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CERAMIC INDUSTRY

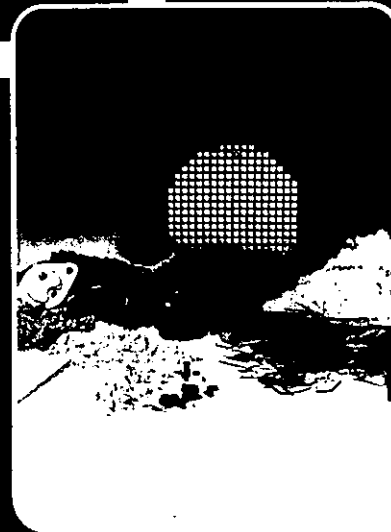
The Exclusive Voice of Ceramic Manufacturing

CERAMICS
R&F 2-11 (BR)

1994-95 Data Book & Buyers Guide Issue



Materials
Batching, Material Handling
Forming, Finishing
Decorating
Firing/Drying
Refractories
Test/Inspect/Measure/Evaluate
Engineering Services
Structural Clay



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The Magazine for Refractories, Traditional & Advanced Ceramic Manufacturers

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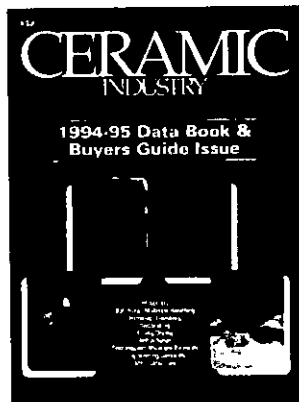
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5 FIRING/DRYING

Typical Firing Temperatures of Ceramics

Heavy Clay Products:

	Temp °F.
Common brick—surface clay	1600-1800
Common brick—shale	1800-2000
Face brick—shale	1950-2200
Face brick—fire clay	2100-2300
Face brick—surface clay	1750-1850
Enamel brick	2100-2300
Paving Brick (vitrified)	2000-2250
Structural clay tile—surface clay	1600-1800
Structural clay tile—shale	1800-2000
Structural clay tile—fire clay	1950-2100
Drain tile	1700-1900
Sewer pipe	2030-2320
Roofing tile	1960-2140
Terra cotta	2070-2320

Pottery:

Ceramic cooking pots	2050-2150
Flower pots	1580-1850
Stoneware (chemical)	2650-2700
Stoneware (once fired)	2318-2426
Earthenware or semi-vitreous ware—bisque	2282-2354
Earthenware or semi-vitreous ware—glost	2174-2282
Artware—bique	1850-2200
Artware—glost	1800-2400
Pottery decalcomanias	1300-1500

Refractories:

Fire brick—clay	2300-2550
High alumina	2650-2800
Fire brick—silica	2650-2750
Chrome brick	2650-3000

Heavy Clay Products:

	Temp. °F.
Magnesite brick	2650-3000
Silicon carbide	2500-2750
Direct bonded basic brick	3000-3200

Whitewares:

Electrical porcelain	2100-2300
Hotel china—bisque	2200-2300
Sanitaryware—bisque	2200-2400
Hotel china—glost	1900-2250
Sanitaryware—glost	2246-2318
Floor tile	2100-2250
Wall tile—bisque	1800-2200
Wall tile—glost	1800-2250

Porcelain Enamels:

Wet process cast iron enamels	1150-1400
Dry process cast iron enamels	1550-1700
Sheet iron ground coat enamels	1400-1600
Sheet iron cover coat enamels	1380-1550
A-19 Coating	1580-1620
Solaramic	1700-2000
Aluminum	900-1100

Electronic & Newer Ceramics:

Steatites	2300-2460
Aluminas	2800-3200
Titanates	2350-2500
Ferrites	2190-2650
Beryllia	up to 3400
Rare Earths	2500-4000
Cermets	2900-3100

J. T. Robson, Consultant

Typical Hot Isostatic Pressing Cycle (SiC Sinter/HIP Cycle)

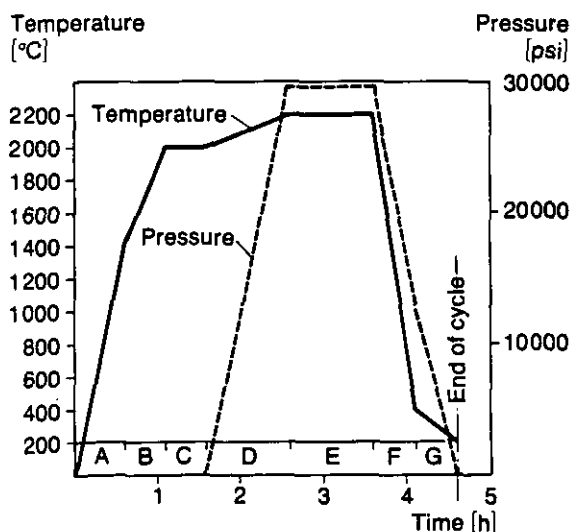
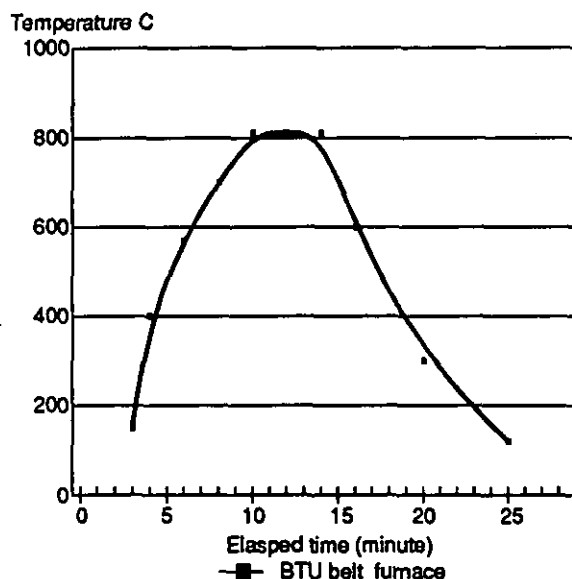


ABB Autoclave Systems Inc.

Firing Profile Silver Termination Kiln



Tam Ceramics Inc.