

Shaft Alignment Trainer

***The Ultimate Tool for
Teaching Shaft
Alignment***



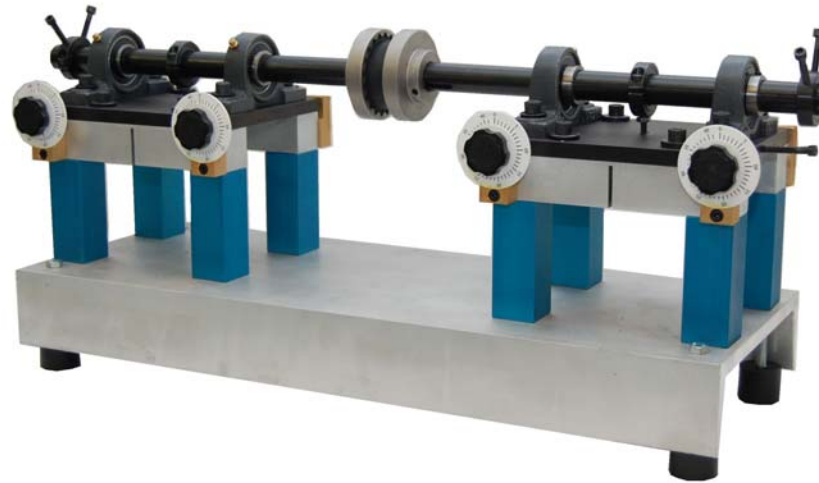
8201 Hermitage Road, Richmond, VA 23228 U.S.A.
TEL +1-804-261-3300/FAX +1-804-261-3303
www.spectraquest.com

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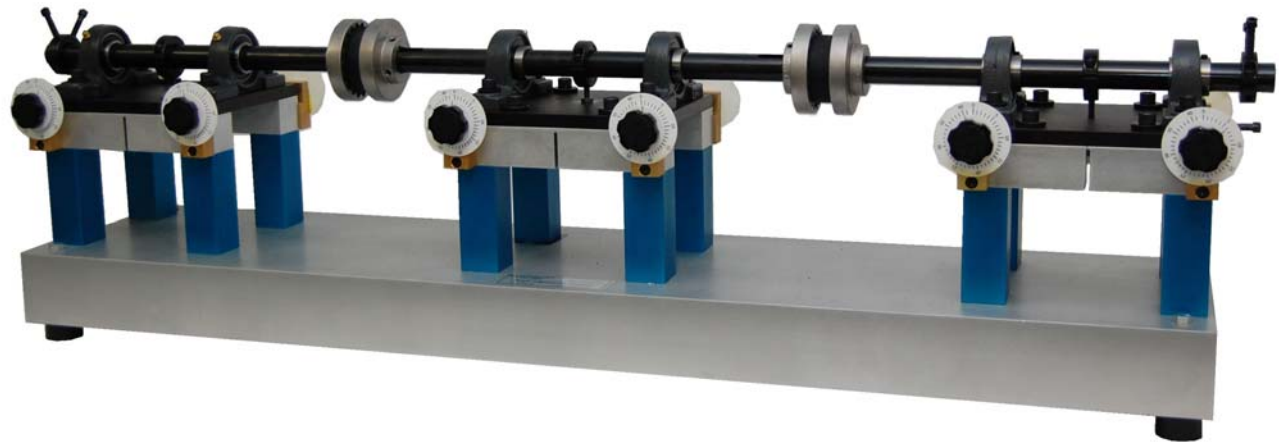
- ❖ The most comprehensive device on the market for shaft alignment training.
- ❖ Designed for studying a wide variety of problems that can arise when two shafts are misaligned.
- ❖ Hands-on trainer for maintenance professionals.
- ❖ Provides a unique mechanism for studying soft and sprung foot.
- ❖ Realistic simulator with a one inch diameter shaft that fits standard couplings.
- ❖ Modular design facilitates simulation of multiple element drive trains.
- ❖ Available in a two train and in a three train configuration.
 - ❖ Each SAT incorporates two fully adjustable modular units featuring horizontal jack bolts, calibrated and reference dials, and replaceable feet.
 - ❖ The three train SAT adds a fixed module which simulates a non-adjustable machine, but, the shaft can be offset and axially floated.

SAT

Two train SAT



Three train SAT



SAT Features

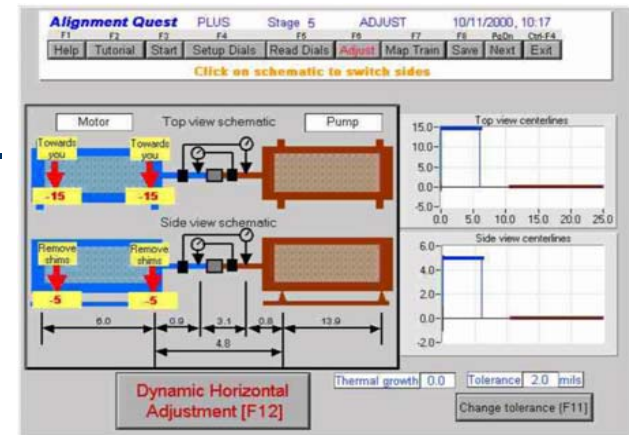
- ❖ Misalignment in both horizontal and vertical planes, both angular and parallel (four horizontally mounted jack bolts with calibrated dials and slotted shims for elevation).
- ❖ Calibrated parallel and angular misalignment easily introduced.
- ❖ Learn to recognize and correct soft and sprung foot conditions.
- ❖ Modular design for easy customization.
- ❖ Portable, robust, and comprehensive alignment trainer.

SAT Benefits

- ❖ Practice and learn different shaft alignment methods using dial indicators or lasers.
- ❖ Practice alignment procedure when one or both shafts are locked
- ❖ Practice alignment when one or both shafts have limited rotation.
- ❖ Practice alignment when the machine is bolt bound.
- ❖ Recognize and correct soft foot conditions in one to three feet.
- ❖ Recognize and correct sprung foot conditions, from one to four feet.
- ❖ Study effect of coupling types on alignment procedures.

AlignmentQuest Software

- ❖ Perform shaft alignment under limited swing conditions using any amount of angle.
- ❖ Self diagnostics to detect errors
- ❖ Sag compensation indicator.
- ❖ Adjustable tolerance limit
- ❖ Align multiple machine trains.
- ❖ Optimum alignment solutions automatically suggested and “what-if” scenarios performed.
- ❖ Perform alignments on vertically mounted machinery.
- ❖ Create a machinery database for the entire facility.
- ❖ Archive alignment data, including steps, with date/time.
- ❖ Generate comprehensive custom reports.



Option Kits

- ❖ SpectraQuest offers a complete array of option kits for a complete shaft alignment training platform

AlignmentQuest Software	AQ-PRO
AlignmentQuest Bracketry with Built-in Inclinator	SAT-BKT
Shaft alignment self study guide	SAT-SSG
Basic shaft alignment workbook	SAT-SAW
Soft / Sprung foot kit	SAT-SFK

Basic shaft alignment workbook (SAT-SAW)

- ❖ Provides valuable information on the basic knowledge needed to begin understanding shaft alignment of rotating machinery, and reviews the importance of alignment, preliminary steps, how to measure shaft positions, and basic graphing techniques.

Shaft alignment self study guide (SAT-SSG)

- ❖ Complement to the basic shaft alignment workbook, it contains eight lessons for the self study of shaft alignment.

Soft / Sprung Foot Kit (SAT-SKF)

- ❖ Study the effect of soft and sprung foot conditions.
- ❖ The kit consists of three soft-feet of different lengths and one sprung-foot

AlignmentQuest Bracketry with Built-in Inclinometer (SAT-BKT)

- ❖ Accommodates 1" to 8" diameter shafts.
- ❖ The kit consists of two precision dial indicators, two mounting brackets with one inclinometer, two 12" bars, two 6" bars, one mirror, and one set of feeler gauges packaged in a rugged plastic case.



Value Packages

- ❖ The SAT is also available in three packages providing you with all of the components necessary for a turnkey training system:

Packages	
Package 1	Includes basic alignment workbook, self-study guide, AlignmentQuest software, and bracketry with built-in inclinometer.
Package 2	Includes SAT-2 train with soft/sprung foot and all items of package 1
Package 3	Includes SAT-3 train with soft/sprung foot and all items of package 1

Specifications

Mechanical	
Shaft Diameter	1" diameter; Turned, Ground, & Polished (TGP) steel
Bearing	Pillar block ball bearing
Foundation	3" x 10" aluminum channel and four rubber isolators
Physical	
Weight	Approximately 60lb for 2 train and 90lb for three train
Dimensions	L=30" for 2 train and 48" for three train, W=10" , H=13"