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KAWASAKI STEEL GIHO

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Development of Highway Lighting Pole with Resistance to Wind Vortex -Induced Oscillation

Ü 4s μ (Ikuo Jo) 5 È Å#è(Tadao Kaneko) ì ` %, Å(Shogo Nagatsu) 9x « æ x(Chiyomaru Takahashi) CŒ § G μ (Masao Kimura)

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Synopsis :

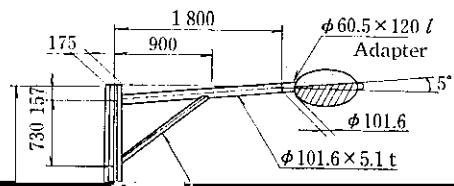
Basic vibrational characteristics of a lighting pole resulting from wind vortex -induced oscillation have been studied and an impact damper which has layered cellseidd(na)13 (f)6.5 (

Development of Highway Lighting Pole with Resistance to Wind Vortex-Induced Oscillations

要旨

風で生ずるカルマン渦による道路用照明柱の渦励振振動について

（著者名）



2.2 基本振動特性の調査

Table 1 に示すように、供試体照明柱の各部位に加速度計を設置のうえ、加振力一定の条件下で振動数を変化させる掃引試験を実施して、共振振動数を求めた。この結果を一括して Table 2 に示す。

Table 2 Basic oscillation characteristics of octagonal-cross-section lighting pole

	Inplane oscillation mode	Out-of-plane oscillation mode
1	1.0	1.0
2	1.0	1.0
3	1.0	1.0
4	1.0	1.0
5	1.0	1.0
6	1.0	1.0
7	1.0	1.0
8	1.0	1.0
9	1.0	1.0
10	1.0	1.0
11	1.0	1.0
12	1.0	1.0
13	1.0	1.0
14	1.0	1.0
15	1.0	1.0
16	1.0	1.0
17	1.0	1.0
18	1.0	1.0
19	1.0	1.0
20	1.0	1.0
21	1.0	1.0
22	1.0	1.0
23	1.0	1.0
24	1.0	1.0
25	1.0	1.0
26	1.0	1.0
27	1.0	1.0
28	1.0	1.0
29	1.0	1.0
30	1.0	1.0
31	1.0	1.0
32	1.0	1.0
33	1.0	1.0
34	1.0	1.0
35	1.0	1.0
36	1.0	1.0
37	1.0	1.0
38	1.0	1.0
39	1.0	1.0
40	1.0	1.0
41	1.0	1.0
42	1.0	1.0
43	1.0	1.0
44	1.0	1.0
45	1.0	1.0
46	1.0	1.0
47	1.0	1.0
48	1.0	1.0
49	1.0	1.0
50	1.0	1.0
51	1.0	1.0
52	1.0	1.0
53	1.0	1.0
54	1.0	1.0
55	1.0	1.0
56	1.0	1.0
57	1.0	1.0
58	1.0	1.0
59	1.0	1.0
60	1.0	1.0
61	1.0	1.0
62	1.0	1.0
63	1.0	1.0
64	1.0	1.0
65	1.0	1.0
66	1.0	1.0
67	1.0	1.0
68	1.0	1.0
69	1.0	1.0
70	1.0	1.0
71	1.0	1.0
72	1.0	1.0
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79	1.0	1.0
80	1.0	1.0
81	1.0	1.0
82	1.0	1.0
83	1.0	1.0
84	1.0	1.0
85	1.0	1.0
86	1.0	1.0
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111	1.0	1.0
112	1.0	1.0
113	1.0	1.0
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328	1.0	1.0
329	1.0	1.0
330	1.0	1.0
331	1.0	1.0
332	1.0	1.0
333	1.0	1.0
334	1.0	1.0
335	1.0	1.0
336	1.0	1.0
337	1.0	1.0
338	1.0	1.0
339	1.0	1.0
340	1.0	1.0
341	1.0	1.0
342	1.0	1.0
343	1.0	1.0
344	1.0	1.0
345	1.0	1.0
346	1.0	1.0
347	1.0	1.0
348	1.0	1.0
349	1.0	1.0
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351	1.0	1.0
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356	1.0	1.0
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361	1.0	1.0
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368	1.0	1.0
369	1.0	1.0
370	1.0	1.0
371	1.0	1.0
372	1.0	1.0
373	1.0	1.0
374	1.0	1.0
375	1.0	1.0
376	1.0	1.0
377	1.0	1.0
378	1.0	1.0
379	1.0	1.0
380	1.0	1.0
381	1.0	1.0
382	1.0	1.0
383	1.0	1.0
384	1.0	1.0
385	1.0	1.0
386	1.0	1.0
387	1.0	1.0
388	1.0	1.0
389	1.0	1.0
390	1.0</td	

2次の場合よりも制振効果が良く、また面内1次は面外2次とほぼ

実験とに分けられる。予備実験では、電磁ダンパを起振機として使

20
m)

Design condition
Height of pole(h)
Diameter(D) and

Weather condition
Direction of wind Wind velocity(V)

