



REFRESH, UPGRADE, PERFORM

Kiln improvements

BURNER BLOCKS WIDE, SHORT-CYCLE KILNS

SACMI for enhanced process control and quality



Process consistency

The long burner block range improves firing uniformity over the cross-section of wide-mouthed kilns and in production processes that have very short cycle times.

These blocks are available in various lengths and feature narrow discharge points to create high flame speeds.

The RAY-type burner block range aids localized firing of pieces on the edges of the load, near the wall.

Available in different lengths and shapes, these blocks ensure optimal heat distribution, intensifying or diluting the 'wall effect'. The introduction of the Pump Jet reduces black core problems (if present) and eliminates the cracks typical of pre-heating.

ADVANTAGES

- Better product quality and higher percentage of 1st class products
- Greater temperature uniformity during firing
- Optimized heat distribution
- Lower consumption with the Pump Jet
- Recirculation of 70% of inflows with the Pump Jet
- NOx emissions reduced with the Pump Jet
- Burner blocks can be replaced without shutting down the kiln
- New burner blocks are interchangeable with those supplied



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Technical features

Using **burner blocks with narrow discharge points** (example d.35 and d.30 mm) can significantly increase burner flame speed. Consequently, the material transiting through the kiln chamber is less affected by flame 'hot spots' or temperature variations over the cross-section.

In wide-mouthed kilns, using **long burner blocks** (L= 700/950 mm) with narrow discharge points (d.35/d.30 mm) extends the reach into the middle of the kiln chamber, making firing more homogeneous. These blocks have the effect of increasing the speed of the burner flames and shifting them closer to the center of the kiln chamber. Therefore, burner flame speeds are less affected by chimney fume draft deviation.

Using **RAY-type blocks** in wide-mouthed kilns improves firing uniformity: by installing them in the firing zones together with long blocks and blocks for high flame speeds, manufacturers can heat pieces at the sides of the load more effectively. The availability of different lengths and shapes of block adapts the heating effect to differently sized pieces and can accentuate or attenuate localized heating effects.

Using the **Pump Jet burner** in pre-heating prevents defects such as black core, cracking and bursting. Featuring one-piece design and a geometry that prevents excessive heating of the kiln walls, it makes firing more uniform over the cross-section and helps increase production, reduce consumption and lower NOx emissions.