



Service Training Programs Full Schedule

Nikon Precision customer training programs consist of operator and service classes. Enrollment is limited to an average of five students per class with class durations ranging from two to five days. New classes are continuously being developed to accompany the release of new Nikon equipment.

NSR-SX08 Series

System Operation course

2 day course

The System Operation course is a two day (seven hour a day) class that introduces controls, software and operating procedures essential for the use of the system. The student will learn system reset, system configuration, software for system operation, reticle loading and aligning, first and second level wafer exposure, and utility functions. Students will also be familiarized with the commonly used terms and phrases. Enrollment in this course is limited to six students.

2006 Schedule: By customer request

System and Data file Management

3 day course

The System and Data File Management course is a three day (7 hour a day) class that instructs the students on theory and use of wafer and reticle alignment, auto-focus and focus calibration management and data file creation and editing using a MCSW Simulator. It also covers System Parameters, Adjust Machine, and exposure and resolution principles. This course is designed for personnel who will be required to create and edit files, maintain system parameters and optimize alignment and image quality on the system. Enrollment in this course is limited to six students.

2006 Schedule: October 18

Maintenance

5 day course

The Maintenance course is a five-day class that introduces NSR-S208/S308 functions and instructs the students in preventive maintenance procedures required to maintain optimum performance on the S208/S308 series systems on a daily, weekly, and monthly basis. This training course is designed for persons who will be required to maintain the systems in a wafer fabrication area. Enrollment in this course is limited to six students.

2006 Schedule: August 21, October 23

Engineering Theory

5 day course

The Engineering Theory course is a five day class that instructs the students on the configuration and theory of the scanner. The student will learn NSR design and cleanroom layout differences from the previous NSR scanner series, as well as component design and construction. Students will learn computer layout and communications control. Enrollment is limited to six students per class.

2006 Schedule: By customer request

NSR-SX05/SX06/SX07 Series

System Operation/Preventive Maintenance

5 day course

The NSR-SX05/SX06 System Operation/Preventive Maintenance course is a five-day class that instructs the students on system operations and daily, weekly and monthly preventive maintenance procedures required to maintain optimum performance on the SX05/SX06 series systems. This training course is designed for persons who will be required to maintain the SX05/SX06 systems in a wafer fabrication area. This course also teaches operations theory and procedures for checking, cleaning, lubricating and adjusting system components. The course is designed for students who have at least three months experience with scanners.

2006 Schedule: October 23, November 27

Advanced System Operation

5 day course

The Advanced System Operation course is a five-day class that instructs the students on topics regarding data file creation and editing. It also covers System Parameters, Adjust Machine, and emphasizes Alignment and Auto-Focus/Leveling Optimization. This course is designed for personnel who will be required to create and edit files, maintain system parameters and optimize alignment and image quality on the NSR Scanner. The NSR Scanner Series Advanced System Operation course is designed to assist system technicians and engineers in the advanced operation procedures of the NSR system.

2006 Schedule: October 30

NSR-SX05/SX06/SX07 Advanced Theory

5 day course

The NSR-SX05/SX06/SX07 Advanced Theory course is a five-day class that introduces the SX05/SX06/SX07 controls, software and operating procedures essential for the use of the SX05/SX06/SX07 systems. The student will learn system and sub-system overview, system initialization, system configuration, software for system operation, reticle loading and aligning, first and second level wafer exposure and utility functions. Students will also be familiarized with commonly used SX05/SX06/SX07 terms and phrases. Enrollment in this course is limited to five students.

2006 Schedule: By customer request

Module A WL/RL

3 day course

The NSR-SX05/SX06/SX07 Module A course is a three-day class that instructs the students on advanced theory, as well as daily, weekly and monthly preventive maintenance procedures required to maintain optimum performance on the wafer loader and reticle loader subsystems. Enrollment is limited to five students per class. The student will learn advanced theory and procedures for checking and adjusting the wafer loader and reticle loader sub-systems. These procedures are required to maintain optimum performance in a production environment.

2006 Schedule: October 9, November 13

Module B WS/RS

5 day course

The NSR-SX05/SX06/SX07 Module B course is a five-day class that instructs students on theoretical knowledge and advanced preventive maintenance procedures required to maintain optimum performance on the wafer stage and the reticle stage. Enrollment is limited to five students per class. The student will understand advanced theory and procedures associated with the AVIS system, wafer stage, reticle stage and interferometer theory and construction. The student will also be capable of performing checks and adjustments necessary to maintain the wafer stages and reticle stages. These procedures are required to maintain optimum performance in a production environment.

2006 Schedule, September 11, September 18, November 6, December 11

Module C WA/RA

2 day course

The NSR-SX05/SX06/SX07 Module C course is a two-day class that instructs students on advanced theory and adjustment procedures for Nikon wafer and reticle alignment systems. This course is designed for maintenance personnel required to maintain optimum performance of the NSR. The student will understand theory and procedures for checking and adjusting the wafer and reticle alignment subsystems incorporated on the NSR-SX05/SX06/SX07. This information is required to maintain optimum performance in a production environment.

2006 Schedule: October 11, November 15

Module D AF/IL

5 day course

The NSR-SX05/SX06/SX07 Module D course is a five-day class that instructs students on advanced theory and adjustment procedures for Nikon auto focus, aerial image sensor, and illumination sub-systems. This course is designed for maintenance personnel required to maintain optimum performance of the NSR. Enrollment is limited to five students per class. The student will understand theory and procedures for checking and adjusting the auto-focus system, aerial image sensor and illumination systems incorporated on the NSR-SX05/SX06/SX07. This information is required to maintain optimum performance in a production environment.

2006 Schedule: September 5, October 16, November 27, December 4, December 18

NSR-S203/S204 Series

System Operation

2 day course

The System Operation course is a two-day class that introduces the NSR controls, software and operating procedures essential for the use of an NSR system. The student will learn system initialization, system configuration, software for system operation, reticle loading and aligning, and first and second level wafer exposure and utility functions. Students will also be familiarized with commonly used NSR terms and phrases.

2006 Schedule: By customer request

Advanced System Operation

3 day course

The Advanced System Operation course is a three (3) day class that instructs the students on topics regarding data file creation and editing. It also covers System Parameters, Adjust Machine and Alignment Optimization. This course is designed for personnel who will be required to create and edit files, maintain system parameters and optimize alignment.

2006 Schedule: By customer request

Service Level 1 & 2

5 day course

The NSR Service Level 1 & Level 2 course is a five (5) day class that provides instruction and hands on practice for performing regular or extensive maintenance procedures for the system. This course teaches theory and procedures for checking, cleaning, lubricating and adjusting system components. The course is designed for students who have completed the System Operations training course and have at least one month of on-the-job experience.

2006 Schedule: November 13, November 27

Wafer Loader Type 3

3 day course

The Wafer Loader Type 3 Advanced Service Training course is a three (3) day class that provides hands-on instruction in electrical and mechanical adjustment techniques used to service this subsystem. The student will learn the theory and advanced procedures for checking and adjusting the component parts of the Wafer Loader Type 3 sub-system.

2006 Schedule: December 4

NSR-S202 Series

NSR-S202 series classes are offered at the Worldwide Training Center in Belmont, CA upon customer request.

System Operation

2 day course

The System Operation course is a two-day class that introduces the NSR controls, software and operating procedures essential for the use of an NSR system. The student will learn system initialization, system configuration, software for system operation, reticle loading and aligning, and first and second level wafer exposure and utility functions. Students will also be familiarized with commonly used NSR terms and phrases.

Advanced System Operation

3 day course

The Advanced System Operation course is a three (3) day class that instructs the students on topics regarding data file creation and editing. It also covers System Parameters, Adjust Machine and Alignment Optimization. This course is designed for personnel, who will be required to create and edit files, maintain system parameters and optimize alignment.

Service Level 1 & 2

5 day course

The NSR Service Level 1 & Level 2 course is a five (5) day class that provides instruction and hands on practice for performing regular or extensive maintenance procedures for the system. This course teaches theory and procedures for checking, cleaning, lubricating and adjusting system components. The course is designed for students who have completed the System Operations training course and have at least one month of on-the-job experience.

Wafer Loader Type 3

3 day course

The Wafer Loader Type 3 Advanced Service Training course is a three (3) day class that provides hands-on instruction in electrical and mechanical adjustment techniques used to service this subsystem. The student will learn the theory and advanced procedures for checking and adjusting the component parts of the Wafer Loader Type 3 sub-system.

Wafer Alignment

4 day course

The Wafer Alignment course is a four day class that instructs students on theory of operation and how and when to adjust Nikon off axis wafer alignment systems. This course is designed for persons required to maintain optimum performance of the NSR.

Wafer Alignment

4 day course

The Wafer Alignment course is a four (4) day class that instructs students on theory of operation and how and when to adjust Nikon wafer alignment systems. This course is designed for persons required to maintain optimum performance of the NSR. The student will learn the theory and adjustments for optimizing the wafer alignment subsystem.

2006 Schedule: September 11

Wafer Stage with Auto Focus

5 day course

The Wafer Stage w/Auto Focus is a five (5) day class that provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Wafer Stage/Auto Focus sub-system. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Wafer Stage/Auto Focus sub-system. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Wafer Stage w/Auto Focus sub-system.

2006 Schedule: August 28

Reticle Loader/Alignment Stage

4 day course

This four (4) day class provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Reticle Loader, the Reticle Stage, and the Reticle Alignment sub-systems. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Reticle Loader, Reticle Stage, and the Reticle Alignment systems. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Reticle Loader, Reticle Stage, and Reticle Alignment systems.

2006 Schedule: November 6

Illumination System

5 day course

The Illumination System Advanced Service training course is a five-day course that provides hands-on practice in electrical and mechanical adjustment techniques used to service the Illumination subsystem. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. Students will learn the theory of operation of specified components of the Illumination system and hands-on procedures involving checking and adjusting the Illumination subsystem.

2006 Schedule: By customer request

Wafer Stage with Auto Focus

5 day course

The Wafer Stage w/Auto Focus is a five (5) day class that provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Wafer Stage/Auto Focus sub-system. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Wafer Stage/Auto Focus sub-system. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Wafer Stage w/Auto Focus sub-system.

Reticle Loader/Alignment/Stage

4 day course

This four (4) day class provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Reticle Loader, the Reticle Stage, and the Reticle Alignment sub-systems. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Reticle Loader, Reticle Stage, and the Reticle Alignment systems. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Reticle Loader, Reticle Stage, and Reticle Alignment systems.

Illumination System

5 day course

The Illumination System Advanced Service training course is a five-day course that provides hands-on practice in electrical and mechanical adjustment techniques used to service the Illumination subsystem. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. Students will learn the theory of operation of specified components of the Illumination system and hands on procedures involving checking and adjusting the Illumination subsystem.

NSR-i14/EX14 Series

Select classes are being offered at the Worldwide Training Center in Belmont, CA. Additional classes are available at customer site upon request.

System Operation

2 day course

The System Operation course is a two-day class that introduces the NSR controls, software and operating procedures essential for the use of an NSR system. The student will learn system initialization, system configuration, software for system operation, reticle loading and aligning, and first and second level wafer exposure and utility functions. Students will also be familiarized with commonly used NSR terms and phrases.

2006 Schedule: September 25, November 6

Advanced System Operation

3 day course

The Advanced System Operation course is a three (3) day class that instructs the students on topics regarding data file creation and editing. It also covers System Parameters, Adjust Machine and Alignment Optimization. This course is designed for personnel who will be required to create and edit files, maintain system parameters and optimize alignment.

2006 Schedule: September 27, November 8

Service Level 1 and 2

5 day course

The NSR Service Level 1 & Level 2 course is a five (5) day class that provides instruction and hands on practice for performing regular or extensive maintenance procedures for the system. This course teaches theory and procedures for checking, cleaning, lubricating and adjusting system components. The course is designed for students who have completed the System Operations training course and have at least one month of on-the-job experience.

2006 Schedule: October 2, November 13

Wafer Loader Type 3

3 day course

The Wafer Loader Type 3 Advanced Service Training course is a three (3) day class that provides hands-on instruction in electrical and mechanical adjustment techniques used to service this subsystem. The student will learn the theory and advanced procedures for checking and adjusting the component parts of the Wafer Loader Type 3 sub-system.

Wafer Alignment

4 day course

The NSR Wafer Stage Service Advanced training course is a four-day course which provides hands-on practice in electrical and mechanical adjustment techniques used to service the Wafer Stage subsystem. Students will learn how to quickly and correctly diagnose stepping errors and fine-tune lead-screw backlash and thrust bearing adjustments. Students will learn the theory and procedures for checking and adjusting the components of the Wafer Stage subsystem, wafer holder replacement and receive in depth knowledge of stage construction. These procedures are required to maintain optimum performance when the NSR is used intensively in production.

Wafer Stage with Auto Focus

5 day course

The Wafer Stage w/Auto Focus is a five (5) day class that provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Wafer Stage/Auto Focus sub-system. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Wafer Stage/Auto Focus sub-system. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Wafer Stage w/Auto Focus sub-system.

Reticle Loader/Alignment/Stage

4 day course

This four (4) day class provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Reticle Loader, the Reticle Stage, and the Reticle Alignment sub-systems. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Reticle Loader, Reticle Stage, and the Reticle Alignment systems. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Reticle Loader, Reticle Stage, and Reticle Alignment systems.

i14 Illumination System

4 day course

The Illumination System Advanced Service training course is a four-day course that provides hands-on practice in electrical and mechanical adjustment techniques used to service the Illumination subsystem. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. Students will learn the theory of operation of specified components of the Illumination system and hands-on procedures involving checking and adjusting the Illumination subsystem.

NSR-i11/i12/EX12 Series (at customer site only)

System Operation

2 day course

The System Operation course is a two-day class that introduces the NSR controls, software and operating procedures essential for the use of an NSR system. The student will learn system initialization, system configuration, software for system operation, reticle loading and aligning, and first and second level wafer exposure and utility functions. Students will also be familiarized with commonly used NSR terms and phrases.

Advanced System Operation

3 day course

The Advanced System Operation course is a three (3) day class that instructs the students on topics regarding data file creation and editing. It also covers System Parameters, Adjust Machine and Alignment Optimization. This course is designed for personnel who will be required to create and edit files, maintain system parameters and optimize alignment.

Service Level 1

4 day course

The Service Level 1 course is a four-day class that instructs the students on daily, weekly and monthly preventive maintenance procedures required to maintain optimum performance on the NSR-11/12 Series system. The Service Level 1 teaches theory and procedures for checking, cleaning, lubricating and adjusting system components. This training course is designed for persons who will be required to maintain the NSR-11/12 Series system in a wafer fabrication area.

Service Level 2

5 day course

The Service Level 2 course is a five-day course that teaches the student advanced service procedures to achieve optimum performance and reduce downtime of the NSR-11/12 Series system. This training course is designed for persons who will be required to maintain the Nikon stepper in a wafer fabrication area. This course must be satisfactorily completed prior to attending the Advanced Service modules to provide a detailed understanding in the main areas of service on the NSR. The student will be able to troubleshoot NSR problems. The course materials include detailed operation flow charts, functional block diagrams, signal paths and troubleshooting guidelines.

Wafer Loader Type 2

2 day course

The Wafer Loader Type 2 Advanced Service Training course is a two (2) day class that provides hands-on instruction in electrical and mechanical adjustment techniques used to service this subsystem. The student will learn the theory and advanced procedures for checking and adjusting the component parts of the Wafer Loader Type 2 sub-system.

Wafer Loader Type 3

3 day course

The Wafer Loader Type 3 Advanced Service Training course is a three (3) day class that provides hands-on instruction in electrical and mechanical adjustment techniques used to service this subsystem. The student will learn the theory and advanced procedures for checking and adjusting the component parts of the Wafer Loader Type 3 sub-system.

Wafer Stage

3 day course

The NSR Wafer Stage Service Advanced training course is a three-day course which provides hands-on practice in electrical and mechanical adjustment techniques used to service the Wafer Stage subsystem. Students will learn how to quickly and correctly diagnose stepping errors and fine-tune lead-screw backlash and thrust bearing adjustments. Students will learn the theory and procedures for checking and adjusting the components of the Wafer Stage subsystem, wafer holder replacement and receive in depth knowledge of stage construction. These procedures are required to maintain optimum performance when the NSR is used intensively in production.

Wafer Alignment

4 day course

The Wafer Alignment course is a four (4) day class that instructs students on theory of operation and how and when to adjust Nikon wafer alignment systems. This course is designed for persons required to maintain optimum performance of the NSR. The student will learn the theory and adjustments for optimizing the wafer alignment subsystem.

Multi Point Auto Focus

2 day course - by request only

The Multi Point Auto Focus course is a two (2) day class that provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Multi Point Auto Focus sub-system. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Multi Point Auto Focus sub-system. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Multi Point Auto Focus sub-system.

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Reticle Loader and Alignment

4 day course

This four (4) day class provides hands-on experience in electrical, mechanical, and optical adjustment techniques for the Reticle Loader, the Reticle Stage, and the Reticle Alignment sub-systems. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. The student will understand the basic theory associated with the Reticle Loader, Reticle Stage, and the Reticle Alignment systems. The student will be capable of performing the checks and adjustments necessary to maintain the NSR Reticle Loader, Reticle Stage, and Reticle Alignment systems.

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Illumination System

4 day course - by request only

The Illumination System Advanced Service training course is a four-day course that provides hands-on practice in electrical and mechanical adjustment techniques used to service the Illumination subsystem. This course is designed for experienced technicians responsible for maintaining optimal performance of the NSR in a wafer fabrication environment. Students will learn the theory of operation of specified components of the Illumination system and hands-on procedures involving checking and adjusting the Illumination subsystem.

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Phototest

By request only

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To register for classes please call the Training Coordinator at Nikon Precision at 1-800-34-NIKON.