## BRICKING SOLUTIONS

## Tilden/Cliffs New Bricking Machine



LMOR at the Tilden/Cliffs plant

## "Installing the $\mathcal{L M} O \mathcal{R}$ saved over 7 hours in setup alone"

LMOR 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 LMOR 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 10 ft 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 $11 / 2$ shifts ( 10 hour shifts) to install. The average installation rate of refractory was $2-2.5 \mathrm{~m}$ per 10 hour shift.

The LMOR 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 LMOR. Yet they still managed to pull off $3.7-4.6 \mathrm{~m}$ per 10 hour shift with the best shift doing 6.0 m in 10 hours.


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


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

