

Sawdust Firing

By Kevin Dykstra
Ceramics 230 Research Project



Antonia Salmon. Two balancing pieces,
burnished and sawdust fired.

Maria Martinez

- Uses local natural clays and adds volcanic ash and water
- Hand made coil pots
- Applies iron-bearing slip
- Stone burnishes



Maria Martinez outside her home in 1976
San Ildefonso pueblo, New Mexico.

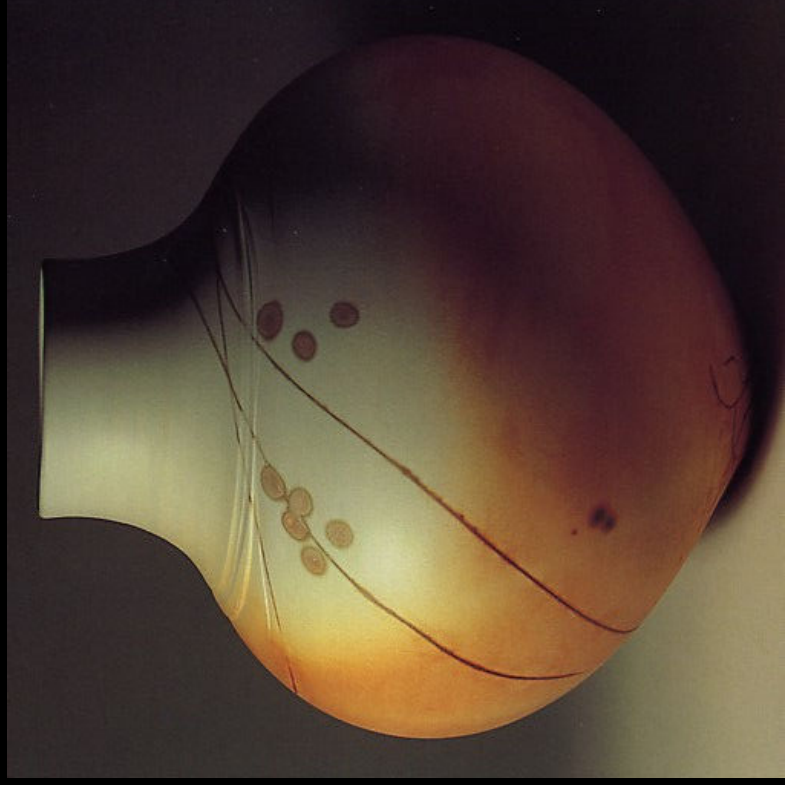
Maria Martinez

- **Stacks pots on rack with wood underneath**
- **Encloses them with metal**
- **Stacks cow chips around them**
- **Starts fire**
- **Smothers with ash**



Maria Martinez's black pots.

Smoke and Form



John Dermer. Terra sigillata vessel.
Height 60cm.

Clay Bodies

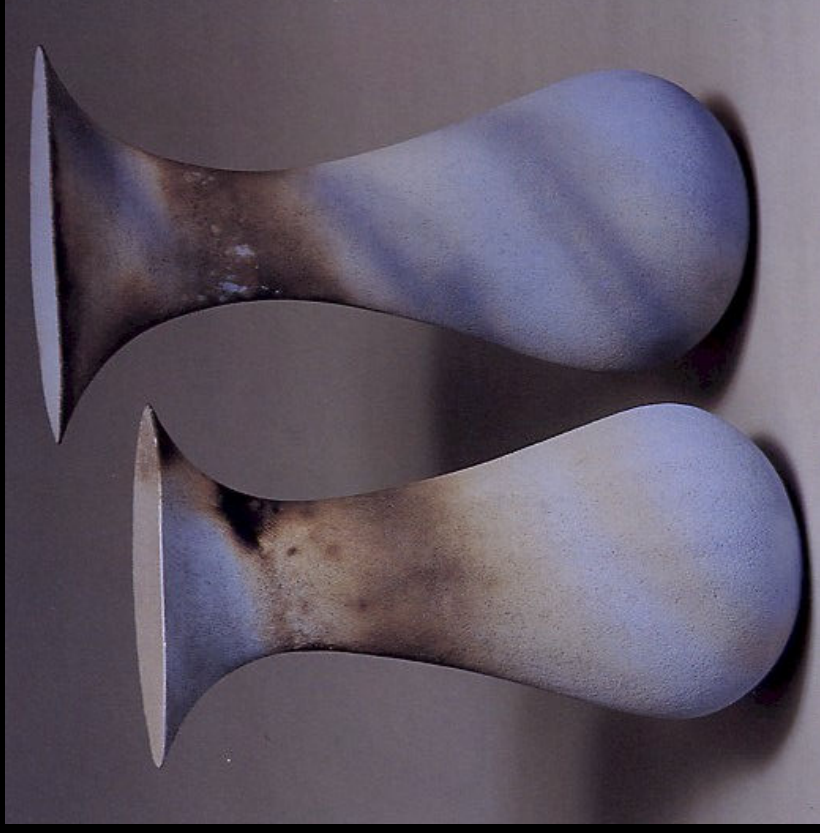
- Stoneware with grog
- Terracotta with grog
- Porcelain with molochite



Karen Hassenberg. Porcelain, burnished and sawdust fired. Height approx. 16cm.

Colouring

- **Body Stains**
 - using coloured clay bodies or adding oxides to the clay
- **Slips**
 - adding oxides to slips and then applying to the clay
- **Terra sigillata**



Judy Trim. Blue pots. Sprayed coloured slips on T-Material, fired to 1000 C and then sawdust fired.

Burnishing

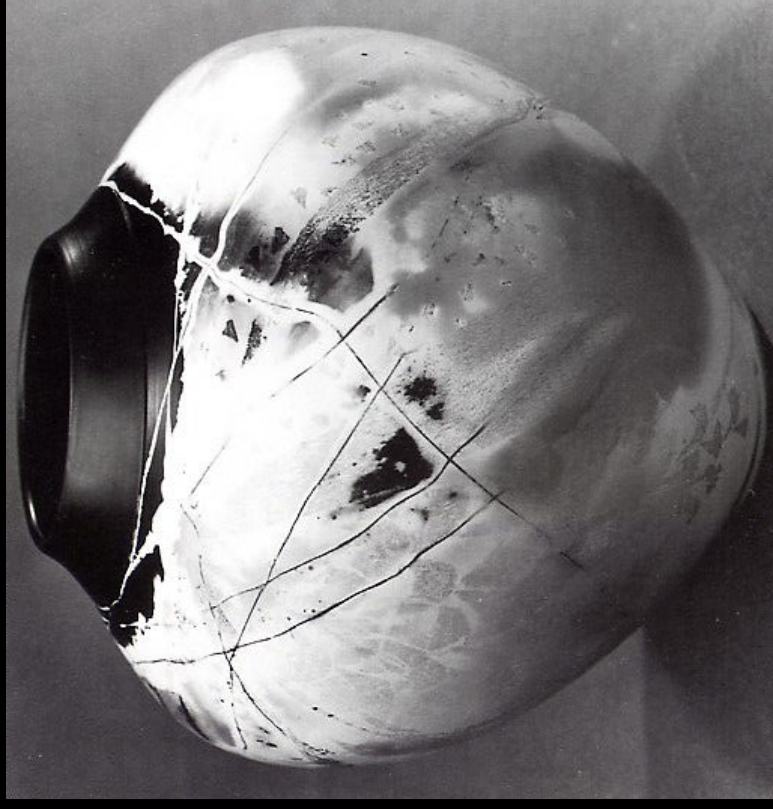
- **Tools: stones, spoons, burnishing tools, plastic, chamois**
- **Surface smoothed at creation**
- **Grog compressed using metal rib**
- **Burnished at leather hard and bone dry**



Gabriele Koch. T- Material with small amount of porcelain. Burnished coil pot. Bisqued to 950 C. Height 13cm.

Bisquing

- **To give the clay body strength**
- **Low temperature**
 - deeper blacks but more fragile
- **High temperature**
 - more vitrified and less responsive to smoke



Ruth Allen. Sagger-fired porcelain jar.
Burnished, tinned copper-wire lines,
masking tape patterns and trapped carbon
black areas. Height 28cm.

Kilns

- Saggars
- Brick Kilns
- Pit Kilns
- Bin Kilns
- Bonfire and Open-pit Kilns
- Sophisticated Kilns



Byron Temple. Porcelain sagger
fired to 1300 C. Height 12.7cm,
width 7.6 cm.

Fuels

- **Sawdust**
- **Branches**
- **Pinecones**
- **Dung**
- **Corn seeds**
- **Copper carbonate/sulphate and salts, iron filings**



Barry Hayes. Pit-fired vessel with fumed colours.

Resist Techniques

- Contact with other pieces during firing
- Fresh slabs of clay
- Dry grass or paper under slabs
- Masking tape and slip
- Slip resist



Jane Perryman. Jugs with slip and masking tape resist patterns. Sawdust fired.

Firing Considerations

- Arrangement of pieces
- Amount of air circulation
- Sealing the kiln at the right moment
- Fire evenly
- Type of sawdust
- Packing and quality of sawdust
- Speed of firing



Anne James. Bottles lustrated and then sawdust fired.

Form

- Subtle patterns and tones created during the firing are sympathetic to the forms they make



Duncan Ross. Burnished vase.
Terra sigillata fired in a sawdust
sagger. Height 23 cm.