



# *the* **OUTRIGGER**

R. Baker & Son Magazine  
*Service-Disabled Veteran-Owned Business*

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## R. Baker Adheres To IRA's Seven R's For Asset Recovery

R. Baker & Son is a member of the Investment Recovery Association (IRA), the premier resource for companies and individuals engaged in the management and recovery of surplus and idle assets, and we live by IRA's "Seven R's Every IR Professional Should Know". These options for disposition, which are listed from highest value returned to lowest value received, help owners realize increased revenue and help preserve the environment.

**1. REUSE** - Reusing assets and equipment within an organization, rather than purchasing new, reduces capital, depreciation, taxes, and insurance costs.

**2. RECYCLE** - Keeping waste out of landfills saves disposal costs, generates income, and preserves resources. Recyclable materials generated by demolition include metal, brick, concrete, cardboard, gypsum wallboard, plastic, wood, glass, carpet and insulation.

**3. RECONDITION** - Many recovered assets can be reconditioned and put back into service or used as backup as an alternative to purchasing new. R. Baker & Son provides equipment and machinery moving services and can expertly disconnect, disassemble, package and ship for offsite repairs and modifications.

**4. RESELL** - As a member of IRA, R. Baker & Son actively networks with fellow members that include the majority of Fortune 500 companies in virtually every industry. Access to this large and diverse field enables us to effectively market recovered assets to reduce losses and increase income for our clients.

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## Huge Dampers Lessen Sway of Narrow Skyscrapers

**There's been a boom recently in Manhattan with the construction of tall, narrow skyscrapers that cater to wealthy buyers willing to pay millions for spectacular views.** One drawback, however, is the tendency for the slim towers to sway and twist at the top. Though these buildings are designed to move with the wind and aren't in any structural danger, the sensation can be extremely unpleasant and at times can cause motion sickness. The solution: giant dampening systems designed to offset the building's motion.

There are several types of dampening systems. A tuned mass damper, or TMD, is a huge, specially-engineered counterweight made of concrete or steel installed within the top of the structure, usually with the building's mechanical equipment. Weighing anywhere from 300 to 800 tons and connected to the structure by a system of pistons, springs, and cables, the device counters the effects of wind or seismic activity much like a giant shock absorber. The 1,667-ft. Taipei 101 skyscraper has opened its spherical pendulum-type TMD to tourists and it even has its own mascot known as "Damper Baby". Another type of damper is the slosh damper, or slosh tank, which utilizes tanks of water instead of steel or concrete to offset motion.

*World's largest TMD at Taipei 101 skyscraper; Photo: Armand du Plessis*



## Project Profile: Module Rigging & Installation

**R. Baker & Son recently completed a module installation at a northern New Jersey chemical pilot plant.** Working closely with the owner and the module fabricator, the Baker team developed a lift plan and a site-specific safety plan before the start of the project. Eighteen 42-foot long process and pipe rack modules, each weighing between 15 and 41 tons, were to be rigged and set in place according to the Sequence of Installation developed by the owner and module fabricator. In reviewing the Sequence of Installation and 3D models, however, R. Baker was able to come up with a more efficient procedure that would enable crews to complete the module installation in less time. Following a consultation with the owner and fabricator, the Sequence of Installation was revised and a new delivery schedule was coordinated with the module transporter.

Rigging crews utilized a 180-ton hydraulic crane to remove modules from transporter vehicles and set them in place per the 3D models, and interconnects were installed for permanent bracing. Platforms, railings, and stairwells were received and constructed in and around the modules. With the revisions to the Sequence of Installation and crews working 10-hour days, R. Baker & Son was able to shave nearly two weeks from the six-week project schedule and enabled electrical and mechanical crews to begin their work earlier than planned.



# Hand Tool Safety

When it comes to safety in rigging and demolition, heavy, powerful tools and machinery usually come to mind, but hand tools pose risks as well. Even seemingly innocuous manual tools like hammers, wrenches and screwdrivers can cause serious injury if guidelines and regulations are disregarded.

According to OSHA, the greatest hazards posed by hand tools result from misuse and improper maintenance. Employers must ensure the safe condition of hand tools and that workers are trained in their proper use. Use the right tool for the job; a chisel shouldn't be used as screwdriver, and vice versa, for example, and non-insulated pliers shouldn't be used while working with or around electricity. As with any construction or demolition imple-

ment, examine each tool before use, and do not use it if it is damaged. Loose or cracked handles can cause the head of a tool to fly off, and wrenches with sprung jaws can slip and cause injury.

Always ensure that knives, shears, snips, chisels, etc., are sharp. Dull tools are more hazardous than sharp ones because they require more force and are likely to slip and cause serious injury. Where flammable substances are present, hand tools made of non-ferrous materials should be used as iron and steel may produce sparks. Finally, always wear the appropriate PPE.



## Asset Recovery

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**5. RECLAIM** - R. Baker & Son safely and routinely reclaims solvents, chemicals, lubricants, refrigerants, hydraulic fluid, glycols, etc., during demolition and dismantling projects, and many of these substances can be reused to reduce waste and preserve the environment.

**6. RETURN** - Equipment, parts, materials and supplies recovered from dismantling, relocation and demolition projects can often be returned to the manufacturer or vendor for cash or future credit.

**7. REMOVE** - The simple act of removal of excess or idle assets lowers the tax base and increases returns on capital.

R. Baker & Son has performed numerous total-care projects involving asset relocation, asset recovery, asset repair, and new equipment installation. We adhere to the new LEED v4 guidelines, including air quality and waste streams. Recovered assets can be stored, prepared, and shipped throughout the world from our expansive, centrally-located outdoor and indoor climate-controlled warehousing facility in Marlboro, New Jersey. R. Baker & Son handles over 100,000 tons of scrap metal per year, enabling us to command the highest value-per-ton and pass along the revenue credits to our customers.

