



S/N 3940 SYNOPSIS SPECIFICATION
FOR
NMR-PPG-23-483150-2372
ELECTRIC PUSHER PLATE TUNNEL KILN

- Designed for maximum operating temperature of 2,372°F (1,300°C) in air.
- Designed for pusher plates 19" wide x 13" long x 1-1/8" thick.
- The overall height of the load and pusher plate above the hearth plate is 6¾".
- The kiln proper is approximately 31'-3" in length, consisting of a 7'-6" preheat section, 15'-0" high heat zone, and 8'-9" cooling zone.
- The overall system length is 40'-11" and the overall system width is 12'-0".
- Side access vestibules, each with a vertical lift door.
- The kiln shell is steel sheet, rigidly supported by structural members and painted gray.
- Refractory construction is castable shapes and graded layers of IFB.
- Closed loop system with cross transfer tracks and return track. Hydraulic cylinders and hydraulic power unit are provided.
- Maximum pusher stroke 13" every thirty minutes.
- The return track is positioned on the right side of the kiln when standing at the charging end looking towards the discharge end.
- The automation system is controlled by limit switch logic, utilizing an Allen-Bradley SLC 150. Temperature control is through a Barber-Colman Cimac 2.
- Barber-Colman MDR-60 data logger.
- Input power is 480/3/60, 150 KVA.
- Two 150 amp circuit breakers, one for each power cabinet.
- The kiln is heated by silicon carbide heating elements. All elements are horizontally oriented and are positioned above the load and below the hearth.
- Fifteen baffled control zones are provided.
- Each power control zone for the SiC elements has a dedicated contactor, phase-angle-fired SCR, tapped stepdown transformer, and ammeter.
- Seven overtemperature limiters are provided.
- Two NEMA-1 power control cabinets.
- One NEMA-1 instrument enclosure.
- System weighs 52,600 pounds.