



# TECHNICAL SERVICES

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## UNISORB ROLL GRINDER INSTALLATION SYSTEMS

Unisorb Installation Technologies is the world leader in equipment installation systems and engineering. Unisorb has the only engineering staff devoted exclusively to the design and implementation of complete machine installation systems. From the properly designed foundation and isolation system to the installation system for the machine, Unisorb will provide the most comprehensive package available.

### Foundation Engineering Services

Unisorb provides completely engineered and coordinated construction documents ready for distribution to project bidders. Due to our extensive knowledge in construction, machinery installation and vibration isolation, Unisorb Foundation Engineering Services cover a much broader scope of the project than typical foundation drawings. In addition to layout and reinforcing drawings typically required for foundation construction, Unisorb provides drawings covering layout of anchoring and alignment hardware, isolation system details and special construction techniques unique to roll grinder foundations. This combination provides a well coordinated set of documents that can be used for construction and machinery installation--a value that is especially important for installation of used or rebuilt machinery.

### Vibration Isolation

Proper foundation isolation from harmful vibrations is paramount to grinder performance and roll finish. Unisorb engineers specialize in vibration isolation designs and offer several vibration isolation systems to meet each unique isolation requirement:

- **IB-500:** Used with a properly designed inertia block, this system can be designed with a natural frequency of 10-12 Hz.
- **RG-80:** Our state-of-the-art isolation system provides a high degree of isolation without the problems associated with spring systems. This system is designed with natural frequencies as low as 5 Hz.
- **Novibra GK Block:** These specially designed rubber blocks attain a natural frequency as low as 3.5 Hz.

### Anchoring and Alignment

Roll Grinder performance is dependent on a rigid connection to its specifically engineered foundation. The anchoring and alignment system is a critical part of the machine's overall performance. The Unisorb Fixator System provides:

- The highest spring constant available that provides and maintains a rigid connection.
- Precision alignment and adjustment simply with the use of a wrench.
- Reduced installation time - by as much as 75%.

## SERVICES

**Product Support:** Unisorb engineering staff is available during regular office hours free of charge to assist you in the appropriate selection and application of our products.

**On-Site Support:** Unisorb provides on-site support for all of our products.

**Vibration Analysis:** Unisorb is available to obtain on-site vibration information and provide a verbal summary the same day. This vibration information is used in determining the design of the required isolation package.

**Finite Element Analysis:** The foundation must be designed for optimum beam performance. Foundation depth must provide the acceptable stiffness required to maintain roll grinder accuracy, but must avoid excessive depths that result in unnecessary construction costs. Additionally, design of the foundation must avoid resonant frequencies with the roll grinder. To meet these two objectives, a Finite Element Analysis (FEA) is performed for each unique machine. Unisorb is the leader in providing this service.

**Advanced Grouting:** Premium cementitious and epoxy resin grouting products along with on-site supervision.

**Field Measuring:** When a used roll grinder is installed, the machine must sometimes be surveyed to gather information necessary for designing the foundation. Unisorb provides this service on an as-needed basis.

## UNISORB ROLL GRINDER INSTALLATION SYSTEM FEATURES

- **Foundation Engineering Services** - From foundation excavation to machine alignment, the most complete set of construction documents available.
- **Foundation Isolation** - The best isolation systems available.
- **Anchoring & Alignment** - The premium anchoring and alignment system.
- **Product Support** - The finest product support available.
- **Time Savings** - Significantly reduced time required to advance from conceptual design to production.
- **Experience** - Experience to guide you through the costly pitfalls and maze of problems associated with machinery installation.
- **Assistance** - A partner in your installation to help relieve the enormous task of coordinating all aspects of the project while trying to maintain your normal workload.
- **Single Source** - A single source to coordinate all parties associated with your project for a complete and seamless installation from design through construction.

**DEPEND ON UNISORB'S YEARS OF EXPERIENCE**

**CONTACT US AT 888-4-UNISORB OR ON THE WEB @ UNISORB.COM**