VIBRATION AND SHOCK TEST REPORT

Company ：Traco Electronic Co. Ltd.

Address ：Jenatschstr. 1., CH-8002 ZURICH, Switzerland.

Model Name ：TEP 75-2415WI

Date Received ：JUN 16, 2012

Date Tested ：JUN 16, 2012

TESTING LABORATORY IS ACCREDITED BY:

IEC/IECQ 17025 certificate of independent test laboratory approval
Certificate No.：T1091
ISO 17025 accredited in respect of laboratory is approved by TAF
Certificate No.：L0835-090819
ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

	Name	Signature	Date
Test Engineer	Ivan Cheng	Ivan Cheng	Jun 29, 2012
Manager	General Lee	General	Jun 29, 2012

NOTE：

1. This report will be invalid if reproduced in part or altered in any way.
2. This report refers only to the specimen(s) submitted to test, and is invalid if used otherwise.
3. This report is ONLY valid with the examination seal and signature of this institute.
4. The tested specimen(s) will only be preserved for thirty days from the date issued if not collected by the applicant.

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1. GENERAL INFORMATION

1.1 DESCRIPTION OF UNIT

Manufacturer：Traco Electronic Co. Ltd.

Model name：TEP 75-2415WI

Sample quantity：1 unit

Model name and Multiple list：

Model name	TEP 75-2415WI	
Multiple list	TEP 75-2411WI	TEP 75-4811WI
	TEP 75-2412WI	TEP 75-4812WI
	TEP 75-2413WI	TEP 75-4813WI
	TEP 75-2415WI	TEP 75-4815WI
	TEP 75-2416WI	TEP 75-4816WI
	TEP 75-2418WI	TEP 75-4818WI

* Based on customer's product specification, 24V was applied to the TEP 75-24 series and 48V should be applied to the TEP 75-48 series.

1.2 UNIT OPERATING CONDITION

During operating testing, unit power is on and 24V should be applied to the unit.

2. VIBRATION TEST

2.1 TEST EQUIPMENT

Model	Serial Number	Calibration Date
SHINKEN G-0250L Shake system	SG-4795	MAR 27, 2012

2.2 LABORATORY AMBIENCE CONDITION

Temperature：23±3°C

Relative humidity：55%±3% (RH)

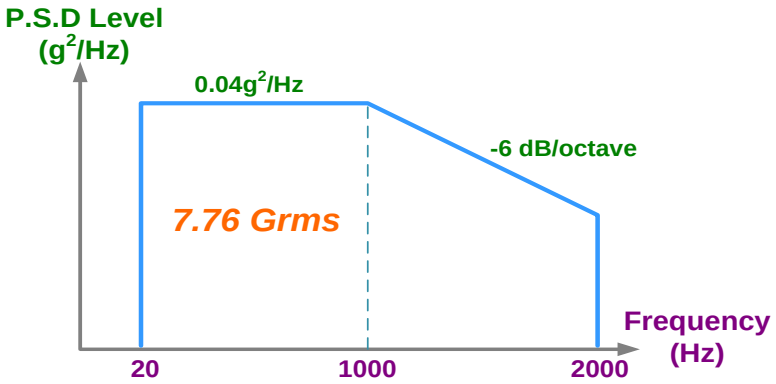
2.3 REFERENCE DOCUMENT

The test is refers to MIL-STD 810F test method.

2.4 TEST CONDITION

Unit is operating.

Vibration waveform：Random waveform



Duration of test：1 hour for each axis

Vibration axes：X, Y and Z

2.5 SUMMARY OF TEST

Before, during and after testing, visual inspection showed no physical defect or functional degradation of unit.

3. SHOCK TEST

3.1 TEST EQUIPMENT

Model	Serial Number	Calibration Date
SHINKEN G-0250L Shake system	SG-4795	MAR 27, 2012

3.2 LABORATORY AMBIENCE CONDITION

Temperature : 23±3°C

Relative humidity : 55%±3% (RH)

3.3 REFERENCE DOCUMENT

The test is refers to MIL-STD 810F test method.

3.4 TEST CONDITION

Unit is operating.

Pulse shape : Terminal-peak saw tooth

Impact acceleration : 40g

Pulse duration : 11 ms

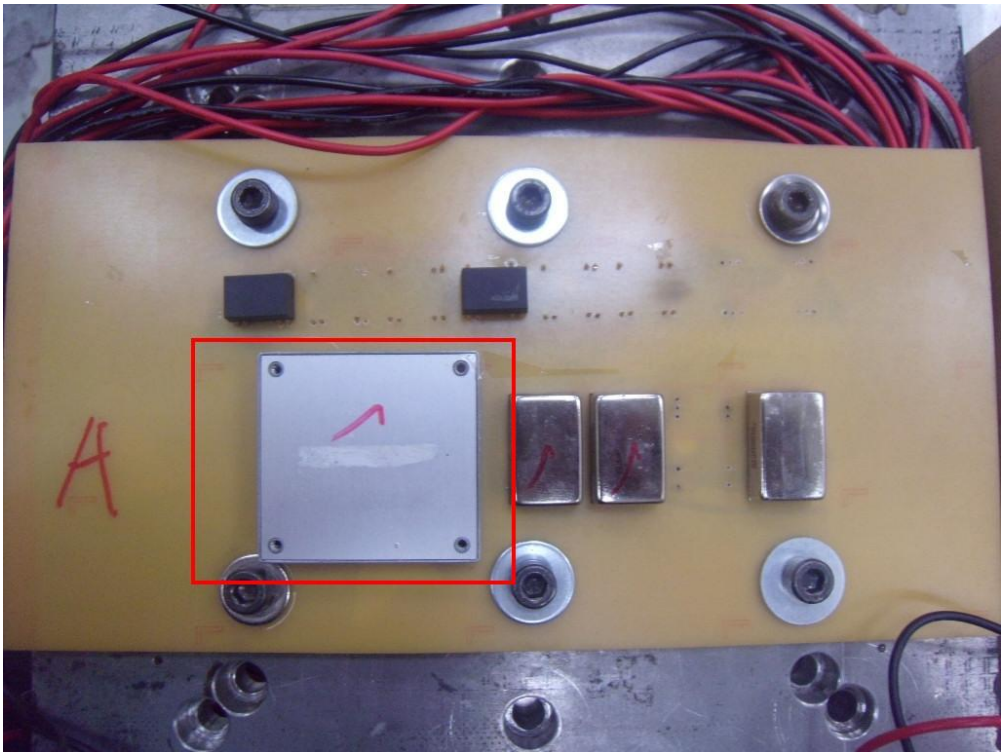
Number of shocks : 18 shocks (3 shocks for each ±axis)

Orientation : ±X, ±Y and ±Z axes

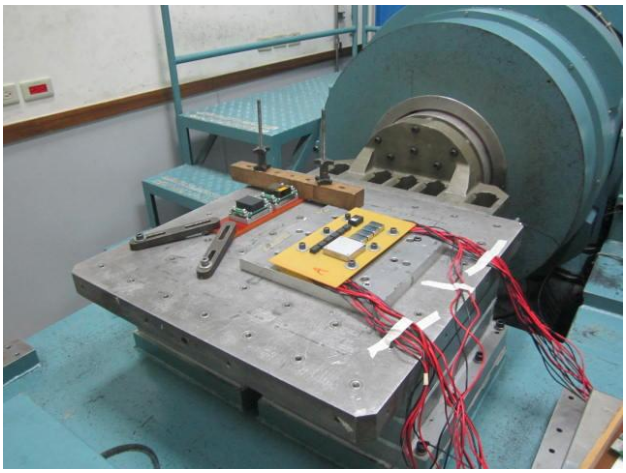
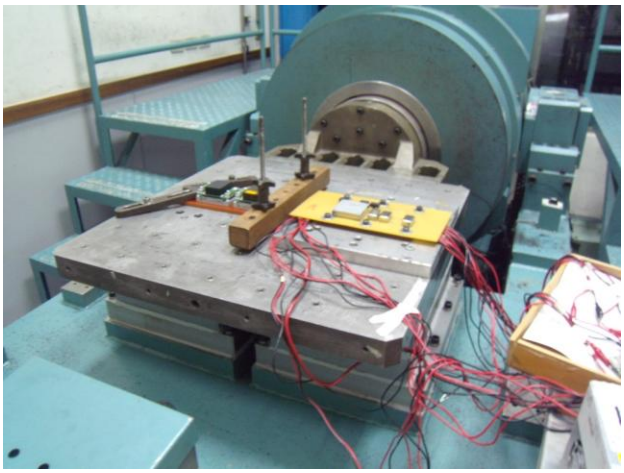
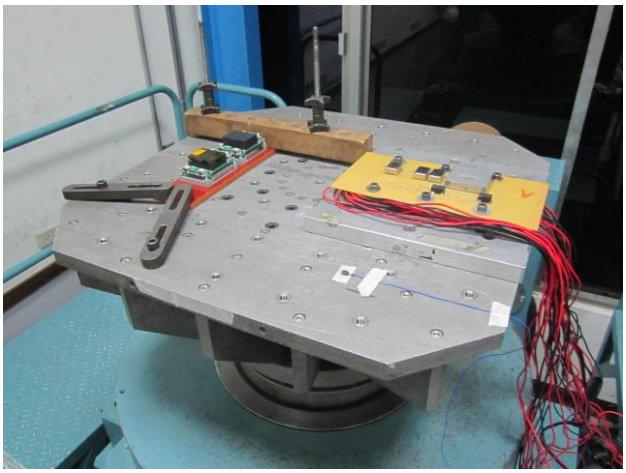
3.5 SUMMARY OF TEST

Before, during and after testing, visual inspection showed no physical defect or functional degradation of unit.

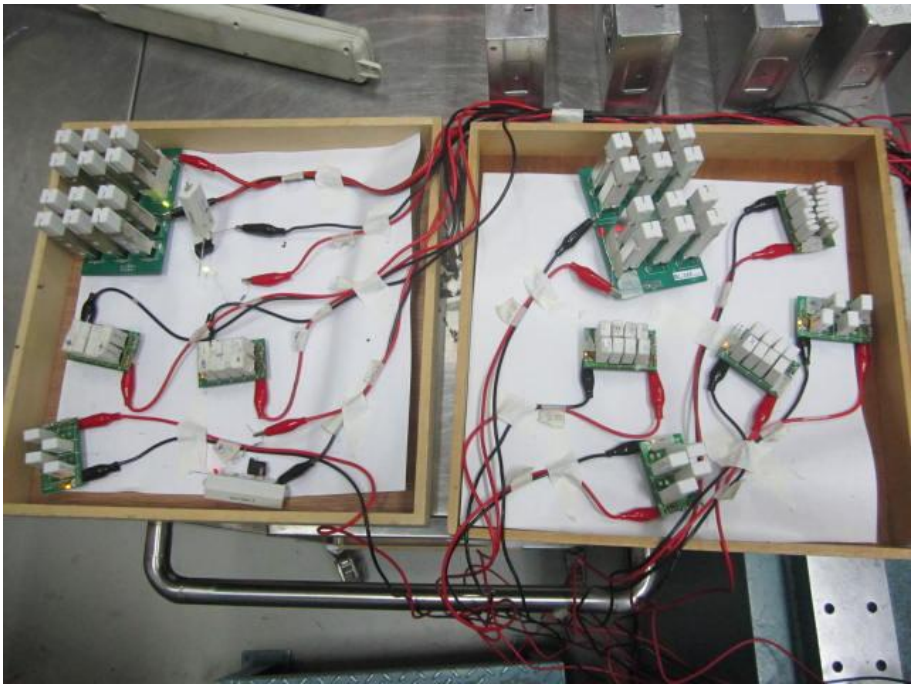
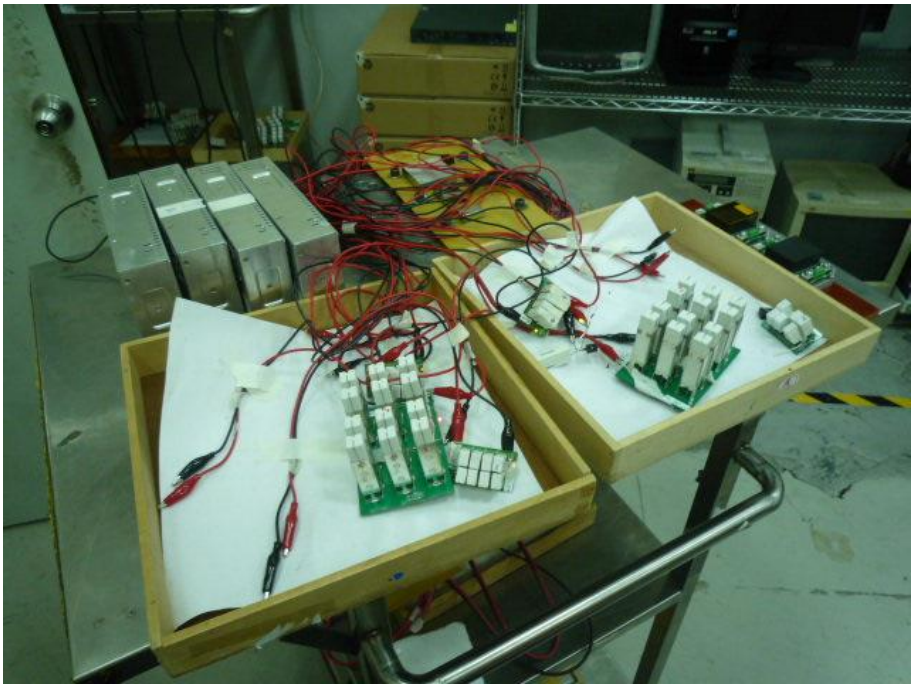
Attachment 1：Photo of unit



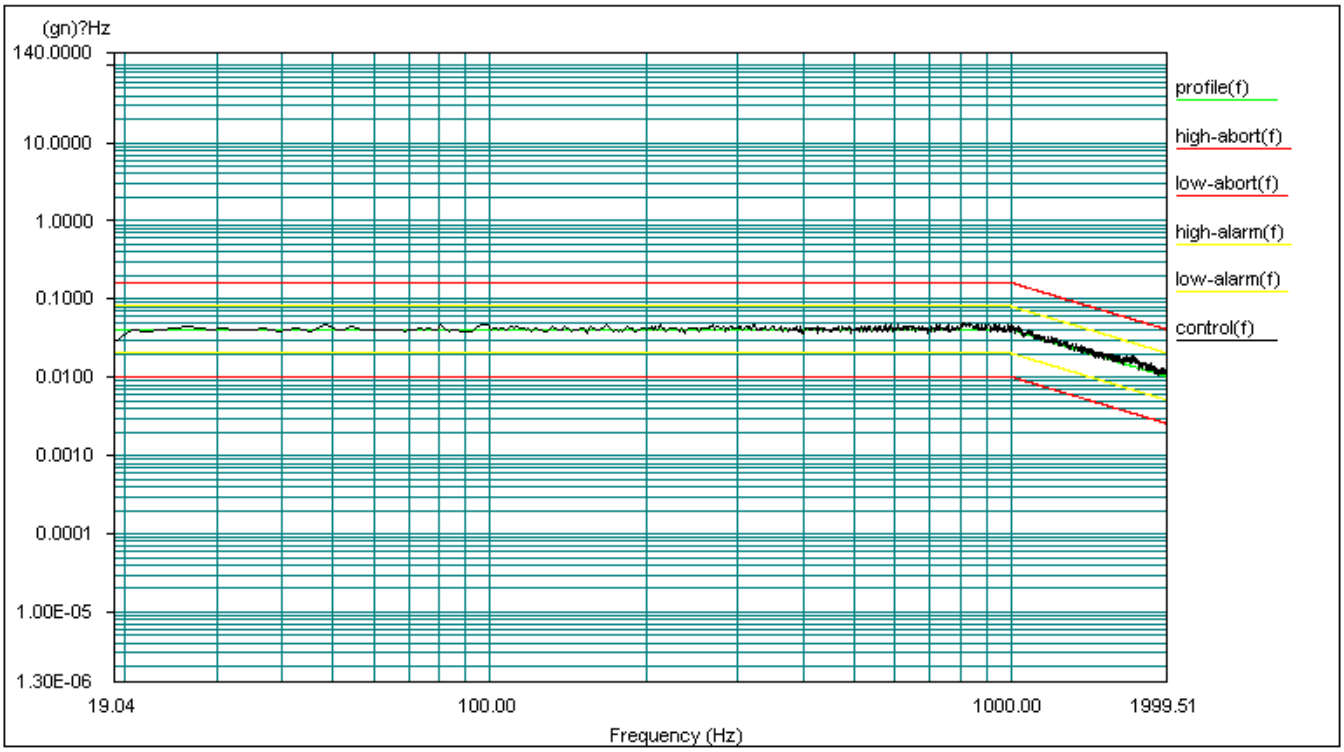
Attachment 2：Photo of vibration and shock test setup

Operating	X axis
	
Y axis	**Z axis**
	

Attachment 3：Photo of unit before and after vibration and shock test

Appearance and function were normal
Before testing

After testing


Attachment 4：Graph of vibration test



Level: 100 %

Control RMS: 8.365216 gn

Full Level Elapsed Time: 01:00:00

Lines: 1600

Frame Time: 0.682667 Seconds

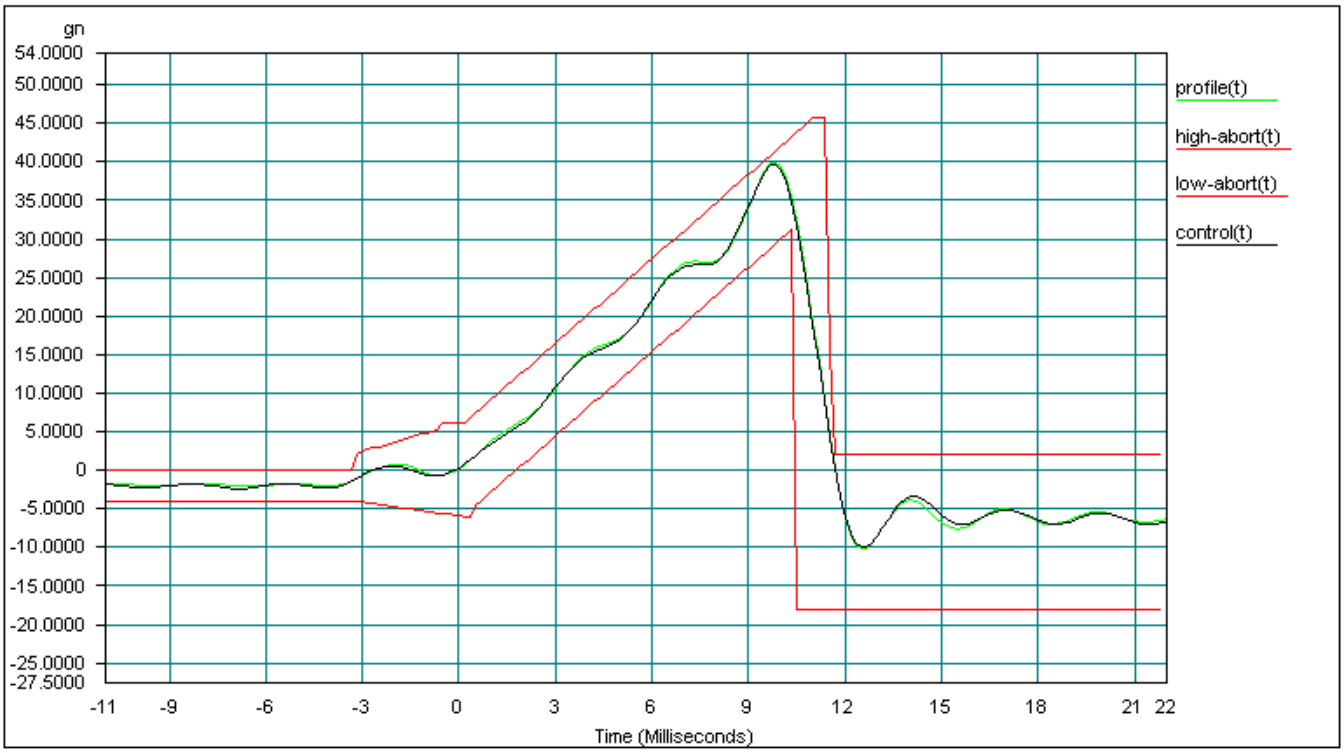
Demand RMS: 7.699404 gn

Remaining Time: 00:00:00

DOF: 300

dF: 1.464844 Hz

Attachment 5：Graph of shock test



Level: 100 %

Block Size: 2048

Frame Time: 0.341333 Seconds

Control RMS: 4.650068 gn

dT: 0.000167 Seconds

Demand RMS: 4.650746 gn

Pulse Type: Forward Sawtooth

Elapsed Pulses: 13

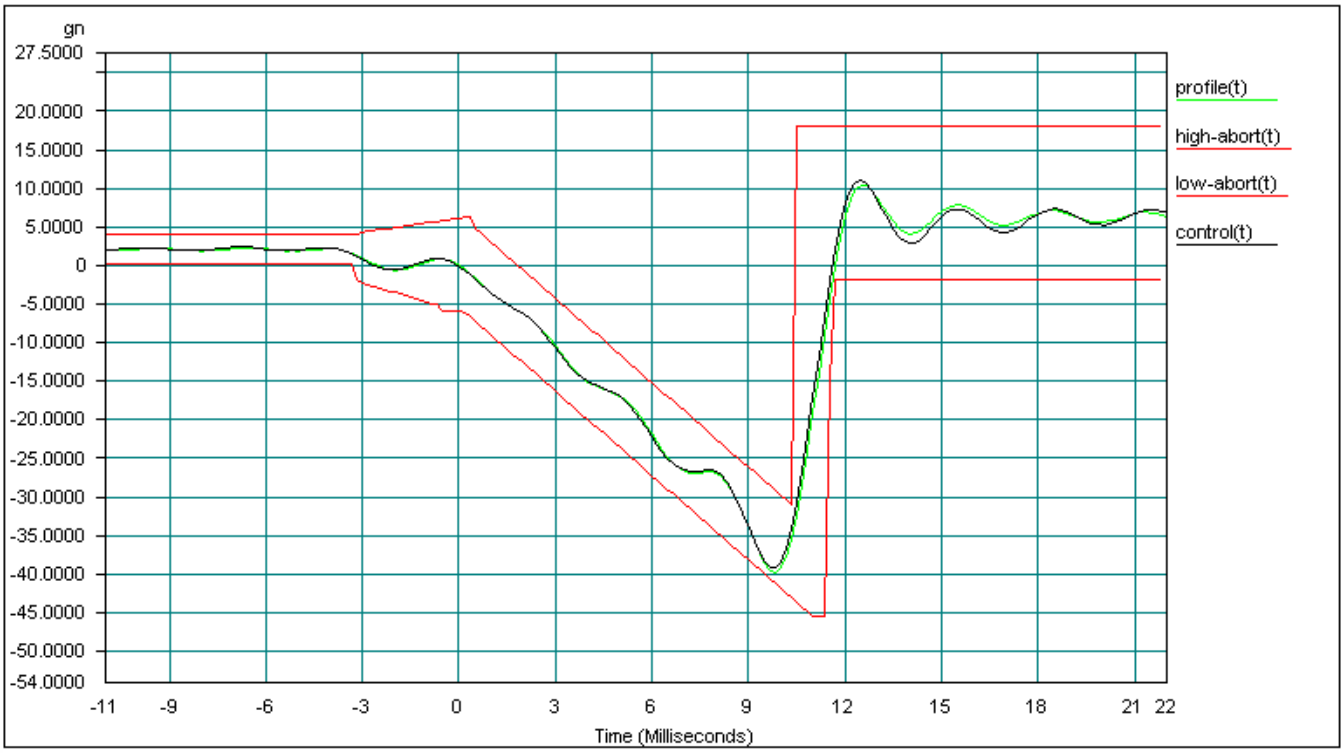
Control Peak: 39.403645 gn

Full Level Elapsed Pulses: 3

Demand Peak: 39.748165 gn

Remaining Pulses: 0

Amplitude: 40.000000 gn



Level: 100 %

Block Size:	2048	Elapsed Pulses:	18
Frame Time:	0.341333 Seconds	Control Peak:	39.194000 gn
Control RMS:	4.643389 gn	Full Level Elapsed Pulses:	3
dT:	0.000167 Seconds	Demand Peak:	39.748165 gn
Demand RMS:	4.650746 gn	Remaining Pulses:	0
Pulse Type:	Forward Sawtooth	Amplitude:	40.000000 gn