

IN THE HIGH COURT
AT AUCKLAND REGISTRY

CIV 2005-404-6908

UNDER **The Fair Trading Act 1986**

BETWEEN **POWER-PLATE NEW ZEALAND LIMITED** a duly
incorporated company having its registered office at
Auckland

Plaintiff

AND **VIBRA-TRAIN LIMITED** a duly incorporated company
having its registered office at Auckland

Defendant

**AFFIDAVIT OF LEIGH DARRYL OVENS IN SUPPORT OF THE
DEFENDANT'S OPPOSITION FOR INTERIM INJUNCTION
DATED 19 JANUARY 2006**

Catherine M Bormans
cathy.bormans@fortunemanning.co.nz
Julia J Wood
julia.wood@fortunemanning.co.nz
Telephone 09 915 2401
Facsimile 09 915 2402
D X CP21503
P O Box 4139 Auckland



FORTUNE MANNING
LAW PARTNERSHIP

I, **LEIGH DARRYL OVENS**, technician of Auckland swear that:

1. I have been employed by Vibration Consultants Limited as a technician for the past 20 years and have been involved in the machine monitoring industry for 22 years.
2. I obtained in 1983 the New Zealand Certificate of Engineering in Mechanics.
3. I am familiar with the different devices used to measure amplitude and frequency rates of machines.
4. I am aware that Power Plate New Zealand Limited, the plaintiff in this proceeding, has filed an application for an interim injunction, to restrain Vibra Train Limited ("the defendant") from making representations about the plaintiff and its business that it alleges are false, misleading and deceptive or likely to mislead or deceive.
5. I have read the affidavit of Krystyna Wardas who I understand is the director of the plaintiff.
6. In late February 2005, I was contacted by Lloyd Shaw of the defendant to carry out vibration tests on two Vibrogym machines and one Power Plate machine, serial number PP04013915.
7. I had prior to then no previous association with Lloyd Shaw or Vibra-Train Limited. Furthermore, I have no specific knowledge of the vibration training industry or the companies involved in it. My involvement was limited to taking vibration readings on the machines, recording the data and drawing conclusions from those results.
8. On 2 March 2005 I visited Vibra-Train Limited's studio at 7/192 Victoria Street West, Auckland to measure vibrations of 3 vibration training platforms.
9. I spent one and a half hours conducting vibrating tests on the machines including the Power Plate machine, serial number PP04013915.




10. I initially measured the vibration in 3 axes using an InstanTel BM III seismometer. However, at the higher frequencies and range, vibration velocity in the vertical axis exceeded the full scale limit of the seismometer. To solve this problem, full sets of vertical measurements were made using a Rion VA-10 vibration analyser ("VA-10").
11. The result of the tests show that the Power Plate machine had frequency errors ranging between -7 and -23%. Furthermore, the amplitude readings were much lower when set to "50hz".
12. Following my visit at the defendant's premises I wrote a report and constructed a graph to show the frequency and amplitude readings of the Vibrogym 13536, Vibrogym 13535 and Power Plate PP04013915. **Annexed** and marked with the letter "B" is a true and correct copy of my report and the graph I constructed.
13. I refute the statement made at paragraph 14 of Krystyna Wardas' affidavit that my test results were "clearly incorrect". Furthermore, I did not see any evidence that the Power Plate machine I tested had been tampered with.
14. Theoretically, the Schenck Vibrotest 60n analyser device used by the plaintiff's expert may be slightly more accurate than the Rion VA-10 analyser ("VA-10") on paper. However, the discrepancies I observed were large, being as high as 23%. Such a large discrepancy could not be caused by instrumentation error especially in light of the much smaller discrepancy levels recorded from the two Vibrogym units (between -1% to -3.2%).
15. The BlastMate III seismometer made by InstanTel that I initially used on the Vibrogyms to measure the lower velocity levels have been calibrated. **Annexed** and marked with the letter "B" is a true and correct copy of the calibration certificate. The readings gained from the VA-10 have been checked against the readings from the InstanTel. The frequency levels for both units were consistent down to 0.1 hertz.



16. In practice, the VA-10 is used on a regular basis (several hours per day) for analysing machine vibrations. This usually contains motor vibration and line frequency components and it would be immediately obvious to me if there were any discrepancies greater than 0.2%.
17. I refer annexure "H" in the affidavit of Krystyna Wardas. In my view, in order for the plaintiff's expert (Owen Reeves) to obtain the readings recorded in his report, the particular machine that I tested must have been recalibrated or his readings are incorrect.
18. I note that the letter by Owen Reeves is unsigned.
19. I am puzzled by the technical specifications provided by the plaintiff in its advertising material for its "next generation" machine. The specifications are inconsistent with both the results obtained by myself and Owen Reeves.

SWORN at Auckland
on 19 JANUARY 2006
before me:




A solicitor of the High Court of New Zealand

IAN WILLIAM HUGH GORDON
SOLICITOR
AUCKLAND



This is the exhibit marked "B" referred to in the affidavit of LEIGH DARRYL OVENS of Auckland sworn this 14th day of January 2006 before me:


IAN WILKINSON
Solicitor of the High Court of New Zealand
AUCKLAND

Calibration Certificate

Part Number: 714A0801
Description: BLASTMATE III
Date: May 08, 2002
Unit: BA5667

| TEST REFERENCES* | Model | Serial No. |
|---------------------------------------|-----------|------------|
| Stanford Spectrum Analyzer | SR760 | 41036 |
| Good Will Inst. Frequency Counter | GUC-2010G | 5110825 |
| Fluke Multimeter | 87III | 71990510 |
| VOD Cable Simulation Test Jig | 717J0201 | n/a |
| Bruel & Kjaer Accelerometer | 4370 | 1425906 |
| Bruel & Kjaer Charge Amplifier | 2635 | 1423229 |
| Bruel & Kjaer Mic Power Supply | 2804 | 1904864 |
| Bruel & Kjaer Microphone Preamplifier | 2669 | 1834210 |
| Bruel & Kjaer Microphone Element | 4193 | 1863904 |

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK™ feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service centre for regular calibration.

AUTHORIZED BY: 

*References are traceable to NRC, NIST or equivalent

Vibration Consultants Ltd.



Phone/Fax (09) 473 5756, (or 479 7627) P.O. Box 35 195 Browns Bay, Auckland.

On the 2nd of March 2005, we visited 7/192 Victoria Street West in Auckland, to measure vibration of three vibration training platforms.

Method

Initially vibration was measured in three axes using an Instanetel BM III seismometer. But at the higher frequencies and range, vibration velocity in the vertical axis exceeded the full scale limit of this seismometer.

Consequently a full sets of vertical measurements were made using a Rion VA-10 vibration analyser.

Checks measurements were also made towards the outer ends of the platform to confirm reasonably consistent levels across the platform.

Comments

Vibra Gym S/N 13536 and 13535 were very similar with the exception that 13536 amplitude was lower at maximum frequency and amplitude (4mm, 50Hz).

Power plate S/N PP04013915, showed significantly lower amplitude and particularly frequency, with actual frequencies of 38.68 Hz (set to 2 mm, 50 Hz) and 38.23 Hz (set to 4 mm, 50 Hz), an error of 22.6% and 23.5% respectively. Actual acceleration amplitudes were 13 g and 24 g, an error of -35% and -41% respectively.

Theoretical levels have been calculated assuming the displacement ranges 2 mm and 4mm are 0 to peak and using the formula,

$$\text{Acceleration} = \frac{(2\pi \times \text{Frequency})^2 \times \text{Displacement}}{9.807 \times 1000} \quad \frac{(\text{Hz})^2 (\text{mm})}{(\text{m/s}^2 / \text{g}) (\text{mm} / \text{m})}$$

Conclusion

Two of the Vibra Gym units tested had frequency errors that were within the range -1% to -3.2%.

Where the Power Plate unit had frequency errors ranging between -7 and -23%,
And were well down in vibration amplitude when set to "50 Hz".

Yours sincerely

Darryl Ovens,
Technician.

Our Ref: VibraTrain020305

Included;

Vibration results graph.

This is the exhibit marked "A" referred to in the affidavit of LEIGH DARRYL OVENS of Auckland sworn this 19 day of January 2006 before me:

Solicitor of the High Court of New Zealand
AUCKLAND

RECEIPT AND CONFIRMATION OF PAPERS SERVED.

Regards to Commerce Commission file report number 105866.

Reports, comments and conclusion of Vibration Consultants Limited on Power Plate model Next Generation commissioned on the 2nd March 2005.

One diagnostic chart of frequency rate on Power Plate model Next Generation commissioned on the 2nd March 2005.



Signature

18.3.05

Date

Proprietor or staff member of vibration training premises in possession of above said units. Premises located at 5 Kingdon St. Level 6. Newmarket, Auckland, New Zealand.

This is the exhibit marked "D" referred to in the affidavit of **LLOYD SHAW** of Auckland sworn this 16th day of February 2006 before me:



A solicitor of the High Court of New Zealand

Helen Chung
Solicitor
Auckland

