

Cornerstone

Mechanical Services, LLC

***Maximizing Reliability
with Predictive Solutions***



cornerstonemechanical.com



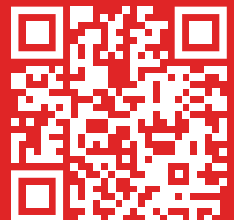
214-570-9498



info@cornerstonemechanical.com



2701 N Hwy 175,
Seagoville, TX 75159





About Us

Cornerstone Mechanical Services is a Christian-owned company that strives to embody the principles of Proverbs 22:1, emphasizing the value of a good reputation over material wealth. Our aim is to be regarded by our clients as the foremost choice for fulfilling their industrial equipment service requirements.

Established in September 1995 by Wynell and Terry Wilson, Cornerstone Mechanical Services has flourished through the collaborative efforts of a dedicated team of professionals. Offering a range of technical services tailored to enhance machinery reliability, we employ cutting-edge technology and methodologies. These services include, but aren't limited to, industrial equipment installation services, dynamic balancing services, laser alignment services, preventive industrial maintenance services, industrial predictive maintenance services, and new construction. In case of malfunction, clients can rely on Cornerstone maintenance expertise for industrial rebuild and repair.

OUR CORE VALUES



1. BE VIRTUOUS



**3. PROVIDE
INDUSTRY-LEADING
EXPERTISE**



2. BE TRUSTWORTHY



**4. PURSUE INNOVATION
& BE ADAPTABLE**

WBENC



NEW CONSTRUCTION

RELIABILITY SOLUTIONS

FIELD SERVICES

OUR PROCESS

One Company
For Your
Equipment's
Full Life
Cycle



INSTALLATION

New equipment installations, grouting and commissioning

RELIABILITY

Predictive and preventive strategies combined with planned maintenance services to ensure equipment longevity

MAINTENANCE & TRAINING

Corrective maintenance activities, repairs and training to maintain equipment availability

RCA & TROUBLESHOOTING

Solving complex issues with root cause analysis and investigations

REPLACEMENT

Equipment end-of-life upgrades, replacements and decommissioning

NEW CONSTRUCTION

- *New Equipment Installation*
- *Precision Grouting*
- *Commissioning*
- *Equipment Replacement*

In just about any industry, time is money. However, efficiency means nothing without effectiveness. **Cornerstone Mechanical offers expert equipment installations to give your facility the best odds for success.**

Before installation, our team will perform pre-alignment and precision leveling services to confirm the equipment frame is straight and that all mounting locations are coplanar. Attention to detail at this vital stage can prevent soft foot or bolt-bound issues after the equipment is set.

Cornerstone also provides unsurpassed precision grouting services using cementitious or epoxy grout to ensure the integrity of the structure, enhance the stability and increase the load-bearing capacity for valuable assets.

Throughout the capital project process, Cornerstone aims to greatly reduce your long-term maintenance expenses by eliminating issues before they have a chance to arise.





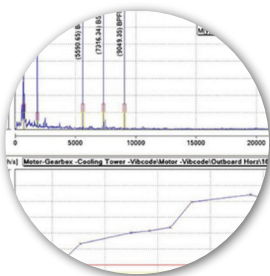
RELIABILITY SOLUTIONS

- *Vibration Analysis*
- *Infrared Thermography*
- *Oil Analysis*
- *Motion Magnification*



RELIABILITY SOLUTIONS

A robust predictive maintenance program encompasses a myriad of methods and metrics to ensure that your equipment consistently operates at peak performance levels. When it comes to supplementing your internal predictive maintenance program, Cornerstone Mechanical stands out by crafting programs or supplemental solutions tailored to suit the unique needs of your facility. Trust Cornerstone to be your reliability partner in sustaining your equipment performance and the optimal functionality of your equipment through any of the following reliability solutions:



VIBRATION ANALYSIS

Vibration analysis is a technique used to monitor, analyze and interpret the vibrational characteristics of machinery and structural components. It involves the measurement and assessment of vibration signals to:

- Identify abnormal conditions
- Detect potential faults or defects
- Assess the overall health and performance of equipment before it impacts production



INFRARED THERMOGRAPHY

Also known as thermal imaging, infrared thermography is a non-contact technique used to:

- Detect and visualize thermal patterns and temperature variations on the surface of objects, systems or structures
- This practice relies on the principle that all objects emit infrared radiation (heat) as a function of their temperature



OIL ANALYSIS

Oil analysis is a proactive maintenance technique used to:

- Assess the condition and performance of lubricants and machinery components
- Analyze samples of oil taken from equipment such as engines, gearboxes, hydraulic systems and turbines
- Examine various properties and characteristics of the oil
- Detect and quantify contaminants, wear particles and degradation products present in the oil sample



MOTION MAGNIFICATION

It can be difficult to identify microscopic amounts of motion. That's where motion magnification comes in. This process:

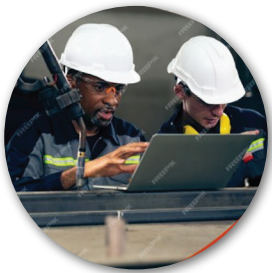
- Uses video and image processing to magnify tiny vibrations in rotating equipment that are naked to the human eye
- Detects and analyzes misalignment, loosening and cracking



TRAINING

Our staff possesses the expertise and experience necessary to provide comprehensive assistance to your teams and address any challenges or inquiries they may encounter. Our services include:

- Troubleshooting technical issues
- Specialized knowledge training
- Predictive or preventive programs
- Equipment-specific training



INVESTIGATIONS/ RCAS

As a company committed to delivering comprehensive solutions, we offer root cause analysis services that harness the power of cutting-edge tools and decades of industry experience to navigate complex scenarios with precision and efficiency. This helps our clients:

- Gain clarity
- Make informed decisions
- Implement sustainable solutions that drive lasting improvements

CONTINUOUS MONITORING

At Cornerstone, we proudly offer continuous vibration and condition monitoring of rotating equipment to ensure optimal performance and reliability for our clients. With our innovative analytics approach and premium wireless hardware partner, Erbesd Instruments, we offer a proactive solution that allows real-time tracking and analysis of critical rotating machinery.

Our continuous monitoring service employs state-of-the-art technology and sophisticated algorithms read by our Certified Cat III/IV analysts to:

- Detect anomalies
- Proactively troubleshoot current alarms
- Predict potential failures
- Prevent costly downtime

By continuously monitoring key parameters such as vibration, speed, current, temperature and other operational metrics, we enable our clients to anticipate critical maintenance needs, mitigate risk and maximize equipment uptime.

Through our commitment to excellence and leveraging the latest advancements in monitoring technology, we empower our customers to operate with confidence knowing that their rotating equipment is in capable hands.



FIELD SERVICES

Cornerstone Mechanical understands that businesses maintaining operational continuity during mechanical malfunctions, which can incur significant costs and disruptions, is paramount. With our field service offerings, we swiftly address system failures and restore operational status.

Our team of experts focuses on identifying and correcting the root cause of the issue to ensure minimal downtime so businesses can resume operations swiftly and smoothly. Our field

DYNAMIC BALANCING

Balancing rotating equipment is a critical process in mechanical engineering aimed at minimizing vibrations and ensuring optimal performance and longevity of machinery. Balanced rotating equipment:

- Reduces vibration levels
- Prevents premature wear and tear on components
- Decreases the likelihood of mechanical failures
- Improves overall safety within the operating environment

PRECISION LASER ALIGNMENTS

Alignment is crucial for minimizing wear and tear, reducing vibration and maximizing the efficiency and lifespan of rotating equipment. Precision shaft alignment involves using specialized tools and techniques to:

- Adjust the position of shafts and couplings so that they're parallel, concentric and in proper angular orientation
- Reduce the risk of premature failure and operational inefficiencies in machinery
- Promote smooth operation and optimal performance in industrial settings

CORRECTIVE MAINTENANCE

Our corrective maintenance technicians can restore a failed system to operational status within the shortest possible time. Typically, this involves replacing, repairing or rebuilding the component responsible for the overall system failure. Examples of our corrective maintenance services include:

- Bearing replacements
- Fan rebuilds
- Pump rebuilds
- Gearbox replacements
- Other valuable rotating equipment restoration services

PREVENTIVE MAINTENANCE

Cornerstone can formulate and implement regularly scheduled inspections, cleaning, lubrication and adjustments to prevent breakdowns and extend equipment life. We offer monthly, quarterly, semi-annual and annual preventive maintenance scheduling to:

- Prevent equipment failure
- Stop sudden catastrophic repair work before it arises
- Extend equipment life

EMERGENCIES / REPAIR WORK

Our team boasts comprehensive expertise in managing a spectrum of challenges, even when given short notice. These include:

- Emergency repairs
- Facility outages
- Urgent turnarounds