,000GT） Lpp-GT





・～Less than 40,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	2.5703	2.8814
β	0.2297	0.2297

$\log Y=a+b\log X$

(R^2= 0.725 , σ= 0.074)

	50%	75%
a	0.4100	0.4596
b	0.2297	0.2297

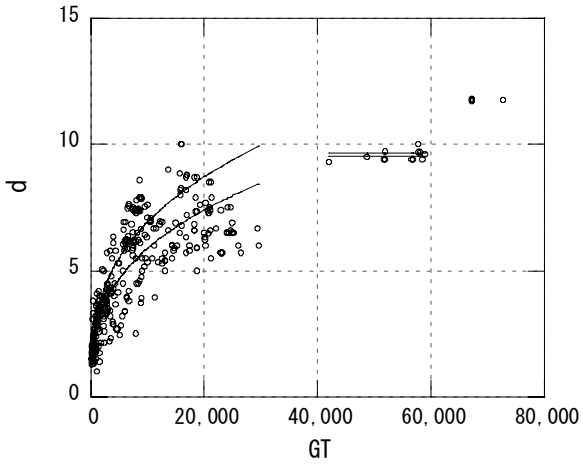
・40,000GT～60,000GT

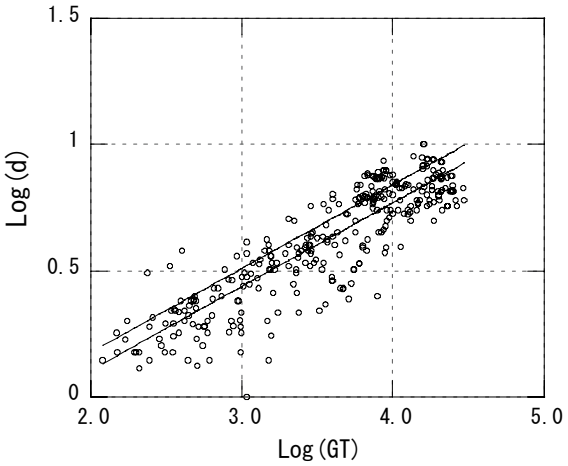
$Y=a_0$

（σ= 0.005 ）

	Average	75%
a_0	32.26	32.26

Figure 3-76 Roll-on/Roll-off Ship (～60,000GT) B−GT





・～Less than 30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	0.2775	0.3267
β	0.3316	0.3316

$\log Y=a+b\log X$

(R^2= 0.788 , σ= 0.105)

	50%	75%
a	-0.5568	-0.4859
b	0.3316	0.3316

・30,000～60,000GT

$Y=a_0$

（σ= 0.194 ）

	Average	75%
a_0	9.5	9.7

Figure 3-77 Roll-on/Roll-off Ship（～60,000GT） d−GT

3.5 Pure Car Carrier(PCC)

Figure 3-78 to **Figure 3-80**show the results of analysis of Loa, B, and d for GT. And the following are the analysis method applied to each main dimension and the range of the ship classes to which each method was applied. **Table 3-11** shows the results of analysis of each main dimension according to the ship class that was set.

(1) Loa, Lpp (**Figure 3-81**,**82**)

The ships were divided into three classes with 30,000GT and 50,000GT as the boundaries. Less than 30,000GT was analyzed by the logarithmic regression analysis method, obtaining R^2 = 0.775 for Loa and R^2 = 0.827 for Lpp. 30,000GT or more and less than 50,000GT and 50,000GT or more were analyzed by the average value analysis method.

(2) B (**Figure 3-83**)

The ships were divided into three classes with 30,000GT and 50,000GT as the boundaries. Less than 30,000GT was analyzed by the logarithmic regression analysis method, obtaining R^2 = 0.897. 30,000GT or more and less than 50,000GT and 50,000GT or more were analyzed by the average value analysis method.

(3) d (**Figure 3-84**)

The ships were divided into three classes with 30,000GT and 50,000GT as the boundaries. Less than 30,000GT was analyzed by the logarithmic regression analysis method, obtaining R^2 = 0.667. 30,000GT or more and less than 50,000GT and 50,000GT or more were analyzed by the average value analysis method.

Table 3-11 The results of analysis of main dimensions (Pure Car Carrier)

Gross Tonnage (t)	Length Overall (m)	Length P.P. (m)	Breadth Molded (m)	Full Load Draft (m)
3,000	89	72	16.1	4.7
5,000	104	88	18.0	5.4
12,000	135	123	21.8	6.8
20,000	158	150	24.4	7.9
30,000	179	175	26.7	8.8
40,000	185	175	31.9	9.3
60,000	203	194	32.3	10.4

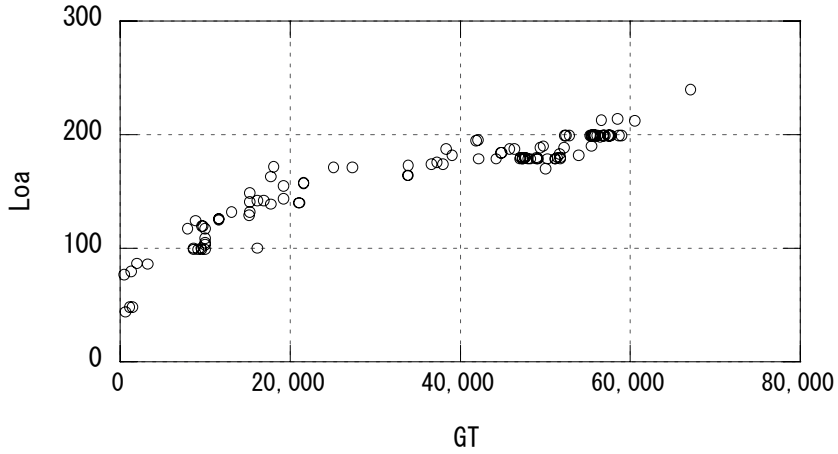


Figure 3-78 Pure Car Carrier Loa-GT

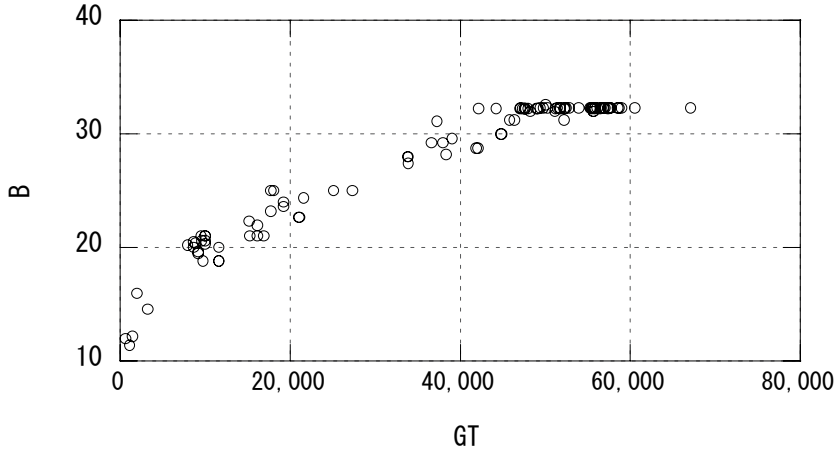


Figure 3-79 Pure Car Carrier B-GT

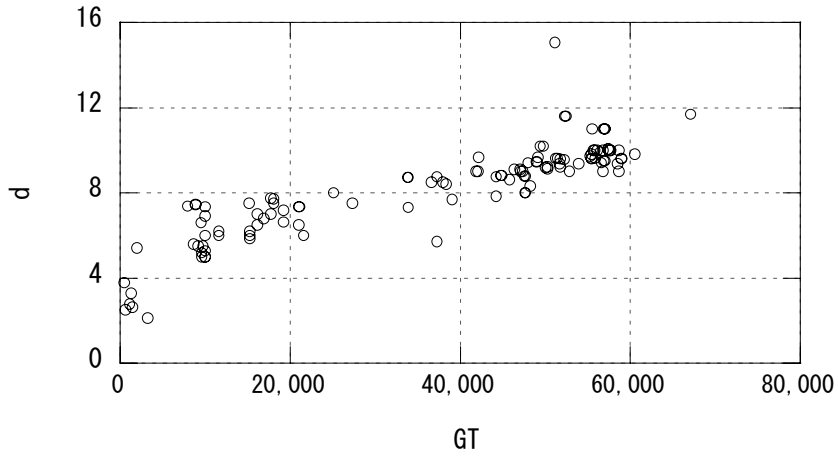
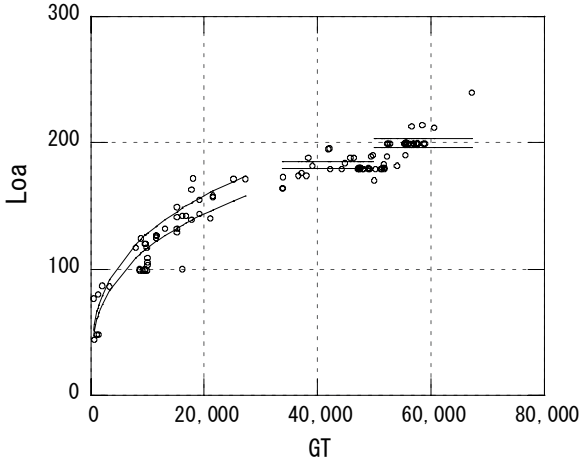
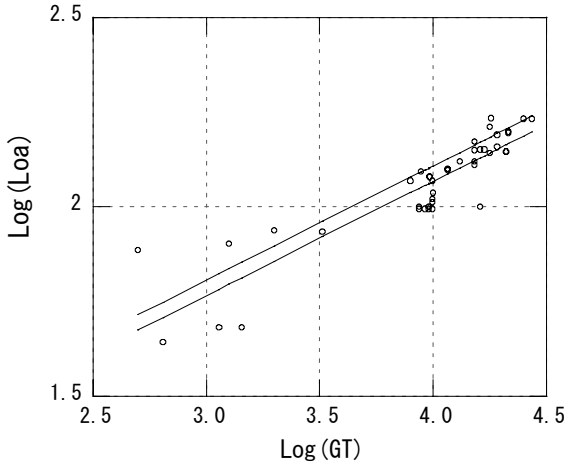


Figure 3-80 Pure Car Carrier d-GT





・～30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	7.2617	7.9846
β	0.3014	0.3014

logY=a+blogX

(R^2= 0.775 , σ= 0.061)

	50%	75%
a	0.8610	0.9023
b	0.3014	0.3014

・Greater than 30,000～Less than 50,000GT

$Y=a_0$

（σ= 7.358 ）

	Average	75%
a_0	179.96	184.92

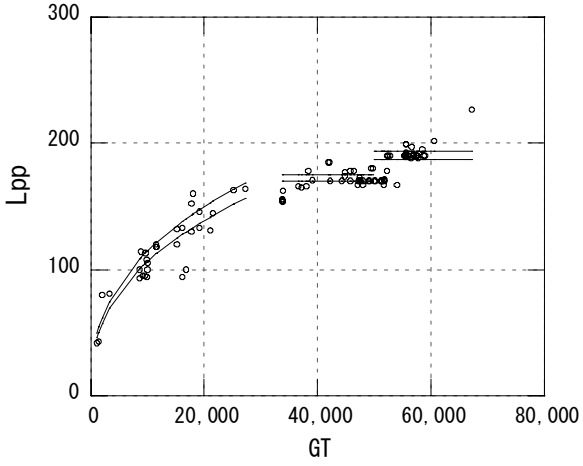
・50,000GT～

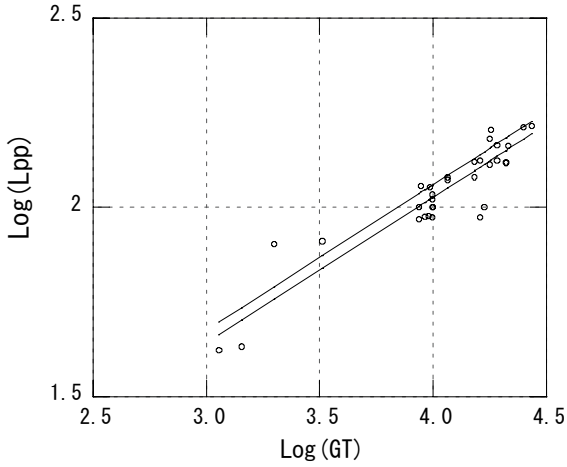
$Y=a_0$

（σ= 10.483 ）

	Average	75%
a_0	196.26	203.32

Figure 3-81 Pure Car Carrier Loa-GT





・～30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	3.0768	3.3234
β	0.3845	0.3845

logY=a+blogX

(R^2= 0.827 , σ= 0.050)

	50%	75%
a	0.4881	0.5216
b	0.3845	0.3845

・Greater than 30,000～Less than 50,000GT

$Y=a_0$

（σ= 7.200 ）

	Average	75%
a_0	170.23	175.08

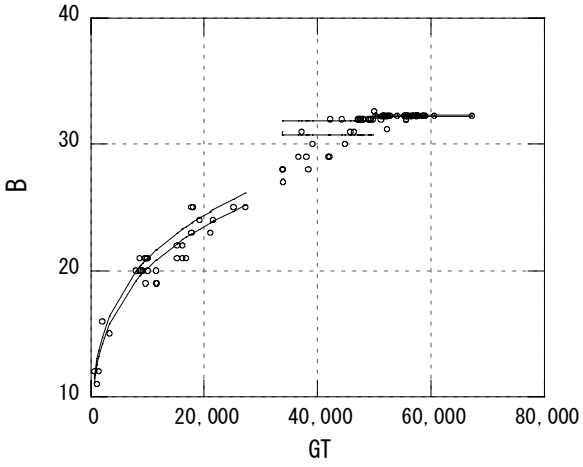
・50,000GT～

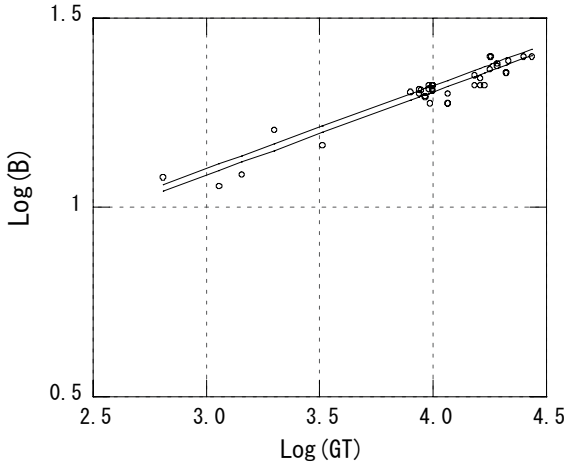
$Y=a_0$

（σ= 10.157 ）

	Average	75%
a_0	186.97	193.82

Figure 3-82 Pure Car Carrier Lpp-GT





・～30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	2.6709	2.7742
β	0.2195	0.2195

logY=a+blogX

(R^2= 0.897 , σ= 0.024)

	50%	75%
a	0.4267	0.4431
b	0.2195	0.2195

・Greater than 30,000～Less than 50,000GT

$Y=a_0$

（σ= 1.596 ）

	Average	75%
a_0	30.79	31.86

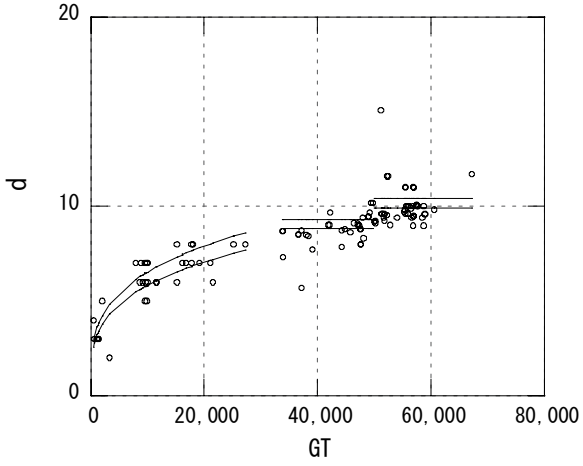
・50,000GT～

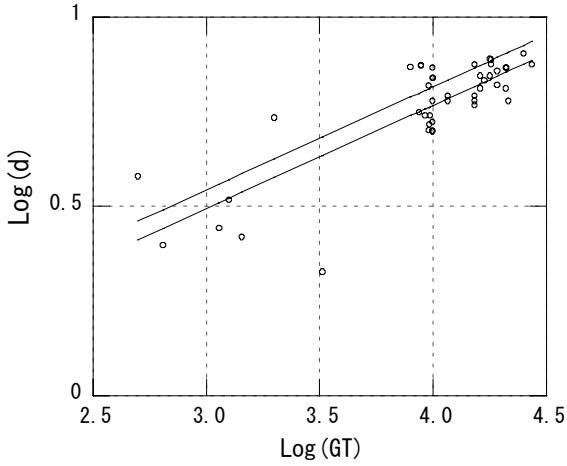
$Y=a_0$

（σ= 0.141 ）

	Average	75%
a_0	32.21	32.31

Figure 3-83 Pure Car Carrier B-GT





・～30,000GT

$Y=\alpha \cdot X^{\beta}$

	50%	75%
α	0.4759	0.5329
β	0.2722	0.2722

logY=a+blogX

(R^2= 0.667 , σ= 0.073)

	50%	75%
a	-0.3225	-0.2733
b	0.2722	0.2722

・Greater than 30,000～Less than 50,000GT

$Y=a_0$

（σ= 0.690 ）

	Average	75%
a_0	8.83	9.29

・50,000GT～

$Y=a_0$

（σ= 0.793 ）

	Average	75%
a_0	9.90	10.43

Figure 3-84 Pure Car Carrier d -GT