



**THE TRUSTED SOURCE FOR
INDUSTRIAL PARTS REPAIR**

REDUCE DOWNTIME, PART COSTS AND REPETITIVE FAILURES

Nothing is more important to a factory than efficiency. Every machine, every system, every process must function efficiently to meet production goals.

The impact industrial parts and MRO can have on a factory's performance is often misunderstood or undervalued. In each machine, every part has to do its job—and do it well—reliably and cost-effectively. Advanced Technology Services, Inc. (ATS), a global leader in reliability-centered industrial maintenance and MRO services, specializes in quality part repairs. From electronic and mechanical part repairs to equipment calibration, root cause analysis to standard warranties, our industrial services are laser focused on optimal efficiency through best practices in asset productivity and uptime.

We Make Factories Run Better

Hundreds of vendor relationships, disorganized inventory systems, localized and/or niche repair houses and buy-it-now parts urgency can lead to inefficiency and unnecessary extra cost. It's these kinds of challenges that lead many of the world's leading manufacturers to count on ATS. Through our maintenance expertise, in-house repair capabilities, strategic channel partners and leveraged supply chain network, we have the breadth and depth to continuously deliver on the priorities manufacturers value most.

ATS is unique in its alignment of people, processes and technologies to ensure service excellence. Every step in the parts repair journey is designed to not only save manufacturers money and improve operational performance, but also uncover opportunities for long term reliability.

160+
SUPPLIER PARTNERSHIPS

1000+
OEM BRANDS SERVICED

60,000+
PARTS SKUS REPAIRED

2x ROI
IN COST SAVINGS

200%
EXTENDED PRODUCT
OPERATING LIFE



STATE-OF-THE-ART FACILITIES

- + Environmental Chamber
- + Functional Test Systems
- + Clean Room
- + PCB Manufacturing
- + Machine Shop
- + Multiple Repair Labs
- + Calibration Lab
- + Engineering Lab



**ISO 9001 &
ISO 17025**

Accredited Repair and
Calibration Center



15+ YEARS

Repair Technician
Experience on Average



RELIABILITY-FOCUSED REPAIRS

Utilizing Decades of
Maintenance & Reliability
Expertise

TABLE OF CONTENTS

Why Choose ATS?	4
Reliability-Focused Repair Process	5
Top OEMs We Repair	6
Top OEM Product Lines	7
Part Repair Expertise	8-9
Getting Started	10
Repairable Parts Management	11

WARRANTIED REPAIRS THAT PERFORM LIKE NEW

As electronic and mechanical parts age and wear, they always seem to fail at the worst time. Direct replacements can often be unavailable as machines become older and obsolete and some manufacturers discontinue specific parts or go out of business – and parts that can be found may have altered specifications, different materials or redesigned connectors and interfaces. Making a new component work in your old machinery costs time, money and may not even be possible.

ATS service facilities are best-in-class and ready to handle any electronic and mechanical repair needs. Our highly skilled technicians have the experience and technical knowledge to perform every repair with the highest quality and turnaround at a significant cost savings.

“ATS’s data-based approach has proven itself time and again. Their dedication to responding quickly, uncovering root causes and finding innovative part solutions is exceptional.”

- Leading Distributor



**40-60% COST SAVINGS
VS. BUYING NEW**



**RAPID TURNAROUND
WITHIN 2 WEEKS**



**1-YEAR IN SERVICE,
5-YEAR SHELF WARRANTY**



**60% REDUCTION IN
REPETITIVE FAILURES**

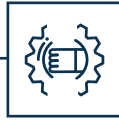
RELIABILITY-FOCUSED REPAIR PROCESS

Unlike other repair services, we replace all failure components, not just the ones found to be defective. To ensure reliability, we test your fully refurbished part in real factory conditions.



STEP 1

Equipment is inspected and barcoded to keep historical record of all failure data.



STEP 2

A common cause of failure for electronic components is contamination. That's why all parts and components are disassembled and thoroughly washed.



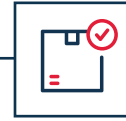
STEP 3

All common-failure components are repaired or replaced, each undergoing rigorous testing and analysis.



STEP 4

Equipment is reassembled and undergoes final testing in anticipated real-world conditions.



STEP 5

Parts are returned with a failure report and recommendations for extending the life of components.





TOP OEMs WE REPAIR

Our broad expertise provides high-quality repairs to the OEM brands seen most on the factory floor.

ABB GROUP

ADVANTECH AUTOMATION

ALLEN-BRADLEY
(ROCKWELL AUTOMATION INC)

BALDOR-RELIANCE
(BALDOR ELECTRIC CO)

BECKER

BOSCH REXROTH AG

BUSCH

CARTER DAY/DONALDSON

CINCINNATI MILACRON INC
(FERROMATIK MILACRON INDIA PVT LTD)

CONTROL TECHNIQUES
(EMERSON ELECTRIC CO)

DODGE

DURBIN INDUSTRIAL VALVES

EATON CORP

EMERSON

EUROTHERM DRIVES LTD

FANUC AMERICA CORP

FINCOR AUTOMATION
(EMERSON ELECTRIC CO)

FIREYE INC
(UNITED TECHNOLOGIES)

FIVES NORTH AMERICAN
COMBUSTION INC
(SIMPLEX)

FLUKE CORP

FUJI ELECTRIC CORP

GARDNER-DENVER

GAST

GENERAL ELECTRIC CO

GSE

HASKEL

HEIDENHAIN CORP

HEYPAC

HONEYWELL INTL INC

HYDRONICS

INDRAMAT PRODUCTS
(REXROTH INDRAMAT
GMBH LTD LIAB CO)

ISHIDA CO

KOLLMORGEN
(DANAHER CORP)

LINCOLN ELECTRIC

MARPOSS SPA

MAZAK CORP

METTLER TOLEDO INTL INC

MITSUBISHI ELECTRIC CORP

MODICON
(SCHNEIDER ELECTRIC)

MOOG INC

MOTOMAN
(YASKAWA)

OKUMA AMERICA CORP

OMRON ELECTRONICS LLC

PARKER HANNIFIN CORP

POWERTEC

PROPORTION-AIR INC

RELIANCE ELECTRIC CO

ROOTS/DRESSER

SICK AG

SIEMENS AG

SPX CORP

STARRETT

STI
(OMRON SCIENTIFIC
TECHNOLOGIES INC)

TECO-WESTINGHOUSE
MOTOR CO

TELEMECHANIQUE
(SCHNEIDER ELECTRIC)

VICKERS

WAUKESHA
(SPX CORP)

WEBER

WESTINGHOUSE ELECTRIC
CORPORATION

YASKAWA AMERICA INC

ZEBRA TECHNOLOGIES CORP
(ZIH CORP)

1000+ OEM BRANDS



We have the capabilities to repair 4,300+ parts across the Allen-Bradley product line. Top parts we repair include:

DRIVES

- 1336, 1391, 1305, PowerFlex 4, 40, 70, 700, 753, 755, ArmorStart

SERVO DRIVES

- Kinetix 3, 300, 2000, Ultra 3000, 5100, 5500, 5700, 6000, 6200, 6500, 7000

PLCs

- PLC-2
- PLC-3
- PLC-5
- SLC
- MicroLogix
- CompactLogix
- ControlLogix
- GuardLogix

HMI's

- PanelView
- PanelView Plus
- VersaView
- Industrial Computer Centers
- Industrial Monitors

SERVO MOTORS

- MP-Series (F,S,M,L) TL, VP (C, F, H, L, S)
- Asynchronous (M, MA, HPK)



We have the capabilities to repair 1,500+ parts across the Fanuc product line. Top parts we repair include:

ROBOTIC CONTROLS

- Rj2, Rj3, Rj3i, R30ia, R30ib
- Teach Pendants, Servo Amps, Power Supplies, I/O, Processors, Front Panel Interfaces, E-stop Units

CNC PRODUCTS

- Operator Panels, I/O, MDI Panels, Power Supplies, HandyOP Panels, MPG Units, Encoders

SERVO DRIVES

- C Series
- Alpha
- Alpha FSSB
- Alpha I LIV
- Alpha I HV

SERVO/SPINDLE MOTORS

- Alpha
- Alpha I
- Beta



We have the capabilities to repair 900+ parts across the General Electric product line. Top parts we repair include:

PLC/MOTION CONTROL

- Series One, 90-30, 90-70, RX3i, Motion Mate

OPERATOR PANELS

- Quick Panel
- Quick Panel Jr.
- Quick Panel View
- LCD Display Units
- Industrial PC

DRIVES

- DC300
- DC2000
- AF-300
- AF-600



We have the capabilities to repair 1,100+ parts across the Siemens product line. Top parts we repair include:

PLC

- 505, S7-200, S7-300, S7-400, S7-1200, S7-1500

AC DRIVES/SERVO DRIVES

- MicroMaster, Sinamics G120, SIMODRIVE 611, Sinamics S120

SERVO/SPINDLE MOTORS

- SIMOTICS 1FK
- 1FT
- 1PH

HMI's

- Mobile Panels
- Basic Panels
- Comfort Panels
- Industrial PCs
- Industrial Displays



WE SERVICE THE PARTS THAT MATTER MOST TO YOUR PRODUCTION.

With our reliability-focused and preventive maintenance approach to part repair, all parts are fully refurbished, extending the life of each part and components. We repair or replace all common-failure components with premium options and new technology. All parts are rigorously tested in real-world conditions to ensure quality and reliability during operation.

INDUSTRIAL CONTROLS

We have full system test capability to support a wide range of industrial systems ranging from PLC's, CNC's and Robotic Controls. The parts are refurbished then system tested to verify full functionality in operation to include communication, program download, configuration run, I/O simulation with load testing, motion control and full "burn in" to insure reliability.

PRODUCTS WE REPAIR

- Processor Boards
- Axis Control Boards
- I/O Boards
- Power Supplies
- Teach Pendants
- Communication Boards
- Networking Boards
- Machine Interface
- Manual Pulse Generators

OEMs

- Allen-Bradley
- Fanuc
- General Electric
- Giddings & Lewis
- Honeywell
- Modicon
- Mitsubishi
- Pilz
- Siemens
- Texas Instruments
- Westinghouse
- Yaskawa



PLANT AUTOMATION

We have the capability to repair hardware and software and exceed OEM standards with our preventive maintenance processes. We can retrofit obsolete components with new technology including keypads, touchscreens, backlights, LCD's and laser diodes. CRT monitors can be rebuilt and upgraded to an LCD screen to prolong the life and improve the ergonomics of the unit.

PRODUCTS WE REPAIR

- Industrial Computers
- Embedded Automation Computers
- Operator Interface Panels
- CRT Monitors
- LCD Touch Displays
- Handheld/Fixed Barcode Scanners
- Lasers
- Perimeter/Navigation Scanners
- Label Printers/Applicators

OEMs

- Advanced Technology Services (Panelmate)
- Allen-Bradley
- SICK
- Eaton
- Siemens
- Datalogic
- Accu-Sort
- TCP
- General Electric
- Advantech
- Maple Systems
- Pro-face
- Zebra
- CAB



MECHANICAL

Our mechanical capability and refurbishment includes a free evaluation and quote, utilization of OEM parts and repair kits, steam cleaning, precise machining/tolerances, powder coating, food grade coating application and etched serialization. All refurbished parts are fully functional or system tested to meet our rigorous standards.

PRODUCTS WE REPAIR

- Hydraulic Pumps/Motors
- Hydraulic Cylinders
- Servo Valves
- Actuators
- Manifolds
- Pneumatic Cylinders
- Grippers
- Pneumatic Valves
- Vacuum Pumps
- Extrusion Pumps
- Air Locks
- Positive Displacement Pumps

OEMs

- SPX/Waukesha
- Busch Vacuum Solutions
- Viking
- Roots/Dresser
- Parker
- Flowserve
- Jabsco
- Emerson
- ARO
- Carter Day/Donaldson



ELECTRONICS

We have full load testing on power supplies, full test capabilities for light curtains at OEM rated distance and advanced methodologies for circuit testing. Based on the architecture of the board, our team can determine the functional output of the board in its parent unit. This information is used to develop repair and testing methodologies with limited or no OEM documentation.

PRODUCTS WE REPAIR

- Circuit Boards
- Logic Boards
- Digital I/O Boards
- Analog I/O Boards
- Safety I/O Boards
- Communication
- Machine Interface
- Power Supplies
- Light Curtains
- Measurement/Gaging Systems
- Process/Temperature Controls
- Chart Recorders & Oscilloscopes
- Test & Measurement Equipment
- Weigh Scale Controls
- Data Acquisition
- Pressure Controllers
- Web Guidance
- Vibratory Controls
- Diagnostic/Service Tools
- Motor Protection Relays

OEMs

- Banner
- STI
- SICK
- Lambda
- Power-One
- Marposs
- Siemens
- Honeywell
- General Electric
- Fluke
- HP
- Tektronix



POSITION CONTROL

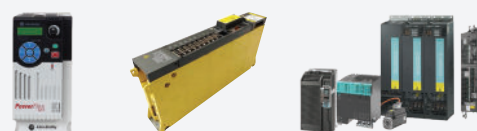
We have the capability to test and load drives up to 500 horsepower. Servo Drives are system tested to ensure complete functionality of position control, I/O and communications. Feedback device output signals are measured to specification.

PRODUCTS WE REPAIR

- AC/DC Motor Drives
- Servo Motor Drives
- Stepper Drives
- Motion Controllers
- Starters
- Encoders
- Resolvers
- Scales

OEMs

- ABB
- Allen-Bradley
- Fanuc
- General Electric
- Siemens
- Indramat
- Toshiba
- Eaton
- Cutler-Hammer
- Westinghouse
- Square D
- Bosch Rexroth
- Baldor-Reliance
- MOOG
- Kollmorgen
- Yaskawa
- Heidenhain



POWERTRAIN/MOTION

We specialize in EASA certified services including rewind, upgraded wire and insulation, balancing, weld/machining services, shafts, bores, housing repair and chrome/grind. Repairs include inspection of all mechanical fits, electrical parts and installation of new OEM or premium parts. Factory data and/or historical data is used to align and preliminary test. All repairs are tested with a factory drive system or ATS custom developed system for final verification.

PRODUCTS WE REPAIR

- Linear Positioners
- Motorized Rollers
- Ballscrews
- Slides
- Gearboxes
- Actuators
- Servo/Spindle Motors
- AC/DC Motors
- Precision Spindles

OEMs

- Yaskawa
- Mazak
- Yamaha
- IKO
- Indramat
- Fanuc
- Siemens
- Van der Graaf
- MOOG
- Allen-Bradley
- Falk
- Baldor-Reliance
- Dodge



ELECTRO-MECHANICAL

Our electro-mechanical capability and refurbishment includes a free evaluation and quote, utilization of OEM parts and repair kits, steam cleaning, precise machining/tolerances, power coating, food grade coating application and etched serialization. All refurbished parts are fully functional or system tested and calibrated when required to meet our rigorous standards.

PRODUCTS WE REPAIR

- Hot Melt Adhesive Systems
- Marking Systems
- Label Applicators
- Metal Detectors
- Clean In Place Valves
- Control Valves
- Proportional Valves
- Temperature Control Units
- Positioners & Actuators
- Process Instrumentation & Transmitters

OEMs








- Nordson
- CAB
- REGLOPLAS
- Marsh
- ITW
- SBS
- Maxcess/North American
- Proportion-Air
- IKO
- Yamaha
- Van der Graaf
- Sterling/Sterlco
- Smart Fog
- Emerson
- Fisher




FAST AND HIGH-QUALITY PARTS REPAIR

ATS has decades of proven experience helping many of the world's leading manufacturers maintain the highest standards for uptime, product quality, cost effectiveness and machine output.

24/7 CUSTOMER SERVICE

-  Quotes for new, surplus or repair and refurbishment
-  Return Material Authorization (RMA) requests
-  Repair status updates
-  Root cause analysis and troubleshooting
-  Warranty activations
-  Remote installation support
-  Repair capability requests

HOW TO GET AN ATS QUOTE

-  Email
partsquote@advancedtech.com
-  Call
800.328.7287
-  Connect
Contact your dedicated ATS Account Representative



HOW TO SHIP A PART TO ATS

We make shipping easy. Call to schedule a shipment or send your parts directly to the ATS repair center. For all shipments, include a packing slip with your contact information, an itemized list of all your parts and a ship/bill to address.

ATS Repair Center
8201 N. University St
Peoria, IL 61615



VISIT **WWW.ADVANCEDTECH.COM**

for all your refurbished/repair, surplus and new part needs

We Make Factories Run Better.

INCREASE EFFICIENCY WITH OUR DATA-DRIVEN MRO PARTS MANAGEMENT PROGRAM

Repairable Parts Management

Our Repairable Parts Management (RPM) program is designed to solve the challenges procurement and reliability manufacturing leaders face.

The program is managed by ATS through an on-site lead responsible for the end-to-end process execution that focuses on improving part reliability and reducing overall part costs. We also track and report on all repairs you outsource – not just the ones ATS performs. KPIs include cost savings, reliability improvements, warranty capture and core return rates.

We Provide Proven Value Through:

- Competitive repair pricing
- Management of all repairs, tracking, warranties and histories
- Root cause analysis on repetitive failures
- Strategic sourcing of obsolete parts
- Comprehensive monthly reporting
- Supporting sustainability initiatives



24-HOUR CUSTOMER SERVICE

800.328.7287

partsquote@advancedtech.com