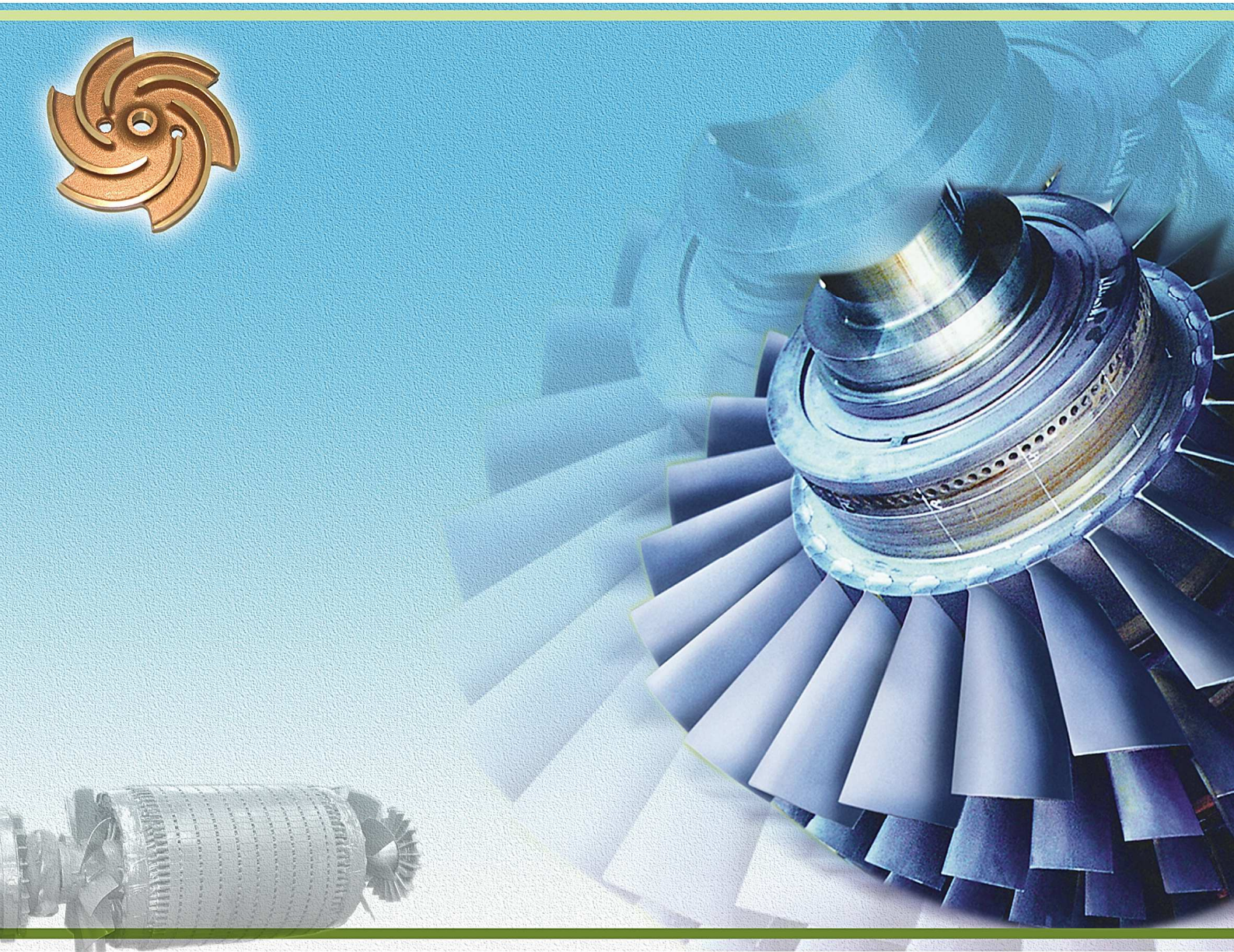


Precibalance

Precibalance Hard Bearing Modular Dynamic Balancing Machines

In Windows / Unicode to enable you to operate in your language



Balancing ensures Quality

Precibalance makes balancing affordable....

All that is needed for dynamic balancing operations

Precibalance



very day operation of balancing machines demands easy handling, accurate indication of unbalance and specific correction instructions on the machines / systems.

Precibalance has more than two decades of experience in design, manufacture, sales and service of dynamic balancing machines across the world.

The design of the mechanical unit is sturdy and modular. The electrical drives are appropriate for the given application, namely Single speed or Multi speed or Variable speed of balancing as required.

The electronics is a perfect combination of high accuracy, high reliability and low cost. The use of a PC based man machine interface makes the whole system upgradable over a period time spanning decades. The system remains and will remain the state of art technology for a very long time. Unicode based programming enables user to have the operating screens in the language of their choice.

Precibalance - End Drive Balancing Machines



Precibalance End Drive balancing machines are used in balancing components who do not have provision for the belt to be mounted on the component directly. End drive machines are used to balance power consuming components like fans, impellers etc.,



Precibalance - Vertical Balancing Machines



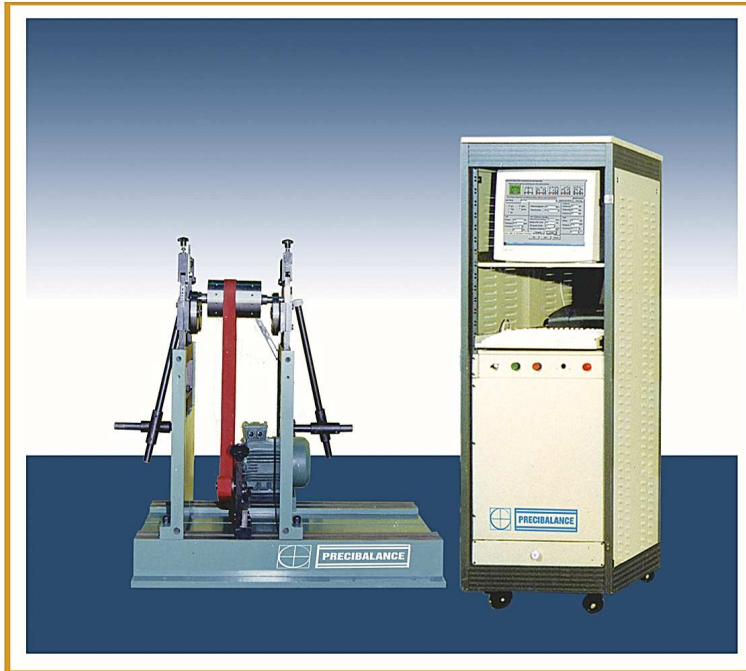
Precibalance Vertical dynamic balancing machines are used for components like fly wheels, Clutches, impellers, where in the components to be balanced have a bore for location and assembly.

Precibalance Vertical dynamic balancing machines are used for components like airconditioner fan impellers as a quality inspection machine. In this case machine inspect only the residual unbalance.

Precibalance has worked with automation machine builders for automatic gaging, inspection of unbalance in alloy wheels and other automobiles components.



Precibalance - Belt Drive Balancing Machines

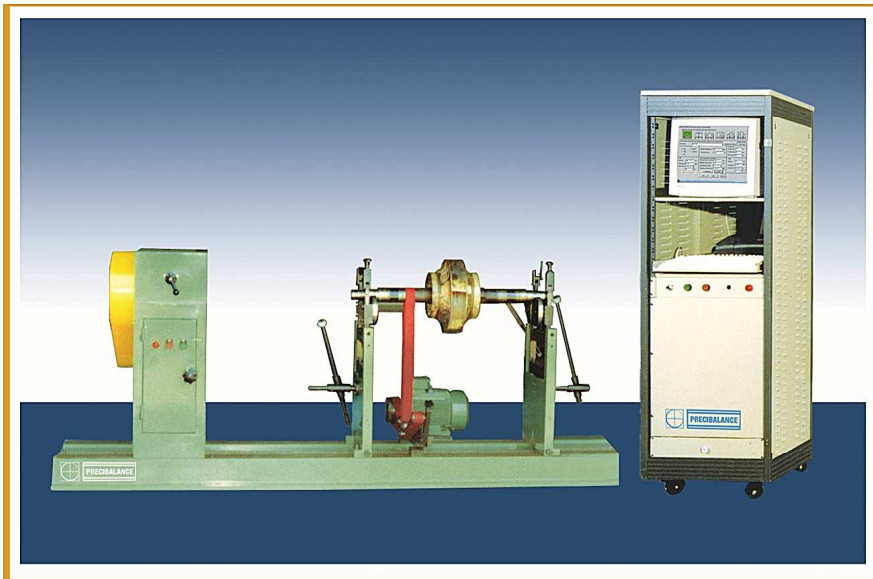


Precibalance belt drive balancing machines are used for components requiring high accuracy. In components where there are no links to drive the components like turbochargers belt drive balancing machine are must.

A 1300 K.W. motor rotor is balanced on a 5000Kg Precibalance belt drive balancing machines.

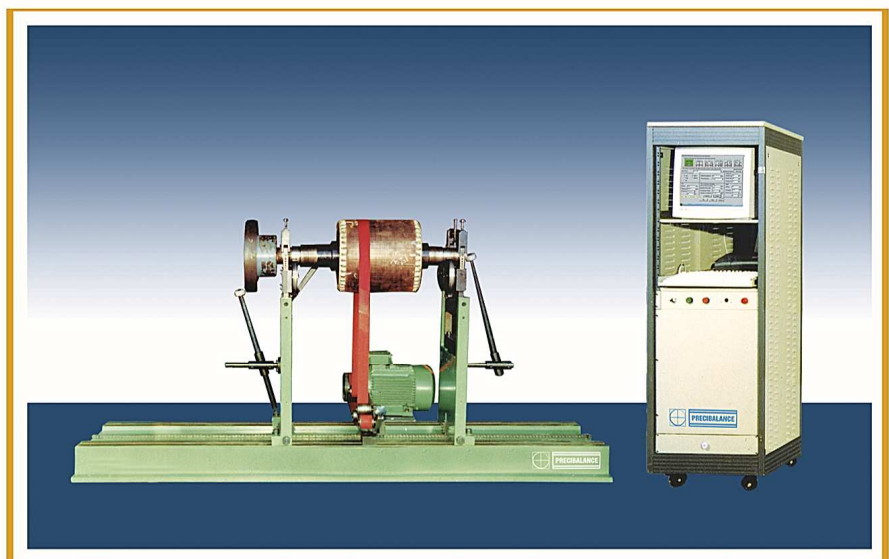


Precibalance - Belt Drive Balancing Machines

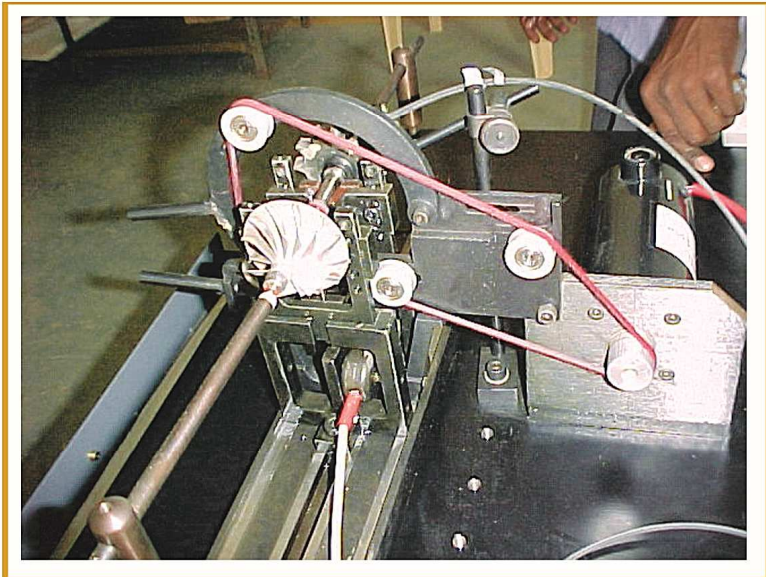


A Pump impeller
is balanced on a 3000Kg
Precibalance belt drive
balancing machines.

A motor rotor with
coupling flange
is balanced on a 1000 Kg
Precibalance belt drive
balancing machines.



Precibalance - Belt Drive Balancing Machines



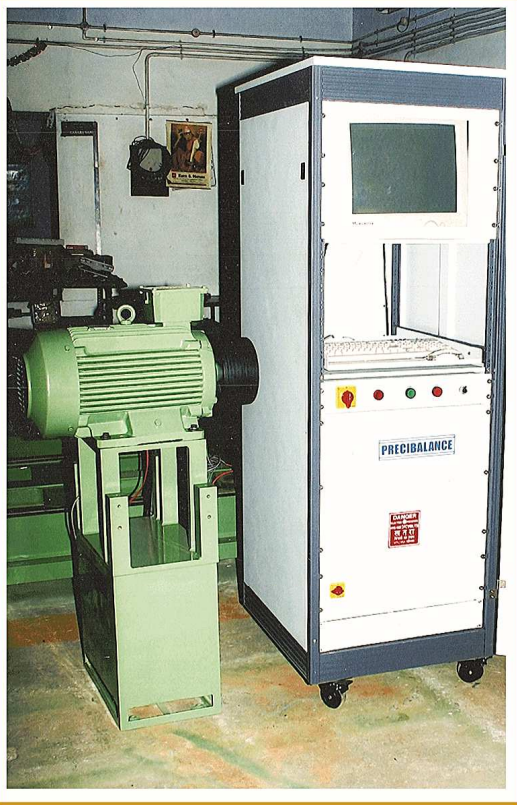
A close up view of the drive arrangement in a small turbo charger balancer.

A small turbo charger is balanced on a 1Kg Precibalance belt drive balancing machines.



Precibalance - Assembly Balancing Machines

Precibalance - Assembly Balancing machines enables the user to balance components to the desired quality requirements with 100% reliability. The user can run the components to the final service speed and check for vibration without dismantling the assembly



Motor and pulley assembly balanced to G1 grade for precision machine tool application

Assembling balancing of engine radiator fan assembly with shroud.



alance - Assembly Balancing Machines



Assembly balancing of a special purpose fan with its own motor is shown. This arrangement is also suitable of balance fan blades using service motor as balancing mandrel.



Balancing of a textile spindles simulating the service condition drive arrangements and service condition bearing housings. Accuracy of balancing is very high.

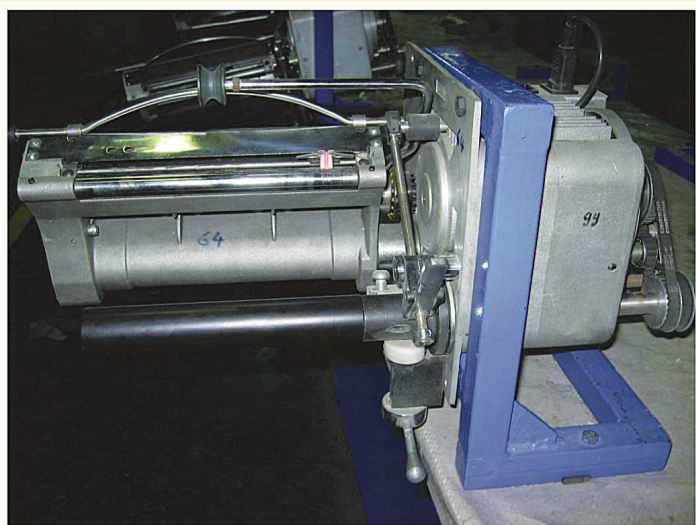


Precibalance - Assembly Balancing Machines



Assembling balancing of a outer rotor motor with fan assembly used in instrument cooling application.

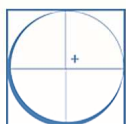
Assembling balancing of a textile mechanism. In this unit three components are balanced using three speed pickups and one set of vibration pickups.





MACHINE MODEL	HE20	HE50	HE1C	HE3C	HE6C	HE1K	HE3K	HE5K	HE10K	HE16K	HE30K	HE65K
NOMINAL WEIGHT CAPACITY (Kg)	20	50	100	300	650	1000	3000	5000	10000	16000	30000	65000
OVER LOAD PERMITTED UP TO (Kg)	30	75	200	450	1000	1800	4000	7500	12500	20000	40000	75000
MAXIMUM DIAMETER OF ROTOR (mm)	500	700	900	1150	1350	1500	2100	2500	3000	3500	4000	4500
MAXIMUM LENGTH OF BED (mm)										Specially Executed Based on the Requirement		
BED SIZE - S	350	600	600	600	1200	2400	2400	2400	3600			
BED SIZE - M	650	900	1200	1600	2300	3600	3600	3600	7200			
BED SIZE - L	950	1200	1800	2300	3000	4800	4800	4800	10800			
MINIMUM DISTANCE BETWEEN PEDESTALS (mm)	30	40	50	50	55	55	80	100	200	250	250	300
JOURNAL DIAMETER RANGE (mm)	8-50	8-60	10-80	12-100	15-120	15-140	25-180	25-250	40-300	70-350	70-350	130-500
MINIMUM RESIDUAL UNBALANCE (mmg)	0.5	0.5	0.75	0.75	1.0	2.5	6.0	10.0	25.0	25.0	30.0	40.0

Machine Confirm to ISO 2953 Balances to ISO 1940 Requirements



Precibalance Dynamic Balancing Machines Pvt Ltd

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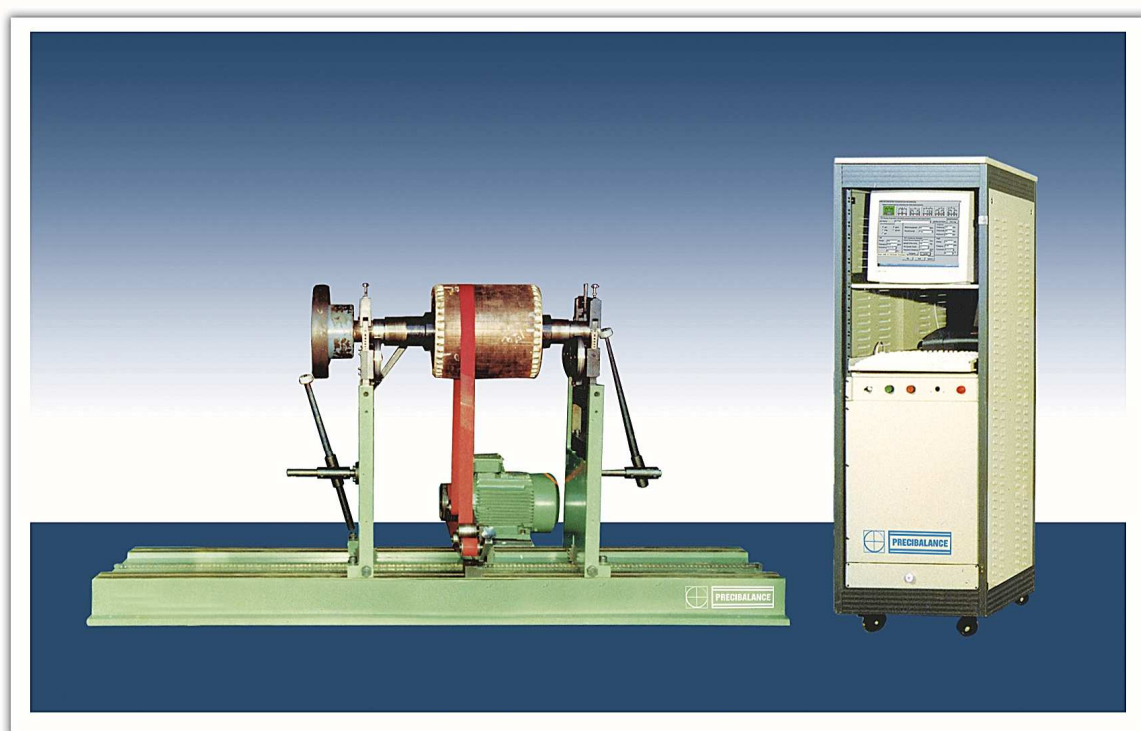
Sriperumpudur, India - 602105.

Ph. No : +91 9789055141 / 142

Fax No : +91

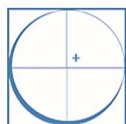
Website : www.precibalance.com

email : sales@precibalance.com



MACHINE MODEL	HB1	HB5	HB10	HB20	HB50	HB1C	HB3C	HB6C	HB1K	HB3K	HB5K	HB10K
NOMINAL WEIGHT CAPACITY (Kg)	1	5	10	20	50	100	300	650	1000	3000	5000	10000
OVER LOAD PERMITTED UP TO (Kg)	2	8	15	30	75	200	450	1000	1800	4000	7500	12500
MAXIMUM DIAMETER OF ROTOR (mm)	150	180	250	500	700	900	1150	1350	1500	2100	2500	3000
MAXIMUM LENGTH OF BED (mm)												
BED SIZE - S	250	300	400	500	600	600	600	1200	2400	2400	2400	3600
BED SIZE - M	-	-	-	800	1000	1200	1600	2300	3800	3600	3600	7200
BED SIZE - L	-	-	-	1100	1600	1800	2300	3000	4800	4800	4800	10800
MINIMUM DISTANCE BETWEEN PEDESTALS (mm)	10	16	20	40	50	60	60	65	70	100	125	200
JOURNAL DIAMETER RANGE (mm)	2-15	3-20	5-25	8-50	8-60	10-80	12-100	15-120	15-140	25-180	25-250	40-300
MIN. RESIDUAL UNBALANCE (mmg)	0.1	0.1	0.2	0.25	0.5	0.75	0.75	1.0	2.0	5.0	7.5	10.0

Machine Confirm to ISO 2953 Balances to ISO 1940 Requirements



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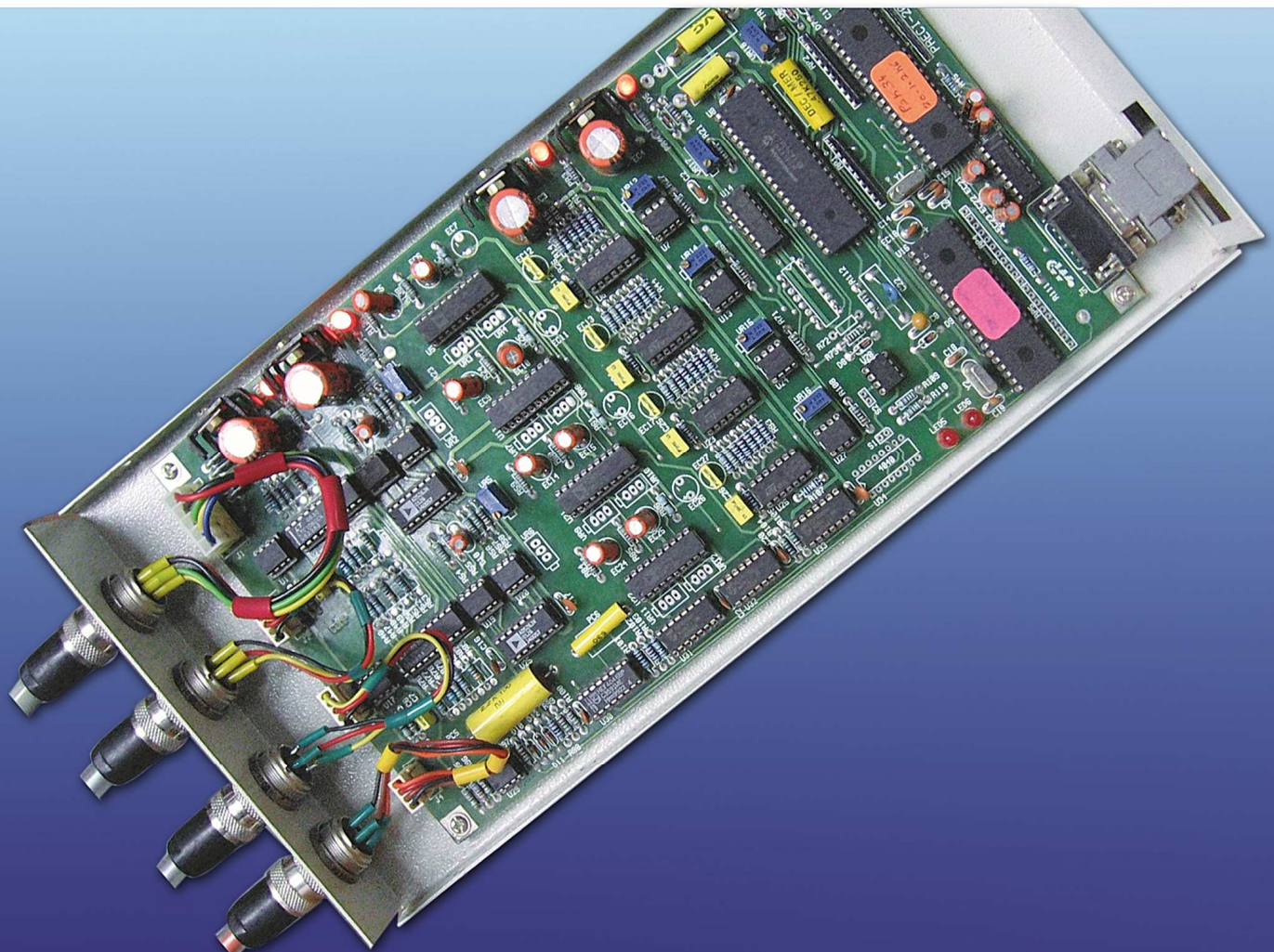
Digital Watt meter instrumentation of Precibalance Dynamic Balancing Machines

“

The precibalance electronics is high end two plane dynamic balancing electronics designed to exacting standards in industrial reliability. The unit consists of a digital phase lock loop . two channels of signal conditioning circuits and a embedded processor. The unbalance signals are processed and sent to a PC thro a RS232 or USB ports for further processing.

”

Precibalance



Technical data :

Application :	Universal for horizontal or vertical balancing machines, hard-bearing
Standard Unit :	Single board easy-maintenance design, with signal conditioning, measuring unit. Data processing, graphics and calculation calculation by means of industry-type PC with precibalance software.
Functions :	<ul style="list-style-type: none">■ Measuring of the dynamic unbalance in 2 planes, of the static unbalance and of the unbalance moment■ Automatic comparison of tolerance■ Tolerance calculation as per ISO 1940■ Vector graphics and numerical indication■ Display in polar / cartesian coordinates■ Display in evenly or unevenly distributed components■ Conversion to other unit■ Averaging of measurement■ Index balancing■ Balancing protocol - user - definable■ Definition and storing of type-related balancing procedures in order to simplify complex operating requirements■ Automatic self-test
Dialog languages :	English as standard and all other languages supported by windows / unicode
Display :	LCD / TFT / CRT color and all other displays supported by PC
Input :	External keyboard and mouse
Measuring procedure :	Full digital Wattmeter unbalance signal processing for precision measurement
Unbalance measuring : range :	1 : 1,250,000
Speed range :	150 to 3,600 min-1 other ranges request
Data storage :	Virtually unlimited
Options :	<ul style="list-style-type: none">■ Selection of measured values, averaging versus runs■ Remote Angle indexing / indicator■ Rotor - specific calibration■ Unbalance data can be recorded in Excel, Pdf formats.■ Printout of balancing results in hard copy■ Print format of balancing result - user definable

Precibalance

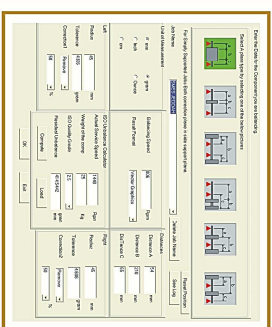
All that is required in dynamic balancing operations

- Every day operation of
- dynamic balancing
- machines requires easy
- handling, accurate
- measurement unbalance,
- clear correction
- instruction
- for quick and neat
- balancing.

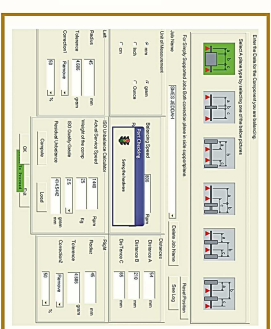


Precibalance Dynamic Balancing software

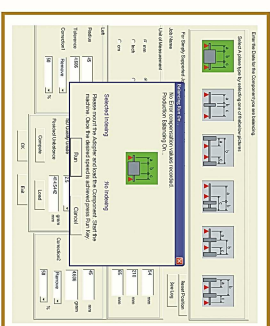
Use of P/C based man machine interface enables an operator to perform balancing operation of a machine. Further the unit remains obsolescence proof and gets updated in line with the changing hardware and operating system changes.



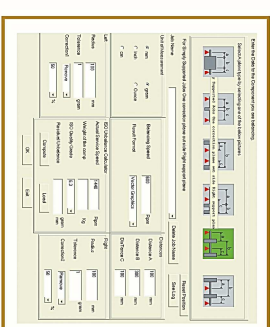
With clear indication of parameters required for balancing an operator can programme precibalance dynamic balancing machines with little training



Precibalance built in programmes enable ease of use, effectiveness and reliability of sub system before proceeding with balancing



The current programme under usage to balance components is indicative for every balancing run.



The quick change of unbalance planes enables stage balancing to be completed with out modifying the mechanical set up.



Un balance indications are available Simultaneously in vector graphics, polar and cartesian coordinate units.



The place weight programme enables the operator to have the information on the number of the correction and location of correction based on the standard correction weights.



Separation of static and dynamic unbalance is available as standard programme.

Electrical panel for Precibalance dynamic balancing operations

The electrical panel in a precibalance dynamic balancing machines serves the purpose of start stop and brake functions of the motor of the Precibalance dynamic balancing machines.

Based on the economics , space availability , ergonomics many designs are available for the buyers to choose. Immaterial of the selection of the panel, the functions remain full with total safety and legal requirements complied with.

A stand alone 21 inch Euro rack design housing electrical switch gear, computer, key board , printer is shown in the design package EP - euro21.

The Panel door can be kept closed for production balancing, Since computer monitor the speed of the component and starts the measuring cycle once programmed balancing speed is reached.

EP - euro21
Door Removed



EP - euro21
With Door

Electrical panel for Precibalance dynamic balancing operations



EP - CP

Control panel with switch gear and computer units mounted in one single assembly is shown above.

The control panel with push button controls outside and the switch gear mounted inside a Steel box is shown. The duplication of controls on the machine enables the unit to be located remotely.



EP - SP



The controls mounted on the machine and the control gear located beneath the machine are shown in this design.



The above configuration needs separate provision / table / station for Computer and Printer.

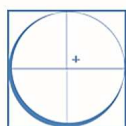
TECHNICAL DATA ON VERTICAL MACHINES

Precibalance



SINGLE PLANE MACHINES	VS1	VS3	VS10	VS30	VS50	VS1C	VS3C	VS6C	VS1K	Machine Confirm to ISO 2953 Balances to ISO 1940 Requirements
TWO PLANE MACHINES	VT1	VT3	VT10	VT30	VT50	VT1C	VT3C	VT6C	VT1K	
NOMINAL WEIGHT CAPACITY (Kg)	1	3	10	30	50	100	300	650	1000	
MAXIMUM DIAMETRE ON TABLE (mm)										
TABLE SIZE - S	200	250	300	400	450	600	650	800	1000	
TABLE SIZE - M	250	300	400	525	575	750	800	1050	1250	
TABLE SIZE - L	300	350	500	650	700	900	1050	1200	1500	
STANDARD BALANCING SPEED(RPM)	1000	1000	800	640	400	300	300	250	200	
MIN.RESIDUAL UNBALANCE (mmg)	1.0	1.25	2.5	4.0	7.5	15	15	20	20	

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Precibalance Balancing Machines - Training



Precibalance is committed to provide professional and ethical services to the users of precibalance dynamic balancing machines.

Every precibalance machines is supplied with a calibration rotor as per ISO 2953.

For very nominal cost of travel, stay precibalance personnel visit the site of the uses to provide them detailed training in theory of balancing and operation of precibalance dynamic balancing machines.



Balancing Machines Upgraded with Precibalance Electronics



A 100Kg Schenck balancing machine upgraded with precibalance dynamic balancing machine electronics

Precibalance has experience in upgrading Schenck, Hoffmann and other makes of machine for many industries like Aeronautical, paper, power defence etc.,

A 3000Kg IRD balancing machine upgraded with precibalance dynamic balancing machine electronics

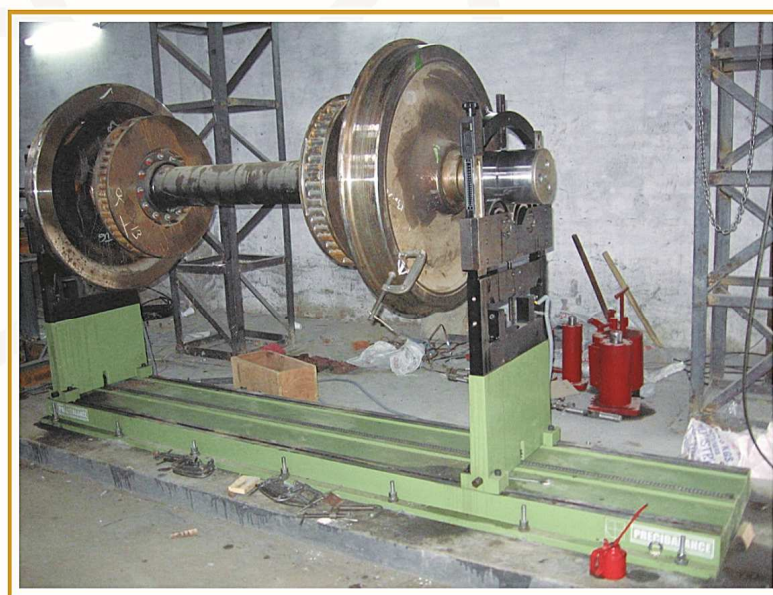


Balancing Machines Upgraded with Precibalance Electronics



A 100 Kg machine
upgraded with
precibalance dynamic
balancing machine
electronics

A 1000Kg rail road wheel
balancing machine
upgraded with
precibalance dynamic
balancing machine
electronics



Balancing Machines Upgraded with Precibalance Electronics



A 1000Kg machine
upgraded with
precibalance dynamic
balancing machine
electronics

A 300Kg machine
upgraded with
precibalance dynamic
balancing machine
electronics

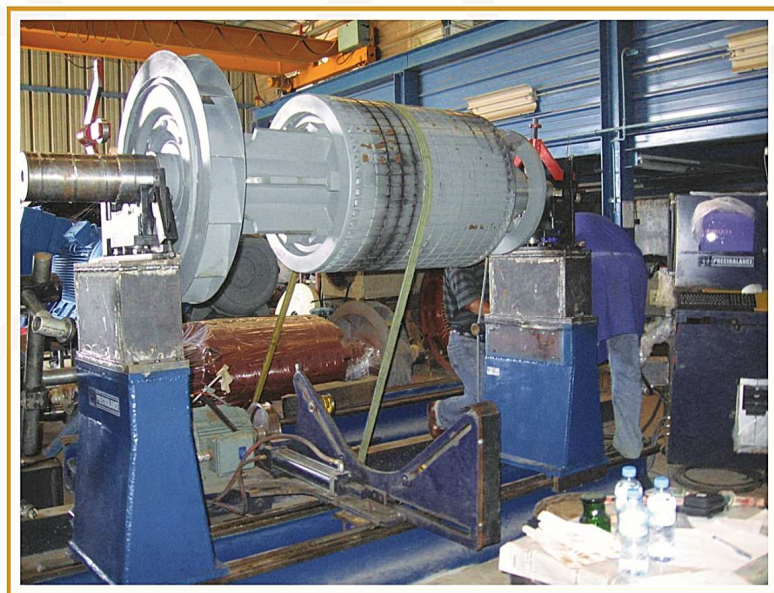


Balancing Machines Upgraded with Precibalance Electronics



A 1000Kg IRD machine
upgraded with
precibalance dynamic
balancing machine
electronics

A 3000Kg IRD machine
upgraded with
precibalance dynamic
balancing machine
electronics



Balancing Machines Upgraded with Precibalance Electronics



A 10000Kg Tinius olsen machine upgraded with precibalance dynamic balancing machine electronics

A 1000Kg machine upgraded with precibalance dynamic balancing machine electronics



Balancing Machines Upgraded with Precibalance Electronics

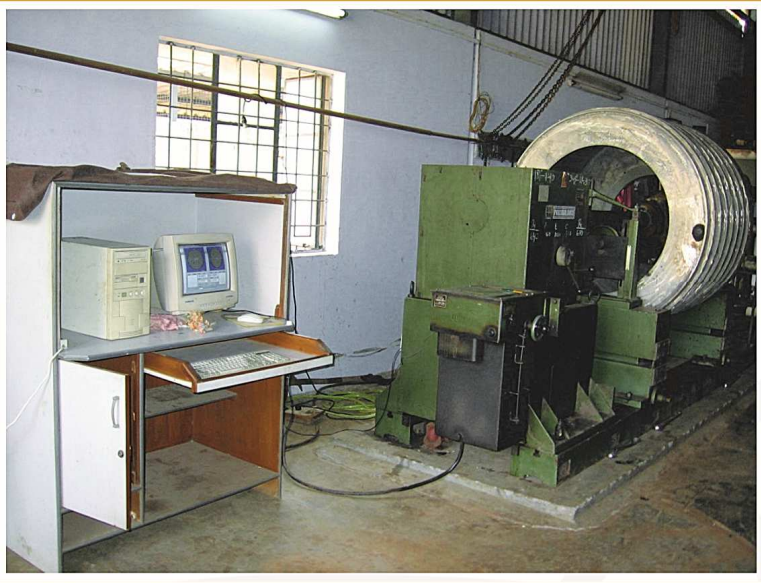


A 1000Kg IRD machine
upgraded with
precibalance dynamic
balancing machine
electronics

A 1000Kg IRD machine
upgraded with
precibalance dynamic
balancing machine
electronics.

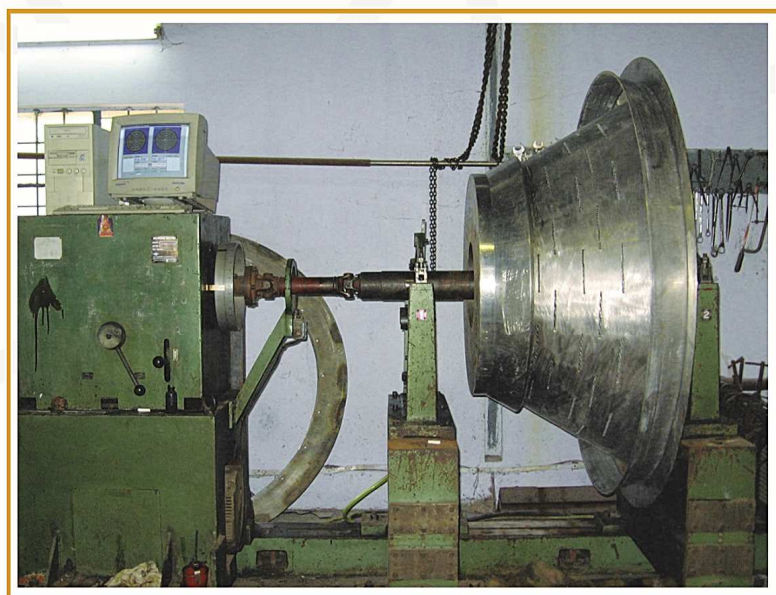


Balancing Machines Upgraded with Precibalance Electronics



A 3000Kg machine
upgraded with
precibalance dynamic
balancing machine
electronics

A 1000Kg machine
upgraded with
precibalance dynamic
balancing machine
electronics



Balancing Machines Upgraded with Precibalance Electronics



A 100Kg schenck machine upgraded with precibalance dynamic balancing machine electronics

A 100Kg Schenck machine upgraded with precibalance dynamic balancing machine electronics



Balancing Machines Upgraded with Precibalance Electronics



A 3000Kg FIE machine upgraded with precibalance dynamic balancing machine electronics

A 1000Kg machine upgraded with precibalance dynamic balancing machine electronics



Major advantages of Precibalance Dynamic Balancing Machines

- Precibalance Dynamic Balancing Machines are the appropriate technology solutions for most dynamic balancing requirements / applications.
- Precibalance dynamic balancing machines are modular in design enabling end users to choose an economical solution now and up grade as requirement changes.
- Precibalance dynamic balancing machines are permanently calibrated to allow the operator to handle variety of jobs with ease.
- Precibalance dynamic balancing machines are equipped with digital watt meter technology for electrical, magnetic and mechanical noise reduction enabling the machine to work reliably in factory and industrial environments.
- Precibalance dynamic balancing machines are provided with standard safety devices for operator protection and for conformity with legal requirements.
- Precibalance dynamic balancing machines can be upgraded with changing, PC, electronics hardware and operating systems specifications.
- Precibalance dynamic balancing machines can handle variety of rotors demanding low level of residual un balance specifications of G1 grade and above.
- Precibalance dynamic balancing machines are having most of the sub systems as industry standard parts for low cost of maintenance and operation. This design enables to have multiple source of spares and ensure easy availability.
- Precibalance dynamic balancing machines achieve required accuracy at lower speeds enabling the end user to run the balancing operation at lower speeds. This results in savings of energy, time, wear and tear of machine.
- Precibalance dynamic balancing machines will confirm to ISO2953 and are supplied with standard proving Rotors.
- Precibalance dynamic balancing machines are equipped with Zero phase shift Filters for precise angle location, for clean and neat balancing.
- Precibalance dynamic balancing machines support unicode, enable the User can get the screen and programming information in all scripts supported by windows os.

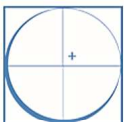
Precibalance



The Precibalance Dynamic Balancing Machines are Manufactured in a Well equipped factory with committed and trained technicians in Chennai, south of India on the east coast.

The factory is located about thirty kilometers from the international airport on the western side of the city on the Chennai - Bangalore express highway .

GPS Location 13 00 19° N 80 00 31° E



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