BRICKING SOLUTIONS

A DIVISION OF **BROKK**®

The New Flat Deck **"Easy Flex"** Bricking Machine



Large Flat Deck machine at the Tilden/Cliffs plant

"Installing the Large Flat Deck saved over 7 hours in setup alone"

Large Flat Deck has:

- Ergonomical stairstep platform
- Flat deck for larger work space
- 25k net load capacity
- Color coded for easy assembly
- Non marking castors
- Light weight aluminum decking
- More courses of brick before machine movement
- Rails facilitate easy arch travel
- Allows installation of two rows of brick at the same time

In 2005 Tilden/Cliffs Mines in Michigan was well equipped for their outage. A New large flat Deck Bricking Machine, Ramp, and Bedding Cart helped do the job in record time. This bricking job called for something special and large enough for a 25' kiln with only a 5 x 10ft access opening. Building a machine of this size took a lot of planning and consideration to the plants special needs.

The plants previous methods of bricking was a fire hose rig. It had a heavy steel frame. You laid the brick on the curved frame then inflated a fire hose that pushed the brick against the wall. Using this method allowed you to brick only one course at a time. The this rig took 1 to 1 1/2 shifts (10 hour shifts) to install. The average installation rate of refractory was 2-2.5m per 10 hour shift.

The large Flat Deck was installed in about 3 hours the first time. A special carrying devise was manufactured to facilitated the assembly of the ring and allowed larger subassemblies to be carried through the door.

This was the first time any of the Commercial Specialties crew had used the Bricking Solutions large Flat Deck machine. Yet they still managed to pull off 3.7-4.6m per 10 hour shift with the best shift doing 6.0m in 10 hours.



The previously used steel ramp took 3 hours to install and the new lightweight aluminum ramp took 30 minutes.

"Largest known pneumatic bricking machine"



The lighter aluminum bedding cart will replace a heavier steelcart with improved ladder height plus sliding ladders to increase installation speed and safety.

Developing bricking machines and kiln refractory maintenance equipment is all we do. With over 900 machines in the field and in over 70 countries. We are well versed in the needs of the masons to get the job done quickly and safely. Providing the best tools to your maintenance personnel has a direct effect on the profitability of the plant.

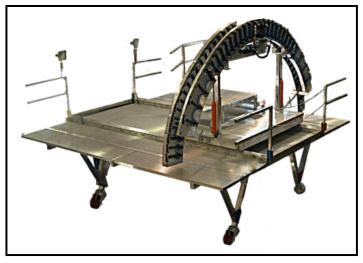
We are the only company to offer a wide range of bricking machines that are built to specifically meet the special needs of each cement plants situation.

The Bricking Solutions "Circle of Refractory Maintenance" new Flat Deck "**Easy Flex**" Bricking Machine has many advantages.

- Easier and quicker to adjust
- No tools needed to adjust arch
- Quicker assembly- less pieces to assemble
- Color coded for easy assembly
- Larger work space
- Easy travel for arch assembly
- 10k net load capacity
- With the new arch trolly system there is no binding on the rails when adjusting the arch.
- The arch is fully supported at all times.

When adjusting the arch on the other machines you have up to 18 adjustment spots on the arch itself. On the new Flat Deck "**Easy Flex**" you have a maximum of 4 adjustments utilizing screw jacks or hydraulic jacks (no tools required). You can literally adjust your machine in a matter of minutes instead of hours. This can be a great advantage when needing to adjust for multiple kilns, kiln defects, and variations in kilns (such as tapers, dams, etc.).

The kiln is considered the heart of a Cement Plant and its performance happens to be the deciding factor for the total profitability of the plant. Healthy operation of the kiln with uninterrupted availability for production is directly linked with the quality and quantity of the kiln output. Studies have shown that down time of a kiln due to refractory work alone ranges from 20 to 35%. Studies also show that improper installation is one of the leading causes of refractory failure.



NEW Flat Deck Easy Flex Bricking Machine



Standard stairstep bricking machine

"Are you providing the best equipment for your installers?"