

# 12 IMPORTANT QUESTIONS TO ASK

## WHEN PURCHASING A REFRACTORY INSTALLATION MACHINE

Refractory costs are only about 5% of the capitol cost of operating a cement plant. And yet almost 50% of plant outages, which result in lost profits coupled with maintenance costs, are a result of refractory related problems. Quality refractory installation facilitated by the best equipment for proper maintenance is critical to bottom line performance.

We encourage you to be careful when purchasing refractory maintenance equipment, because it's easy to purchase on price alone only to have this decision come back to haunt you with increased outages, increased downtime, and ultimately lost profits. The following 12 questions will help ensure you maximize your return on investment when considering the purchase of refractory maintenance equipment. **If your answer to any one of these questions is NO, you need to decide if you want to be a HERO or a ZERO:**



- 1** **Is the machine built to International Design, Welding, Fabrication & Safety Criteria Standards?**  
Be sure the equipment you choose is designed, welded & fabricated to International Standards with reviews by an independent certified professional engineer.



- 2** **Does the supplying manufacture have a reference list indicating years of experience & satisfied customers?**

Look for a company that has supplied equipment to major cement companies around the world & can supply a comprehensive reference list.



- 3** **Is the manufacture of Refractory installation equipment the main business of the supplier?**

The manufacture of maintenance equipment for Refractory Installation should be the main business & focus of your supplier.



- 4** **Does the manufacture have local representation for sales, technical information & after sales service and support?**

Make sure your supplier is represented by a World Wide organization of local offices or independent sales, service & support agents backed up by factory direct representatives.



- 5** **Does the equipment design consider easy movement into & set-up in the kiln with color coded match marks, minimal yet strong component weight & easy to read manuals?**

Make sure the manufacture designs for the lightest weight yet strongest equipment with color coded match markings for easy assembly with easy to read manuals.



# 6

**Will the bricking machine frame support two pallets of brick plus the work crew to facilitate the installation of two shape bricks used by most cement plants (can weigh up to approximately 1800 kilos)?**

Make sure the bricking machines standard frame supports 4500 kilos or 10,000 lbs net.



# 7

**Does the machine brick placement arch have a cut away center section on the up kiln arch for easy access to the keying area & valve in base cylinders on both arches with a master valve for each arch to allow independent operation of all cylinders or simultaneous cylinder operation to speed up the movement of the arches & thus speed up the installation of refractory?**

A clear view of the previously keyed ring in keying area allows the key mason to use the previously keyed ring as a guide line to maintain radial alignment. A key factor to quality installation. Master valves on both arches speeds up the release of cylinders in order to move the arches & greatly speeds up the installation process.



# 8

**Does the bricking machine come with standard accessories such as keying jack, shim driver, filter lubricator unit, fabricated storage area plus independent storage trays for shims, keying jack and other tools?**

It is the little things that make a big difference. Providing the masons with these key accessories further insures quality of the installation.



# 9

**Is the bricking machine arches furnished with air pressure gauge & regulator & hydraulic keying jack pressure gauge?**

Gauges are the feed back system for the bricking machine help maintain consistency of installation.



# 10

**Is the equipment designed for ease of maintenance?**

Quality equipment is designed for easy access to all components & with quick disconnects for easy replacement of parts while in the kiln or in the maintenance facility.



# 11

**Is the machine shipped in quality crates or storage containers?**

Storage containers help keep maintenance equipment from being damaged or contaminated by the ambient environment in between outages.



# 12

**Does the manufacture support the machine with Commissioning & training?**

Be sure your supplier supports all of its equipment with trained commissioning experts.



**REMEMBER** - IT IS BETTER TO BE **CAREFUL** THAN **SORRY**, PARTICULARLY WHEN YOU ARE DEALING WITH COSTLY CEMENT PLANT OUTAGES. **THE MAIN GOAL IS TO KEEP YOUR FLAME BURNING!**