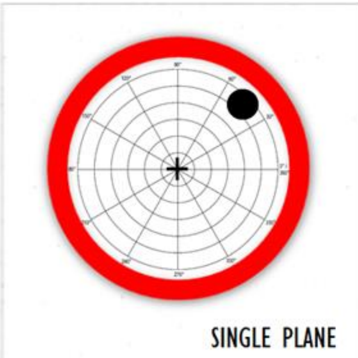
CONFIDENTIAL

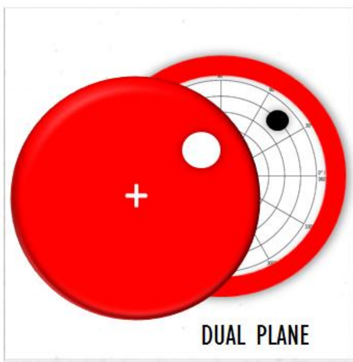
ROTOR BALANCER

ABSOLUTE ROTATION™

Know more !

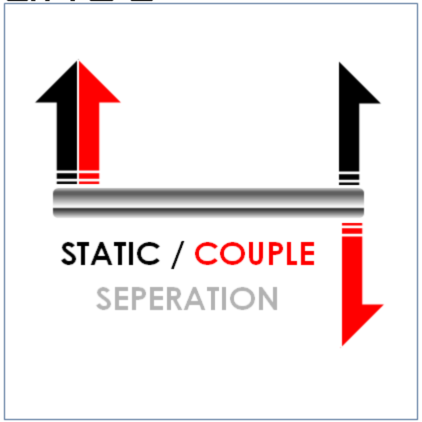


SINGLE PLANE BALANCING
Comply ISO 1940/1 for Rigid Rotor



DUAL PLANE BALANCING

Utilities
Resolve Static / Couple imbalance
Vector addition / separation



ROTOR SETUP | FOUR RUNS | SINGLE BALANCING | SINGLE PLANE | DUAL PLANE

RIGID ROTOR BALANCING
RESIDUAL IMBALANCE CALCULATOR

RotoR BALANCER

Single plane ○ Dual plane ◉

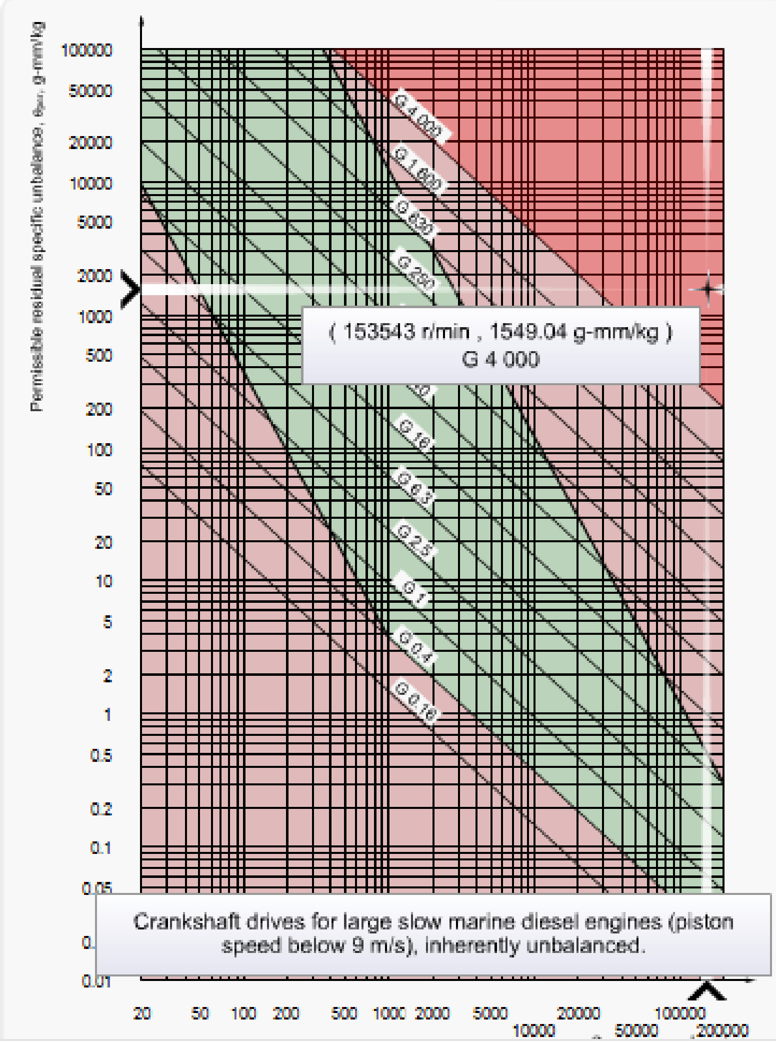
ISO 1940-1 QUALITY GRADE	WEIGHT OF THE ROTOR in Kg
G 2.5	100
ROTOR RATED SPEED in RPM	ANGULAR FREQ in rad/s
1500	157.08
ROTOR ECCENTRICITY in µm	RESIDUAL IMBALANCE in g.mm
15.9155	1591.55

LEFT PLANE Radius of correction in mm	RIGHT PLANE Radius of correction in mm
200	100
LEFT PLANE Residual Imbalance in gram	RIGHT PLANE Residual Imbalance in gram
3.97887	7.95775

CALCULATE | PROCEED

ABSOLUTE ROTATION™

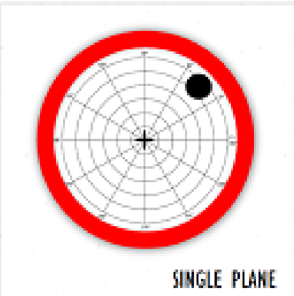
Tuesday, 29 December, 2015 12:43 AM



Static Couple Seperation

Vector Addition

Vector Separation



No.	Angle	Weight
1	0.0	48
2	20.0	67
3	40.0	120
4	60.0	89
5	80.0	
6	100.0	
7	120.0	22
8	140.0	
9	160.0	56
10	180.0	
11	200.0	90
12	220.0	
13	240.0	
14	260.0	78
15	280.0	
16	300.0	
17	320.0	5
18	340.0	

Any Location

Fixed Locations

Locations

18

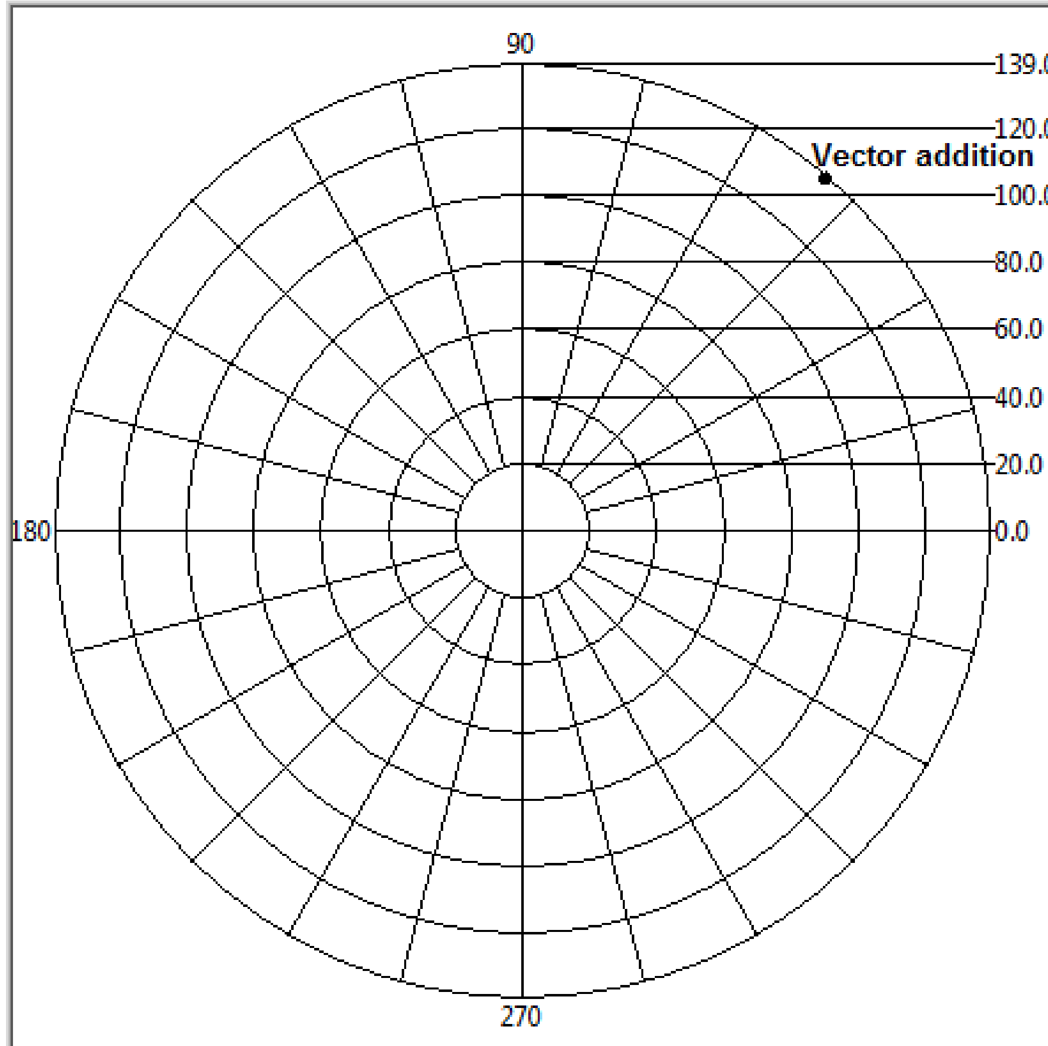
Weight

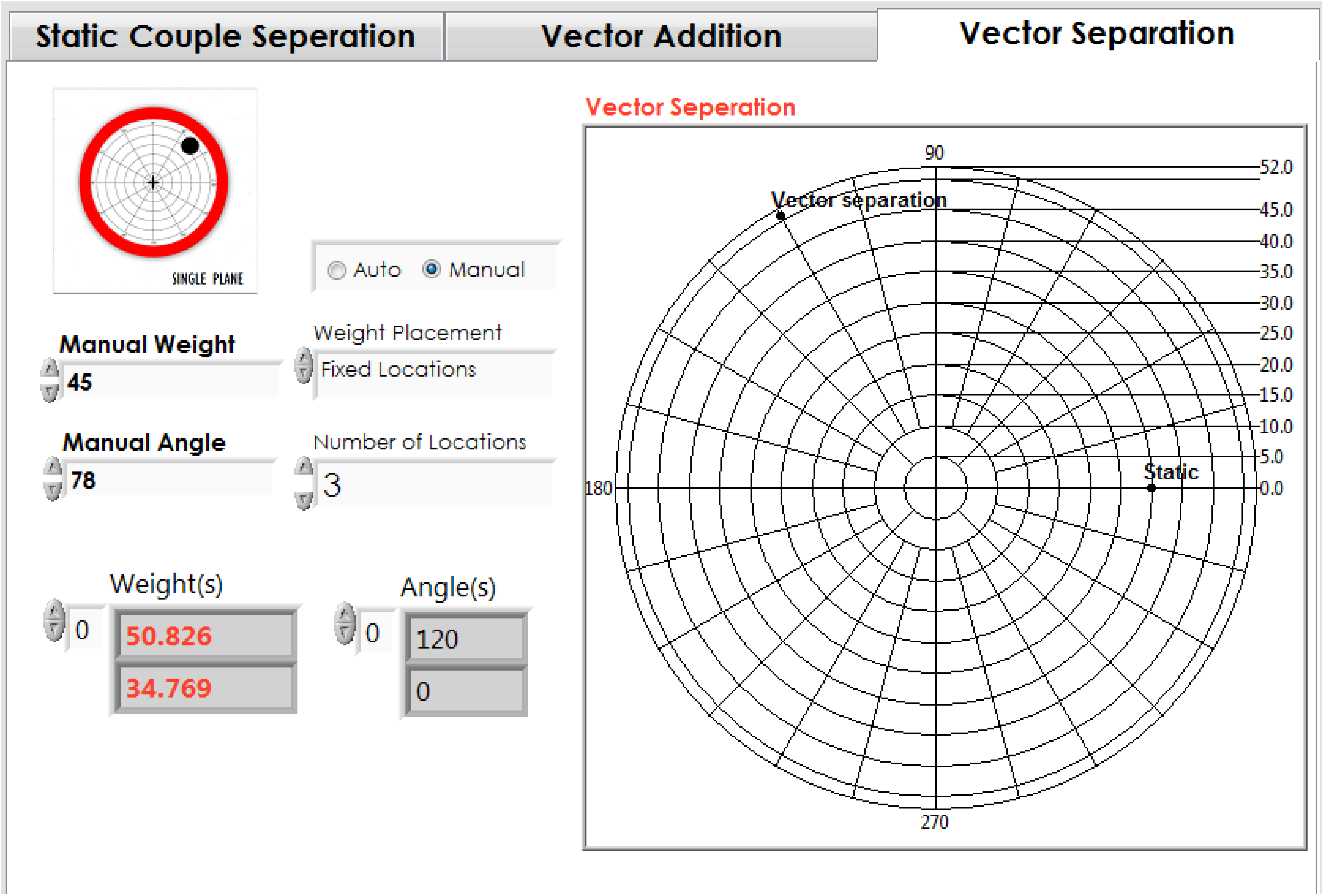
137.588

Angle

49.4348

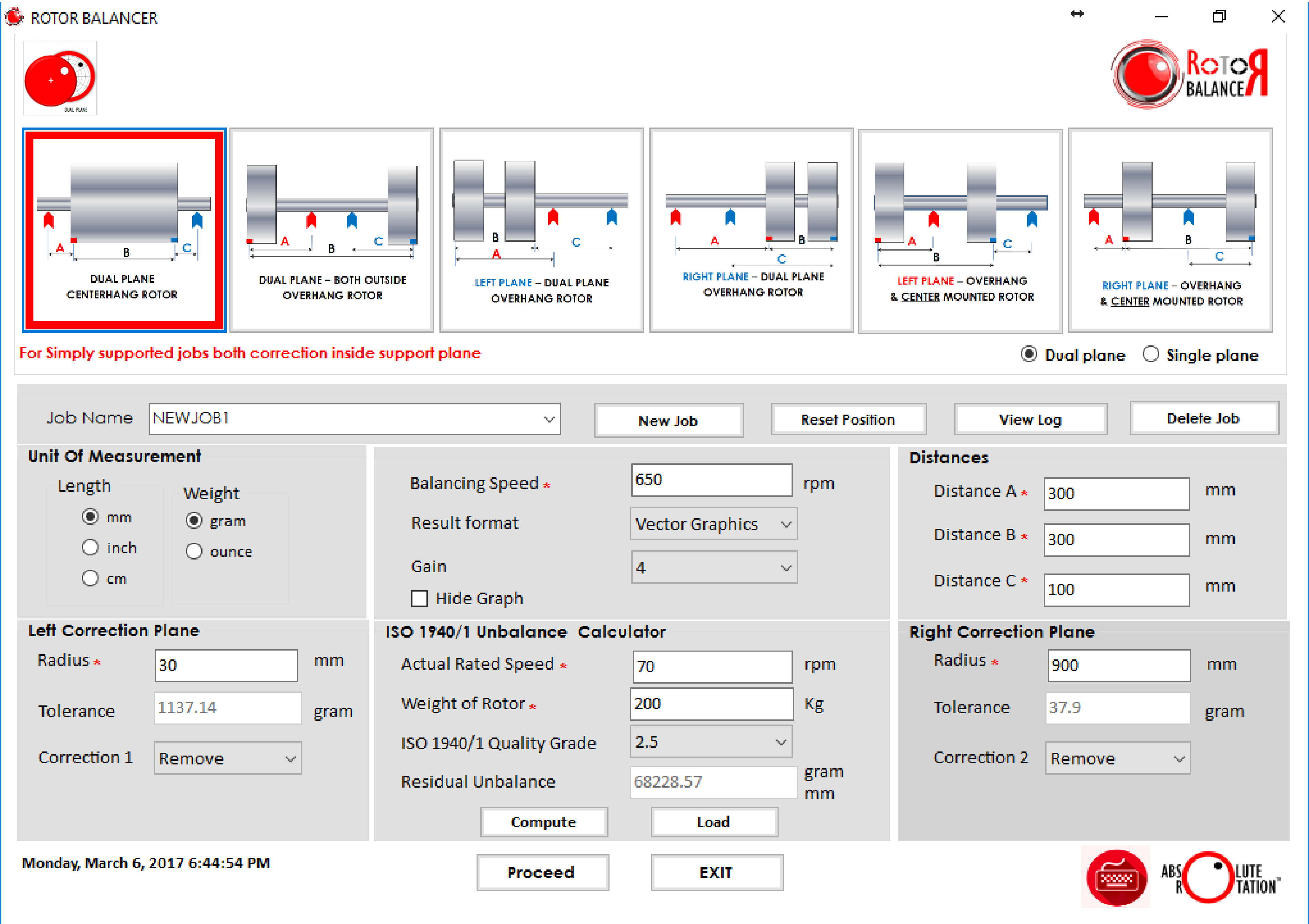
Vector Addition



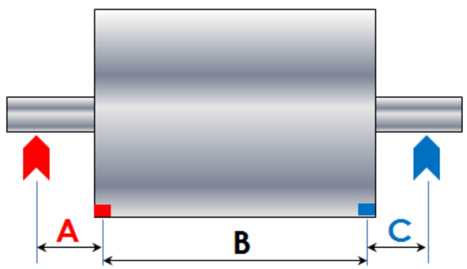


Static Couple Seperation
Vector Addition
Vector Separation
SINGLE PLANE
Auto
Manual
Manual Weight
45
Weight Placement
Fixed Locations
Manual Angle
78
Number of Locations
3
Weight(s)
0
50.826
34.769
Angle(s)
0
120
0
Vector Seperation
90
180
270
52.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Vector separation
Static

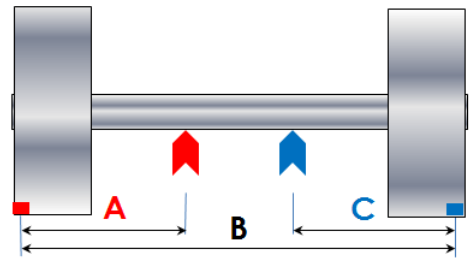
ROTOR BALANCER


ROTOR BALANCER
RoToR BALANCER
DUAL PLANE
DUAL PLANE CENTERHANG ROTOR
DUAL PLANE – BOTH OUTSIDE OVERHANG ROTOR
LEFT PLANE – DUAL PLANE OVERHANG ROTOR
RIGHT PLANE – DUAL PLANE OVERHANG ROTOR
LEFT PLANE – OVERHANG & CENTER MOUNTED ROTOR
RIGHT PLANE – OVERHANG & CENTER MOUNTED ROTOR
A
B
C
For Simply supported jobs both correction inside support plane
Dual plane
Single plane
Job Name
NEWJOB1
New Job
Reset Position
View Log
Delete Job
Unit Of Measurement
Length
mm
inch
cm
Weight
gram
ounce
Balancing Speed *
650
rpm
Result format
Vector Graphics
Gain
4
Hide Graph
Distances
Distance A *
300
mm
Distance B *
300
mm
Distance C *
100
mm
Left Correction Plane
Radius *
30
mm
Tolerance
1137.14
gram
Correction 1
Remove
ISO 1940/1 Unbalance Calculator
Actual Rated Speed *
70
rpm
Weight of Rotor *
200
Kg
ISO 1940/1 Quality Grade
2.5
Residual Unbalance
68228.57
gram mm
Compute
Load
Right Correction Plane
Radius *
900
mm
Tolerance
37.9
gram
Correction 2
Remove
Monday, March 6, 2017 6:44:54 PM
Proceed
EXIT
ABSOLUTE ROTATION

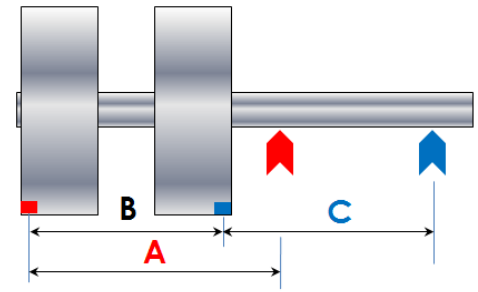
Setup Options – DUAL PLANE



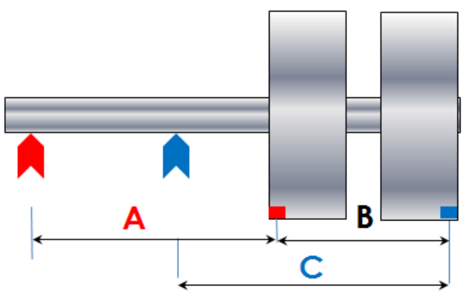
DUAL PLANE
CENTERHANG ROTOR



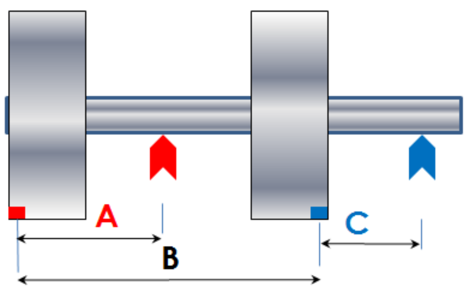
DUAL PLANE – BOTH OUTSIDE
OVERHANG ROTOR



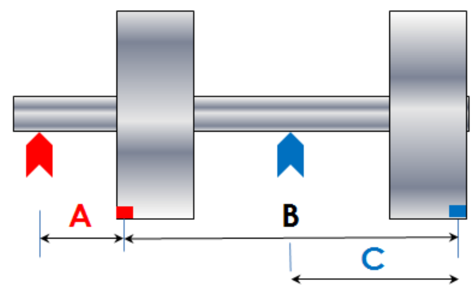
LEFT PLANE – DUAL PLANE
OVERHANG ROTOR



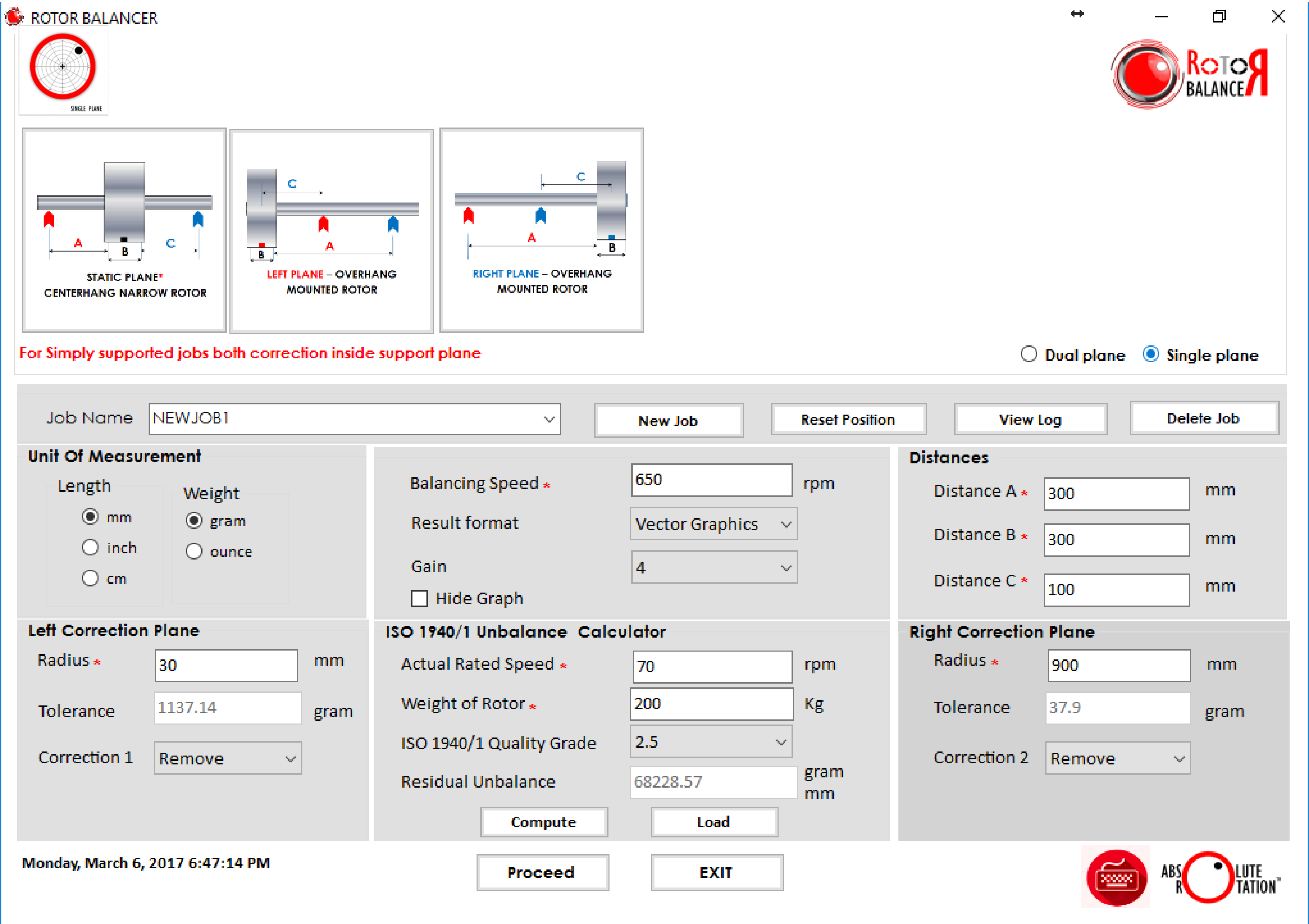
RIGHT PLANE – DUAL PLANE
OVERHANG ROTOR



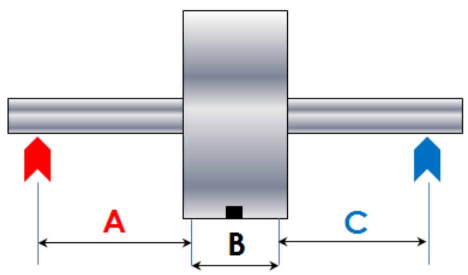
LEFT PLANE – OVERHANG
& CENTER MOUNTED ROTOR



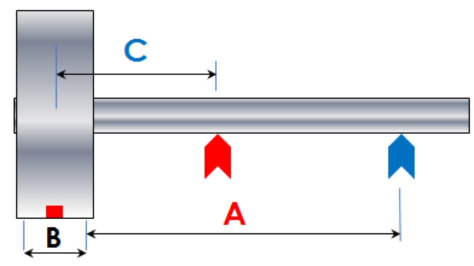
RIGHT PLANE – OVERHANG
& CENTER MOUNTED ROTOR


ROTOR BALANCER
SINGLE PLANE
RoToR BALANCER
C
A
B
C
STATIC PLANE*
CENTERHANG NARROW ROTOR
C
A
B
LEFT PLANE – OVERHANG
MOUNTED ROTOR
C
A
B
RIGHT PLANE – OVERHANG
MOUNTED ROTOR
For Simply supported jobs both correction inside support plane
Dual plane
Single plane
Job Name
NEWJOB1
New Job
Reset Position
View Log
Delete Job
Unit Of Measurement
Length
mm
inch
cm
Weight
gram
ounce
Balancing Speed *
650
rpm
Result format
Vector Graphics
Gain
4
Hide Graph
Distances
Distance A *
300
mm
Distance B *
300
mm
Distance C *
100
mm
Left Correction Plane
Radius *
30
mm
Tolerance
1137.14
gram
Correction 1
Remove
ISO 1940/1 Unbalance Calculator
Actual Rated Speed *
70
rpm
Weight of Rotor *
200
Kg
ISO 1940/1 Quality Grade
2.5
Residual Unbalance
68228.57
gram mm
Compute
Load
Right Correction Plane
Radius *
900
mm
Tolerance
37.9
gram
Correction 2
Remove
Monday, March 6, 2017 6:47:14 PM
Proceed
EXIT
ABSOLUTE ROTATION

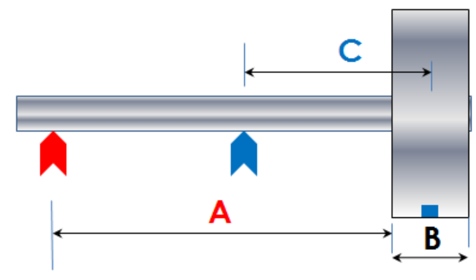
Setup Options – SINGLE PLANE



STATIC PLANE*
CENTERHANG NARROW ROTOR



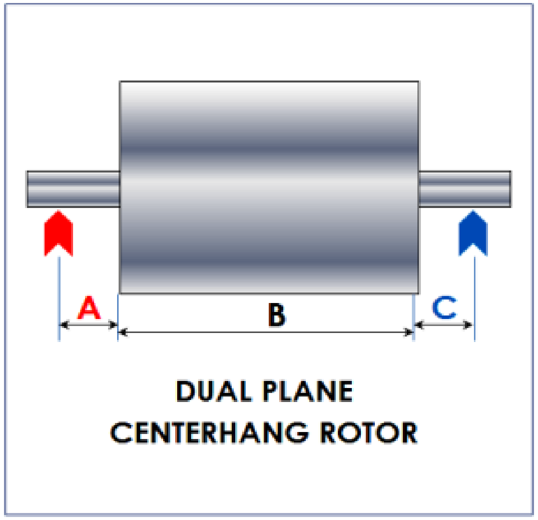
LEFT PLANE – OVERHANG
MOUNTED ROTOR



RIGHT PLANE – OVERHANG
MOUNTED ROTOR

Measurement

No error compensation values recorded. Production balancing On!!



Measured Speed in RPM

0192

For Simply supported jobs Both correction inside support plane

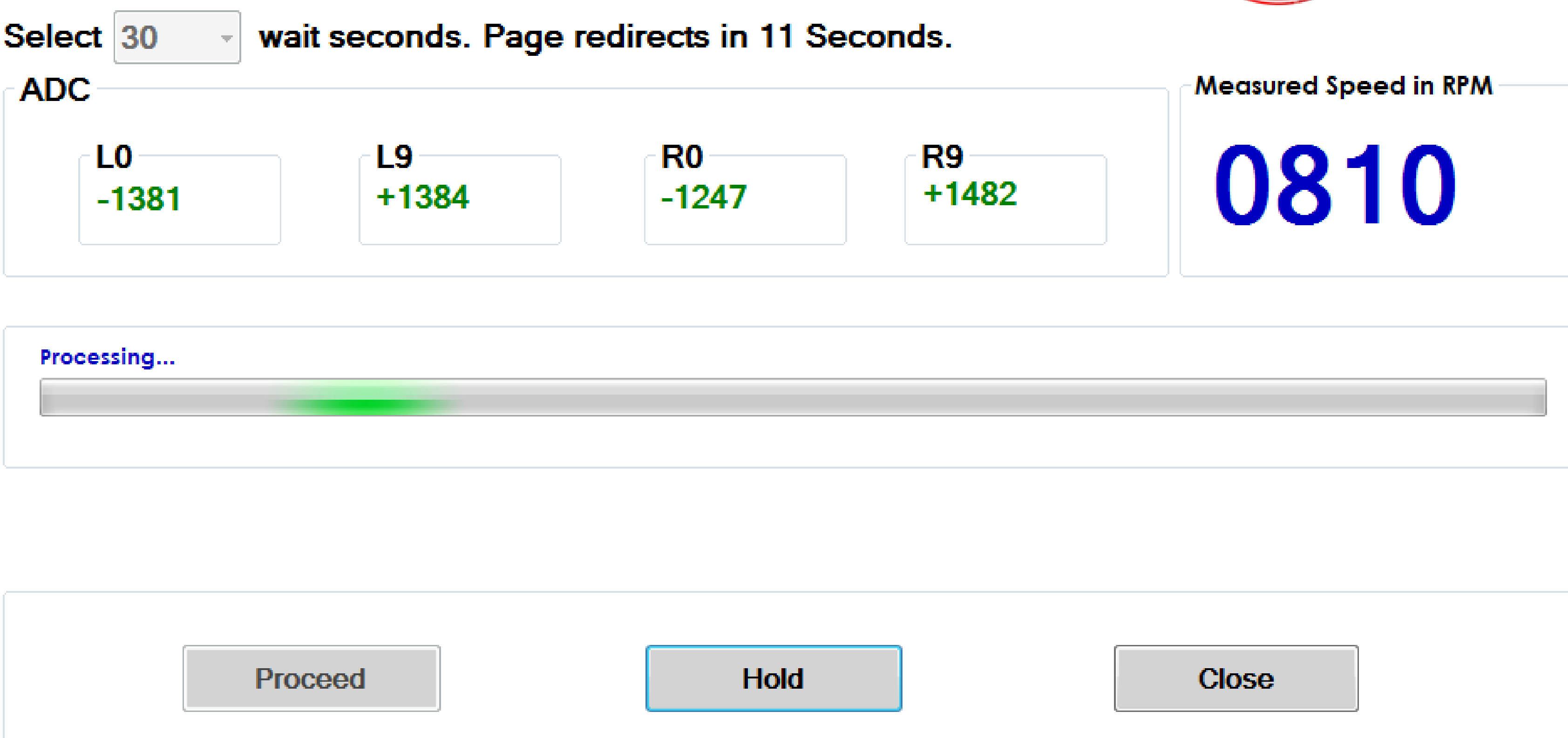
Rotational Speed Differs from the Set Balancing Speed. Match the speed to 225 rpm.

Run

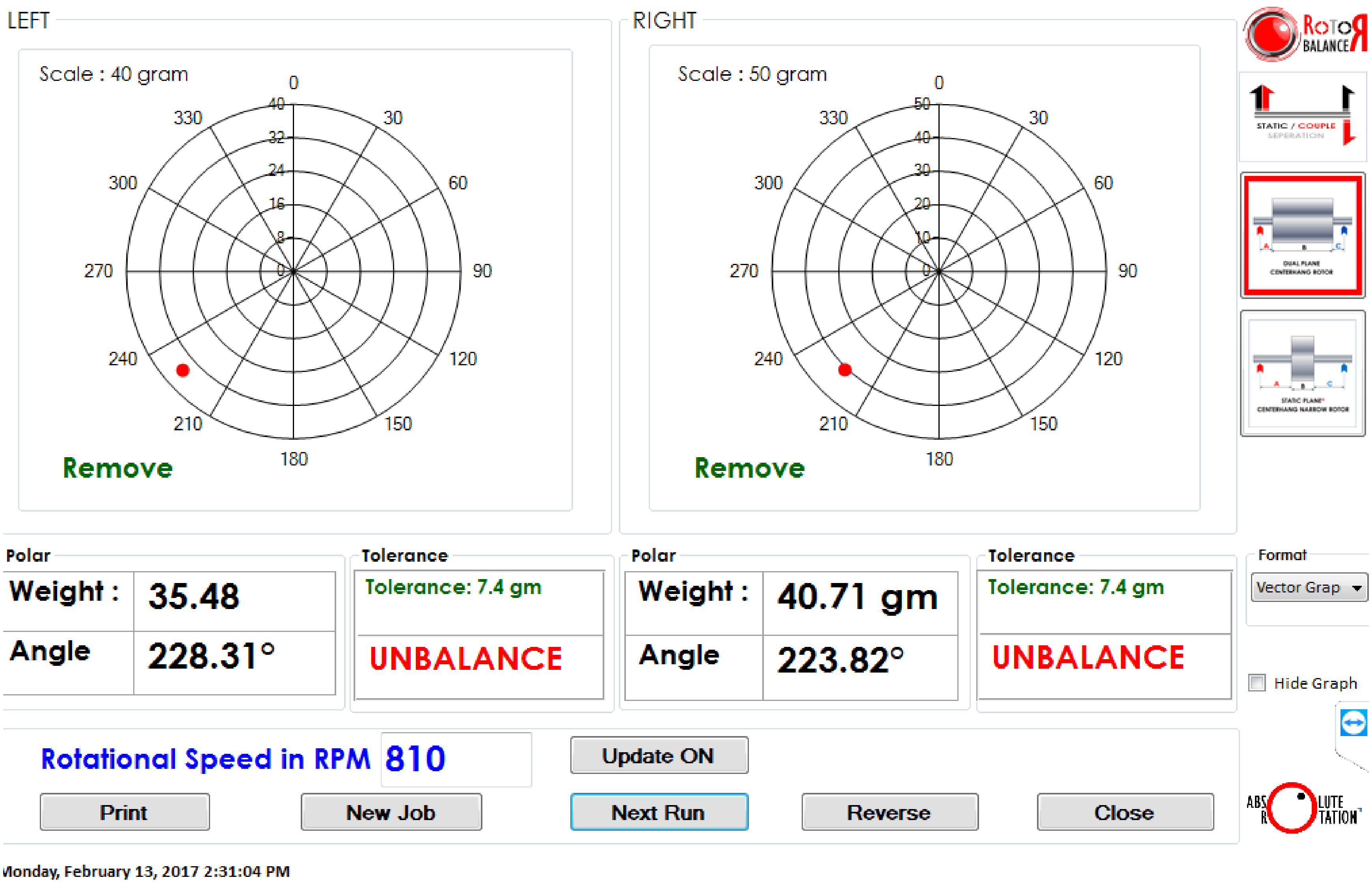
Please mount the adaptor and load the component.

Start the machine and press the Run key when the desired speed is achieved!

Measurement …



Result



LEFT
Scale : 40 gram
Remove
RIGHT
Scale : 50 gram
Remove
STATIC / COUPLE SEPERATION
Polar
Weight : 35.48
Angle 228.31°
Tolerance
Tolerance: 7.4 gm
UNBALANCE
Polar
Weight : 40.71 gm
Angle 223.82°
Tolerance
Tolerance: 7.4 gm
UNBALANCE
Format
Vector Grap
Hide Graph
Rotational Speed in RPM 810
Update ON
Print
New Job
Next Run
Reverse
Close
Monday, February 13, 2017 2:31:04 PM

Result ...

LEFT

Weight	67.14 gm
Angle	163.07°

RIGHT

Weight	51.15 gm
Angle	74.44°

LEFT	RIGHT
Tol: 53.49 gm	Tol: 53.49 gm
UNBALANCE	BALANCED

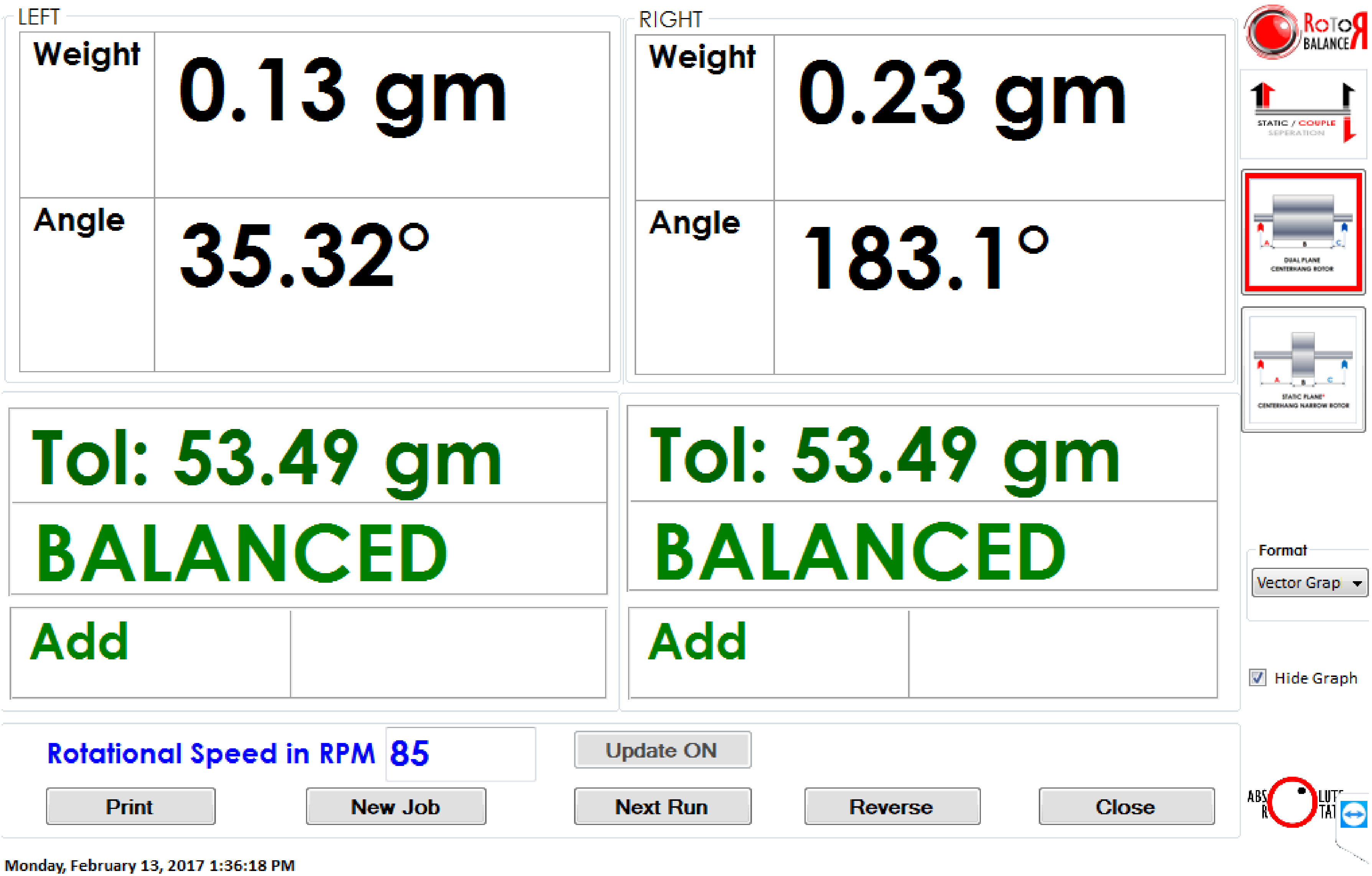
Format

Vector Grap

☑ Hide Graph

riday, February 10, 2017 1:58:47 PM

Result ...

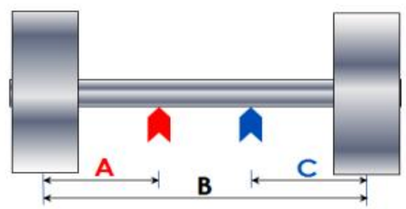


LEFT
Weight
0.13 gm
Angle
35.32°
RIGHT
Weight
0.23 gm
Angle
183.1°
Tol: 53.49 gm
BALANCED
Add
Tol: 53.49 gm
BALANCED
Add
Rotor Balancer
STATIC / COUPLE
SEPERATION
Format
Vector Grap
Hide Graph
Rotational Speed in RPM
85
Update ON
Print
New Job
Next Run
Reverse
Close
Monday, February 13, 2017 1:36:18 PM

Report

RIGID ROTOR - DYNAMIC BALANCING REPORT

Name Of the Operator	:
Name Of the Component	NEWJOB7
Time and Date of Balancing	10-Jan-2017 07:59:15 PM
Type Of Balancing	Both correction plane outside support plane
Mass of the job	100 kg
Service Speed of the job	1000 RPM
Left Side Radius	100 mm
Right Side Radius	100 mm
Distance A	100 mm
Distance B	300 mm
Distance C	100 mm
ISO Balancing Grade	G 2.5
Balancing Speed	650 RPM
ISO tolerance limit for the job	2388 gram-mm



DUAL PLANE – BOTH OUTSIDE OVERHANG ROTOR

Particulars

Particulars	LEFT SIDE PLANE	RIGHT SIDE PLANE
Unbalance Weight	10.81gram	11.07gram
Unbalance Angle	47.33°	48.6°
Allowable Tolerance	23.88gram	23.88gram
Weight Added/Removed	Remove	Remove
Unbalance Status	Balanced	Balanced
Name of the User	:	
Signature		

INTERNATIONAL STANDARD **ISO 1940-1**

Second edition
2003-08-15

Mechanical vibration — Balance quality requirements for rotors in a constant (rigid) state —

Part 1:
Specification and verification of balance tolerances

Vibrations mécaniques — Exigences en matière de qualité dans l'équilibrage pour les rotors en état rigide (constant) —

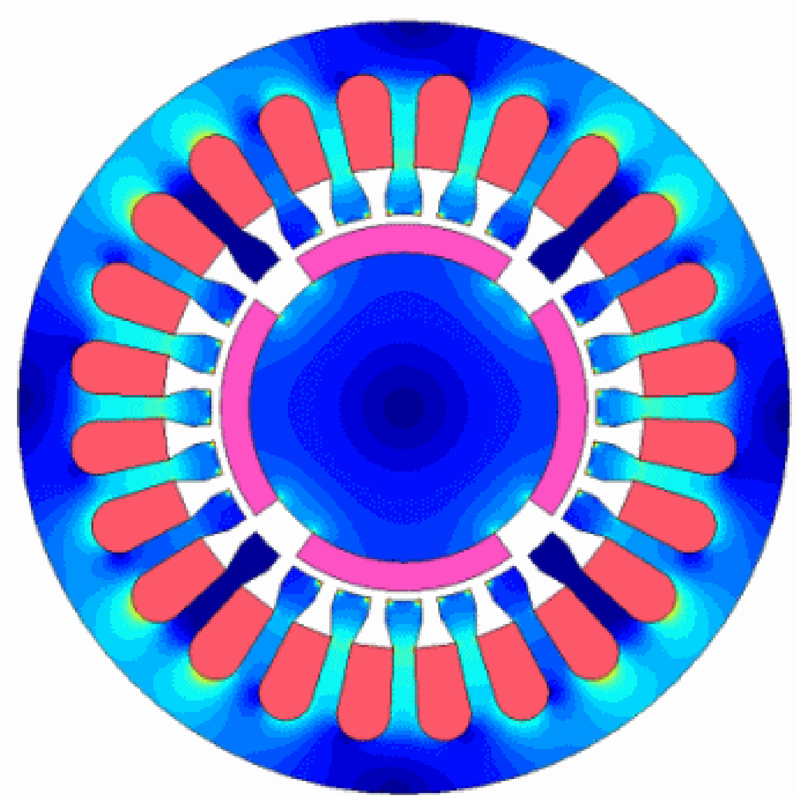
Partie 1: Spécifications et vérification des tolérances d'équilibrage

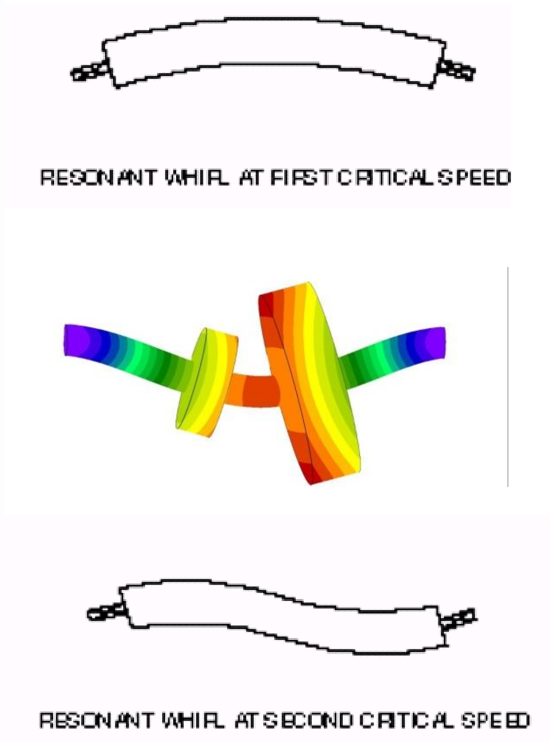
Reference number
ISO 1940-1:2003(E)

Know more !

ISO 21940-11 : 2016

Mechanical vibration -- Rotor balancing -- Part 11: Procedures and tolerances for rotors with rigid behaviour






INTERNATIONAL STANDARD

ISO 21940-11

First edition
2016-11-15

Mechanical vibration — Rotor balancing —

Part 11:
Procedures and tolerances for rotors with rigid behaviour

Vibrations mécaniques — Équilibrage des rotors —

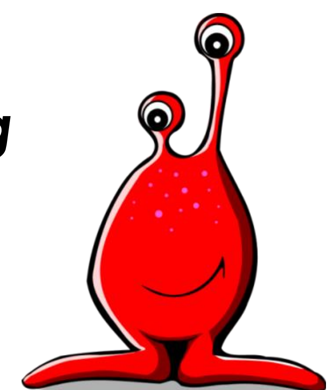
Partie 11: Modes opératoires et tolérances pour rotors à comportement rigide

Reference number
ISO 21940-11:2016(E)

Upgrade options

Upgrade Outdated Horizontal Hard Bearing Balancing Machine with Force Sensors for Single & Dual planes Automated Calibration Procedure with ISO Test Rotor

The above illustrated LOGO's are trademark & copy rights of respective firms



ABSOLUTE ROTATION™

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