



Lavan Sanat-e Maad Co.

NDT & Advanced NDT inspection services





OVERVIEW

Lavan Sanat-e Maad (LSM) is a leading provider of engineering and inspection services, specializing in **Non-Destructive Testing (NDT)** and **Advanced Non-Destructive Testing (ANDT)** for the oil, gas, petrochemical, refinery, and power generation industries.

LSM delivers accurate inspection services, high-quality reporting, and industry-leading technical support—ensuring safety, compliance, and reliability across all stages of industrial operations.

Our multidisciplinary team of certified Level II and Level III inspectors, advanced technicians, and project managers ensures that every inspection is performed according to international standards such as: **ASME, ASTM, API, EN ISO, AWS, and ASNT.**

LSM supports clients through:

- Stand-alone inspection services
- Joint ventures (JV)
- Specialized subcontracting
- Full inspection packages for EPC contractors

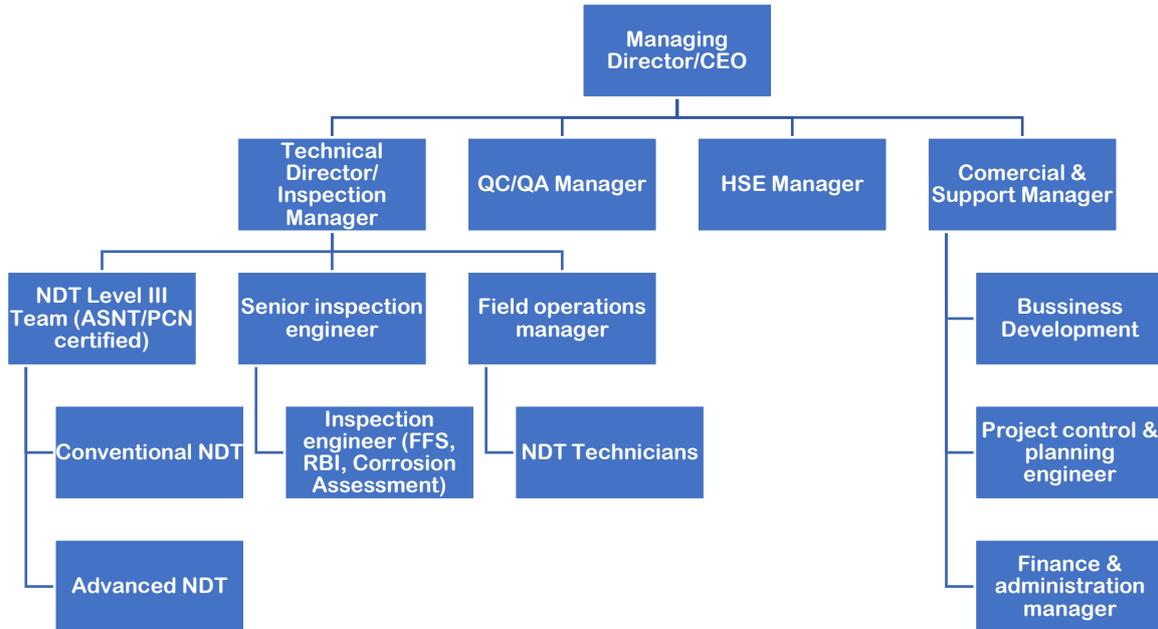
We prioritize efficiency, safety, transparency, and long-term asset integrity.





ORGANIZATION STRUCTURE

The organizational structure ensures full technical control of inspection and advanced NDT activities through certified NDT Level III personnel.





Our Equipment

LSM utilizes advanced and fully calibrated equipment sourced from leading global manufacturers. Our equipment ensures accuracy, repeatability, and compliance with international requirements.

| No. | Model | Company | Test method |
|-----|---------------|---------------------------------------|---|
| 1 | USM Go+ | GE inspection Technologies | Thickness measurement Weld inspection Corrosion mapping |
| 2 | Sitescan D10+ | Sonatest | Thickness measurement Weld inspection |
| 3 | Mentor EM | GE inspection Technologies | Surface Eddy current testing |
| 4 | Ectane 2 | Eddyfi | Tubing inspection surface eddy current testing |
| 5 | ISONIC 3505 | Sonatron | Weld inspection SRUT |
| 6 | NextSCAN | NextNDT Technology Inc. | PAUT, TFM, TOFD & FMC |
| 7 | M2M | Eddyfi | PAUT, TFM, TOFD & FMC |
| 8 | FLOORMAP | Eddyfi | MFL tank floor mapping |
| 9 | AMSY | Vallen systeme | Acoustic Emission testing (AE) |
| 10 | Eddymax | TMT Test- und Maschinenteknik GmbH | Tubing inspection |



CORE COMPETENCIES

NDT Services:

We offer a full range of NDT services designed to verify structural integrity, material soundness, and weld quality across industrial applications.

NDT Capabilities:

- Visual Testing (VT)
- Ultrasonic Testing (UT)
- Radiographic Testing (RT)
- Magnetic Particle Testing (MT)
- Dye Penetrant Testing (PT)
- Corrosion & Thickness Measurement
- Welding Inspection



Our API-certified services include:

- **API 510** – Pressure Vessel Inspection
- **API 570** – Piping Systems Inspection
- **API 653** – Aboveground Storage Tank Inspection

Each inspection is executed with a focus on accuracy, traceability, compliance, and clear reporting.



● Advanced NDT inspection services

Lavan Sanat-e Maad (LSM) provides certified experts in **advanced non-destructive testing (ANDT)** to deliver precise and reliable asset inspections—especially for flaws undetectable by traditional methods.

Using cutting-edge technologies, our ANDT services ensure faster, more accurate data on asset integrity and increase the likelihood of flaw detection.

Our trained technicians help identify anomalies, assess their severity, and support informed **run-repair-replace** decisions.

Some common uses of ANDT techniques include the inspection and detection of:

- Corrosion
- Cracking
- Corrosion Under Insulation (CUI)
- High Temperature Hydrogen Attack (HTHA)
- Weld Inspection

As a world leader in non-destructive technologies, our ANDT technique portfolio is expansive. Below is a portion of the ANDT inspection solutions that our expert technicians provide:

- Short Range Guided Wave Ultrasonic Testing (SRUT)
- Tubing Inspection (RFT, ECT, ECA, NFT, NFA, MFL & IRIS)
- Phased Array (PAUT)
- Time-Of-Flight Diffraction (TOFD)
- Pulsed Eddy Current (PEC)
- Acoustic Emission Testing (AE)
- MFL Tank floor inspection
- Surface and weld Eddy current testing (ET)







Table of Relevant NDT & Inspection Projects

| | Client / Company | Equipment / Scope | Inspection Method | Project Period |
|----|--|---|--------------------------|-----------------------|
| 1 | Isfahan Oil Refinery | Air Cooler Tubes | MFL, NFA | Aug 2019 |
| 2 | Bandar Abbas Oil Refinery | Air Cooler Tubes (Overhaul) | MFL, NFA | Sep 2019 |
| 3 | Isfahan Oil Refinery | Air Cooler Tubes | IRIS | Sep–Oct 2019 |
| 4 | Sarkhoon & Qeshm Gas Refinery | Heat Exchanger Tubes | RFT | Oct 2019 |
| 5 | Arya Sasol Polymer Co. | LD Unit Air Cooler Tubes | MFL, NFA | Oct 2019 |
| 6 | Bandar Imam Petrochemical (Bespaaran Unit) | Jacketed Tubes | SRUT | Jan 2020 |
| 7 | Sarkhoon & Qeshm Gas Refinery | Pressure Vessel & Tubes (Training + C-Scan) | C-Corrosion Mapping | Feb 2020 |
| 8 | Bandar Abbas Oil Refinery | Heat Exchanger Tubes | RFT, IRIS | Feb 2020 |
| 9 | Fajr Jam Gas Refinery | Reboiler Tubes | IRIS | Feb–Mar 2020 |
| 10 | Arya Sasol Polymer Co. | LD Unit Air Cooler Tubes | MFL, NFA | Mar–Apr 2020 |
| 11 | Mahshahr Pipe Manufacturing Co. | Industrial Components | C-Corrosion Mapping | Aug 2020 |
| 12 | Amirkabir Petrochemical Co. | Storage Tanks & Spherical Tank Supports | SRUT | Jan 2021 |
| 13 | Imam Khomeini Oil Refinery (Shazand) | Air Cooler Tubes | MFL, NFA | Mar 2021 |
| 14 | Imam Khomeini Oil Refinery (Shazand) | Air Cooler Tubes | IRIS | Apr 2021 |
| 15 | Damavand Petrochemical Co. | High-Pressure Gas Pipelines (CUPS) | UT / CUPS Inspection | Jul 2021 |
| 16 | Laleh Petrochemical Co. | Process Tubes | IRIS | Jul 2021 |
| 17 | Arta Energy Petrochemical Co. | Reactor Tubes | IRIS | Aug 2021 |
| 18 | Bandar Abbas Oil Refinery | Storage Tank Annular Area | SRUT | Sep 2021 |



| | Client / Company | Equipment / Scope | Inspection Method | Project Period |
|----|---|---|--|------------------------|
| 19 | Bandar Abbas Oil Refinery | Storage Tank Annular Area | SRUT | Nov 2021 |
| 20 | Amirkabir Petrochemical Co. | Heat Exchanger Shell | C-Corrosion Mapping | Dec 2021 |
| 21 | Karaj Grain Co. | Storage Tank Annular Welds (Construction) | PAUT | Mar 2022 |
| 22 | Amirkabir Petrochemical Co. | Storage Tank Welds | PAUT | Jun 2022 |
| 23 | Bandar Abbas Oil Refinery | Storage Tank Corrosion Assessment | Acoustic Emission Testing | Jul–Aug 2022 |
| 24 | Maroon Petrochemical Co. | Reactor Tubes | RFT | Aug–Sep 2022 |
| 25 | Bandar Abbas Oil Refinery | Process Tubes | NFA, MFL, IRIS | Nov 2022 |
| 26 | Maroon Petrochemical Company | Fitness for Service (FFS) Assessment | Thickness Measurement, PAUT, ECT, Conventional NDT | Apr–May 2023 |
| 27 | Sarkhoon & Qeshm Gas Refinery | Heat Exchanger Inspection | Conventional & Advanced NDT | Apr–May 2023 |
| 28 | Saqquez Gold Processing Plant Project | Tank Inspection during Construction, Piping Inspection & Equipment Installation | VT, UT, NDT Supervision | May–Jun 2023 (Ongoing) |
| 29 | Karun Petrochemical Company | .Phosgene Unit Inspection | Advanced NDT | Nov 2023 |
| 30 | Karun Petrochemical Company | Phosgene Unit Tube Inspection | Advanced Tube Inspection | Jan 2024 |
| 31 | Iran Chemical Industries Investment Co. | Heat Exchanger Inspection | Advanced NDT | Mar 2024 |
| 32 | Morvarid Petrochemical Company | Furnace & Reactor Tube Inspection | Advanced Tube Inspection | Apr 2024 |
| 33 | Sarkhoon & Qeshm Gas Refinery | Heat Exchanger Tube Inspection | Tube Inspection Methods | May 2024 |
| 34 | Imam Khomeini Oil Refinery (Shazand) | Advanced NDT during Overhaul | PAUT, UT, Advanced NDT | May–Jun 2024 |
| 35 | Sarkhoon & Qeshm Gas Refinery | Heat Exchanger Tube Inspection | Tube Inspection Methods | Jul 2024 |



| | Client / Company | Equipment / Scope | Inspection Method | Project Period |
|----|--------------------------------------|--|--------------------------|-----------------------|
| 36 | Arya Sasol Polymer Company | Furnace Tube Inspection | Advanced Tube Inspection | Jul 2024 |
| 37 | Jam Petrochemical Company | Reactor Tube Inspection | Advanced Tube Inspection | Dec 2024 |
| 38 | Zagros Petrochemical Company | Furnace Tube Inspection | Advanced Tube Inspection | Dec 2024 |
| 39 | Fateh Sanat Mobadel Arya Co. | Heat Exchanger Inspection | Advanced NDT | Apr 2025 |
| 40 | Arya Sasol Polymer Company | Furnace Tube Inspection | Advanced Tube Inspection | Jun 2025 |
| 41 | Imam Khomeini Oil Refinery (Shazand) | Advanced NDT during Overhaul | PAUT, UT, Advanced NDT | Jun–Jul 2025 |
| 42 | Persian Gulf Star Oil Refinery | SRUT Inspection of Gas Pipeline Supports | SRUT | Oct–Nov 2025 |
| 43 | Lordegan Petrochemical Company | Heat Exchanger Tube Inspection | Advanced Tube Inspection | Sep–Oct 2025 |
| 44 | Lavan Oil Refinery | SRUT Inspection of Tank Annular Plates | SRUT | Nov–Dec 2025 |
| 45 | Morvarid Petrochemical Company | Furnace & Reactor Tube Inspection | Advanced Tube Inspection | Dec 2025–Jan 2026 |
| 46 | Shiraz Petrochemical Company | Urea Unit Heat Exchanger Tube Inspection | Advanced Tube Inspection | Dec 2025–Jan 2026 |
| 47 | Jam Petrochemical Company | Furnace Tube Inspection | Advanced Tube Inspection | Dec 2025 |



OUR CLIENTS

“We have successfully partnered with the following clients on major industrial projects across Iran.”



Isfahan Oil Refinery



Fajr-e Jam Gas Refinery



South pars Gas Complex



Imam Khomeini Oil Refinery



Persian gulf star Oil Company



Karun Petrochemical Company



Amir Kabir Petrochemical Company



Sarkhoun & Qeshm Gas Refinery



Bandar Abbas Oil Refining Company



ARYA SASOL POLYMER COMPANY



Marun Petrochemical Company



Shiraz Oil Refining Company



Morvarid Petrochemical Company



شركت پتروشیمی زاگرس
ZAGROS PETROCHEMICAL CO.



JPC



PARTNER COMPANIES

At Lavan Sanat-e Maad (LSM), we believe that successful project execution relies not only on internal expertise but also on strong, reliable partnerships. Over the years, we have built lasting collaborations with reputable engineering firms, equipment suppliers, and specialized subcontractors both locally and internationally. These partnerships enable us to expand our capabilities, maintain high-quality standards, and deliver complex projects on time and within budget. Together with our partners, we strive to exceed client expectations through innovation, technical excellence, and shared commitment to safety and integrity.

Why LSM? — Key Advantages

- ✓ Certified Level II & Level III NDT experts
- ✓ Full compliance with ASME, API, ASTM, EN ISO, AWS
- ✓ Advanced inspection technologies (PAUT, TOFD, PEC, AE, IRIS, SRUT, etc.)
- ✓ Detailed, accurate reporting
- ✓ Fast mobilization across Iran
- ✓ Reliable support for refineries, petrochemical plants, and EPC contractors
- ✓ Proven track record with major national companies

CONTACT INFORMATION

-  Email: info@lsm-co.ir
-  Phone: +98 919 2280 237
-  Location: Saqqez, Kurdistan Province, Iran
-  Website: www.lsm-co.ir