

# Multiplane Balancing

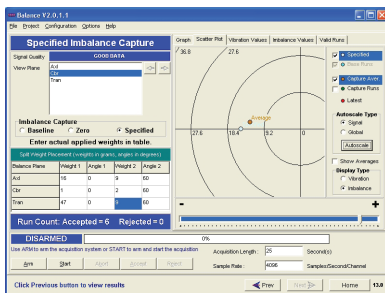
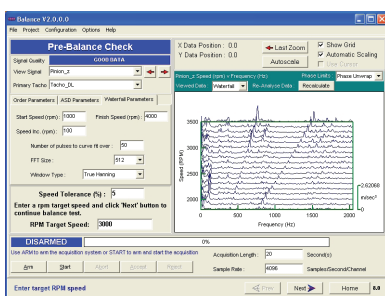
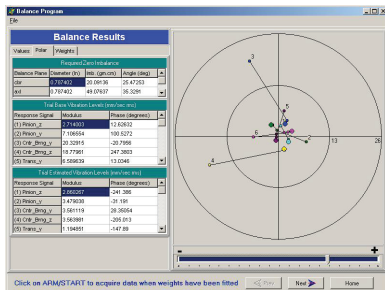
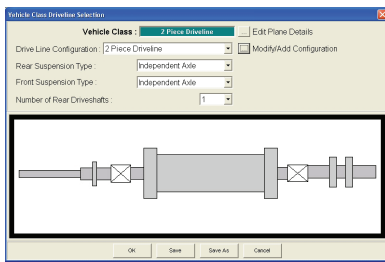
A simple, step-by-step way to perform multiplane balancing



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**These data allow formulation of the influence coefficients. At the heart of the software is a least squares, optimised, multi-plane balancing algorithm. This uses a single value decomposition algorithm (SVD) with an option to add bias.**

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Once the influence coefficients are known, the software will predict the masses required to achieve either a zero imbalance or a user specified imbalance. This is particularly useful as a 'worst of class' case to verify if that level of vibration affects the chosen quality criteria. Test runs at these conditions may be made giving the actual weights added to compare the predicted and achieved results.

The user interface automates repetitive testing. It leads the user through the necessary steps to perform the baseline and trials capture and import.

Pre-balance run-up data allows identification of the ideal shaft speed to perform balance. Signal quality checks are also provided to detect over-ranging, bad tacho signals and out of band speeds. The time history and the first order component for each input signal may be displayed to assist accepting or rejecting the current measurement.

Displays include

- first order components for each measurement position with individual and average values
- split weight display to graphically show the required shaft positions
- graphical representations of standard shaft configurations to assist the test management



Find out more about the Multiplane Balancing at  
[prosig.com/dats/optbalance.html](http://prosig.com/dats/optbalance.html)

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## Multiplane Balancing Features

- Multiplane balancing
- Dual Tacho support
- Split Weight calculation
- Specified Imbalance
- Zero Imbalance
- Bias Factor Selection
- SVD (Single Value Decomposition)
- Primary Solution
- Refinement by Least Squares
- Minimisation
- Synchronous Resampling
- Data Quality Checks
- User Defined Level of Averaging

## Contact Prosig

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