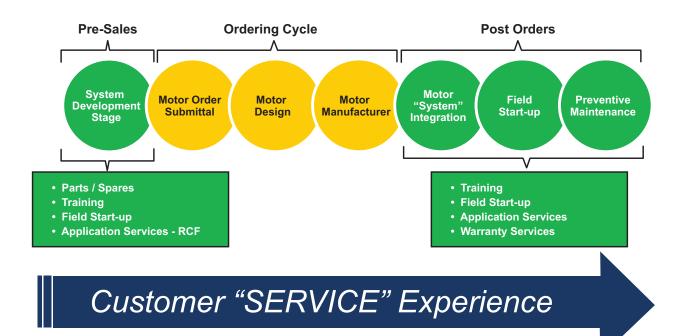




U.S. MOTORS[®] SERVICE SOLUTIONS

Nidec stands behind the lifecycle of the U.S. MOTORS products we produce. For over 100 years we continue to manufacture the highest quality products that provide years of reliable operation for our customers and end-users. To extend the value we bring, Nidec is committed to optimizing product reliability through a variety of service offerings ensuring years of continued up time within the various industrial application our motors serve.



U.S. MOTORS service offerings include:

- Extended Warranties (10% discount at time of order).
- Spare Part Recommendations (i.e. spare set of bearings).
- On-Site Commissioning / Start-Up Service (25% discount at the time of the order).
- Visually inspect all equipment furnished on the covered purchase order to assure compliance.
- Monitoring of equipment performance to validate electrical and mechanical compliance after installation.
- Training on proper maintenance, lubrication, and operation of all U.S. MOTORS equipment.
- Engineering support on technical and analytical evaluations to support your system needs.

TECHNICAL SERVICES

We are here whenever you need support

Nidec prides ourselves in our service and support to our customers and end-users. When questions or issues need immediate attention, you can count on Nidec. Our Product Service Engineers are just a phone call away (1-800-566-1418) in solving the most complex inquiries. Our service teams have decades of experience providing solutions to all your questions and service needs.



Service Engineers provide onsite technical assistance and advisory in the following areas:



Motor Installation



Vibration data collection and analysis



Preventive Maintenance



Onsite motor repair advisory



Electrical Testing

On-Site Support

- i. Visually inspect all equipment furnished on the covered purchase order to assure compliance
- ii. Validate the performance of U.S. MOTORS equipment to meet electrical and mechanical compliance
- iii. Provide training on proper maintenance, lubrication, and operation of all U.S. MOTORS equipment



Virtual and onsite support available.

Contact: motorhelp@nidec-motor.com or 1-800-566-1418

START-UP SERVICES

Successful commissioning to ensure uptime reliability

Nidec experienced service teams can assist in all your commissioning start-up needs. Our dedicated product service engineers have the knowledge and expertise to fully validate the motor performance during the installation and operation during the start-up commissioning phases to ensure the utmost reliability of your U.S. MOTORS products.

Start-up and Commissioning Assistance

- Review of motor storage records and inspections.
- Verification of acceptable motor installation and operation.
- Baseline static electrical testing*.
- Power quality testing (VFD Output)*.
- Dynamic motor performance testing.
- System resonance check.
- Baseline vibration collection and analysis.
- Verification of storage and installation data.
- · Technical assistance as needed.

(* For motors rated < 600V)



ENGINEERING/ANALYSIS SERVICES

Advanced Engineering Services for complex problems

With companies requiring fast turnaround on projects or field services requiring Engineering Analysis or Site Analysis work, many organizations do not have the necessary resources or skill sets to support these requirements. Nidec Advanced Engineering Services group has the answers to your requirements. Our highly skilled team of engineers have the knowledge, state-of-the-art software tools, and field analysis equipment to assist project managers and end-users solve complex problems. We offer Advanced Engineering Services supporting the design and development stages of a project, motor application reviews, assistance during the commissioning phase, and/or troubleshooting issues identified after full operation of your systems.

Our Advanced Engineering Services include:

- Motor Application Reviews and Compliance Verification / Validation
- Vibration Analysis and RCF (Reed Critical Frequency)
- Advanced Failure Analysis / Material Analysis / Bearing Analysis
- FEA (Finite Element Analysis) / Modal Analysis
- Acoustic Analysis (NVH)
- On-site Engineering support to assist in commissioning, analysis, and troubleshooting

Numerous other Engineering Services are available to review and provide the best options for your specific requirements. Our goal is to provide you with engineering support throughout the entire product lifecycle (cradle-to-grave) on any project requiring additional analysis, faster system completion, as well as ensuring the maximum "uptime" for the end-user. Call us to discuss our capabilities.

TRAINING SERVICES

U.S. MOTORS training goes beyond "motors-101 basics"

Nidec offers a full-range of motor course offerings. Our training team conducts "on-site" and "virtual" courses tailored to the specific requirements of your functional areas responsible for maintaining uptime of motors within your various applications and systems. Our training staff will provide customized training materials focused on the needs of your operation ensuring that your internal teams obtain full knowledge in maintaining reliable motor operation across your facilities through proper maintenance.

On-site customer training are 4-hour sessions with maintenance and site personnel covering:

- Installation
- Operation
- Maintenance

U.S. MOTORS University provide all the necessary tools to develop motors and drives specialists

With over 60 training topics available, U.S. MOTORS University provides a learn at your own pace introduction to basic motor theory including common terms, definitions, and motor types for the industrial and commercial sectors. Trainings are free to customers and cover new, re-engineered and improved U.S. MOTORS products.





MOTOR REFURBISHMENT AND REPAIR SERVICES

Original OEM services provide expertise for increased uptime

Reliability and uptime are engrained in our Service DNA, and we take pride in the quality of products produced. In the event of field issues needing a deep-dive analysis, Nidec will support your needs by engaging the various functional areas of our enterprise to quickly perform the necessary reviews to address and resolve your issues. We are available to perform on-site unit analysis and/or returned to our manufacturing facility for a thorough review by our experienced team of engineers and operations personnel. We will do a thorough teardown, analysis, and develop a plan to correct any deficiencies and repair to OEM specifications ensuring an "as-new" condition upon completion. Our state-of-the-art test systems will ensure motor performance validations are performed with comparisons to testing performed when initially manufactured.

In the event that you need an expedited turn-around time to get your product back on-line, we have a global authorized service network of shops that will provide the utmost quality of repair.

Motor Repair:

Motor repairs can be provided through two options:

- 1. Nidec Facility
 - Offer OEM repair services for sites with spare motors or sites not needing immediate turnaround
- 2. Authorized EASA Shop partner
 - For end users needing a fast motor turnaround time



