



**Utrecht Art Supplies**

## **Just for Fun: The Paint Milling Process**

Mechanical paint manufacture produces smooth, brilliant paint that is workable, stable and consistent from batch to batch through a highly refined process that goes far beyond just mixing and grinding. Skilled craftsmen observe and control all aspects of the process to ensure each color exhibits the perfect hue, intensity and working properties. Thorough testing in the laboratory and studio ensure each batch meets the highest standards.



Burnt Sienna Oil Color- 1<sup>st</sup> milling

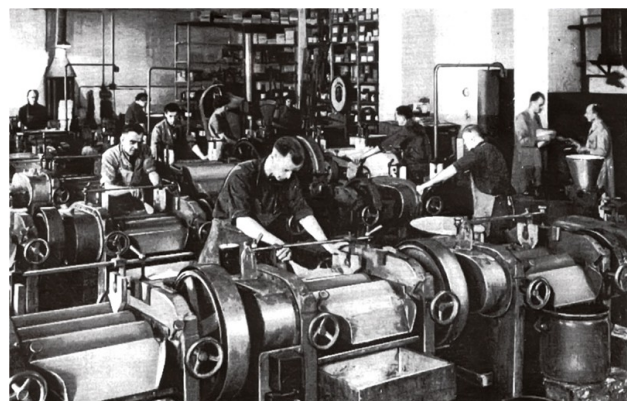


Burnt Sienna Oil Color- 2<sup>nd</sup> milling

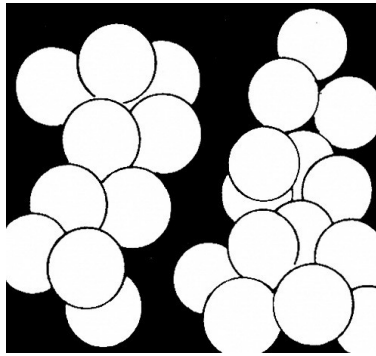


Burnt Sienna Oil Color- 3<sup>rd</sup> milling

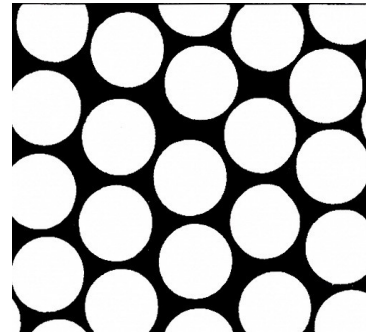
More than one pass through the mill may be required; some pigments may require as many as three millings. The first pass produces a grainy paste. The second pass further breaks down particles as color develops. The final milling brings the pigment to its peak intensity and optical effect as the paint achieves a workable consistency. The process can require many hours depending on the hardness and absorbency of the pigment.



Each pigment shows its maximum color at a different particle size. Certain colors achieve the best appearance with an extremely fine grind, while others lose intensity if over-processed. Each particle must be enveloped with the vehicle for the paint to offer maximum intensity and coverage.



Undispersed pigment clusters



Dispersed pigment with proper envelopment

Amendments may be added to improve body, enhance drying and shelf stability. Ultramarine Blue, for example, can yield a stringy consistency unless modified. Very slow-drying colors may receive precisely calculated amounts of siccatives.

While adjustments may be made to improve the paint, additional ingredients should never take the place of pigment in the formulation of professional-grade artists' colors.



### The Boston Stone

Claimed to be the first paint mill in the US, this stone sphere is now set into the foundation of a historic building in Boston's Marshall Street.

It's believed that the artifact was used as a muller by a painter who was the occupant of an earlier structure on the site. The object was dubbed the "Boston Stone", a name inspired by the historic London Stone.

(Illustration courtesy paintpartner.com)

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