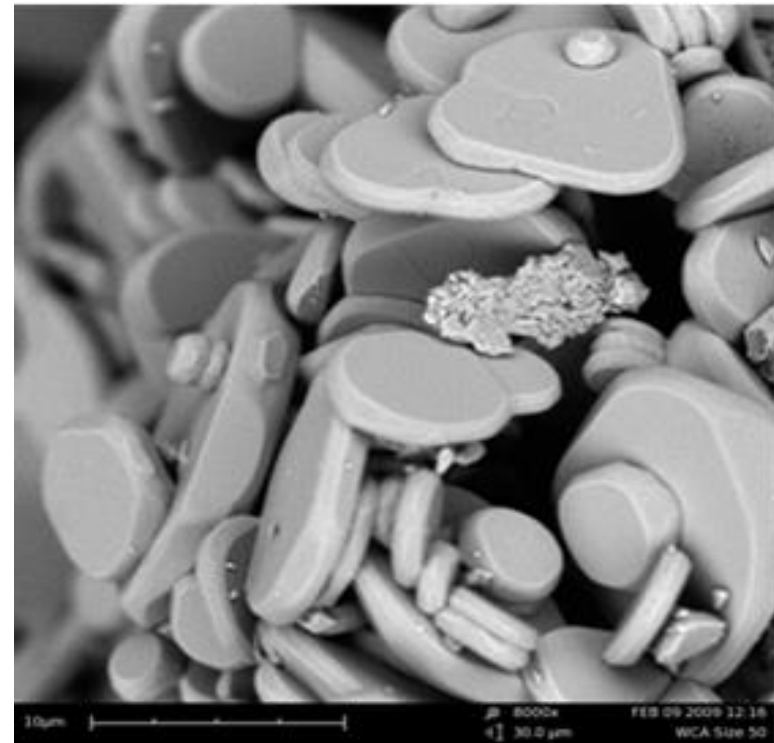
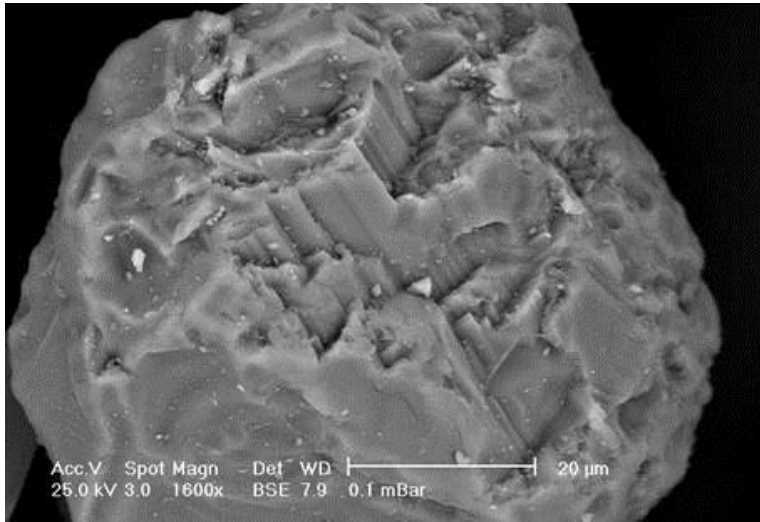


# Aluminum Oxide For the Laminate Industry



**MICRO**  
**ABRASIVES**  
CORPORATION®

# Supplying Aluminum Oxide to the Laminate Industry for over 40 years.



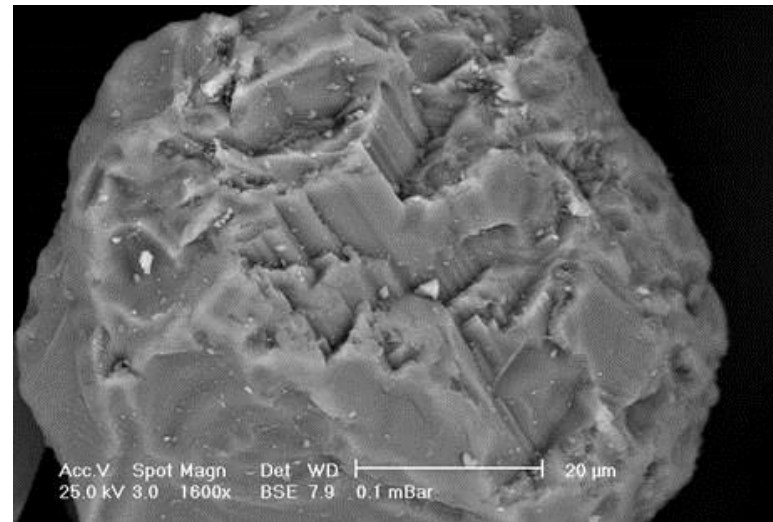
# White Fused Aluminum Oxide

WA "SSW"- **White Fused Aluminum Oxide crystals use for wear resistance.**

These blocky crystals are sized to give the best Taber results for AC2-6.

The WA "SSW" line is water classified giving the cleanest particle possible which removes all ultrafine particles that creates the clearest laminate.

The Silane treatment allows the perfect bond between the aluminum oxide and coating creating the clearest finish even on the darkest décor paper.



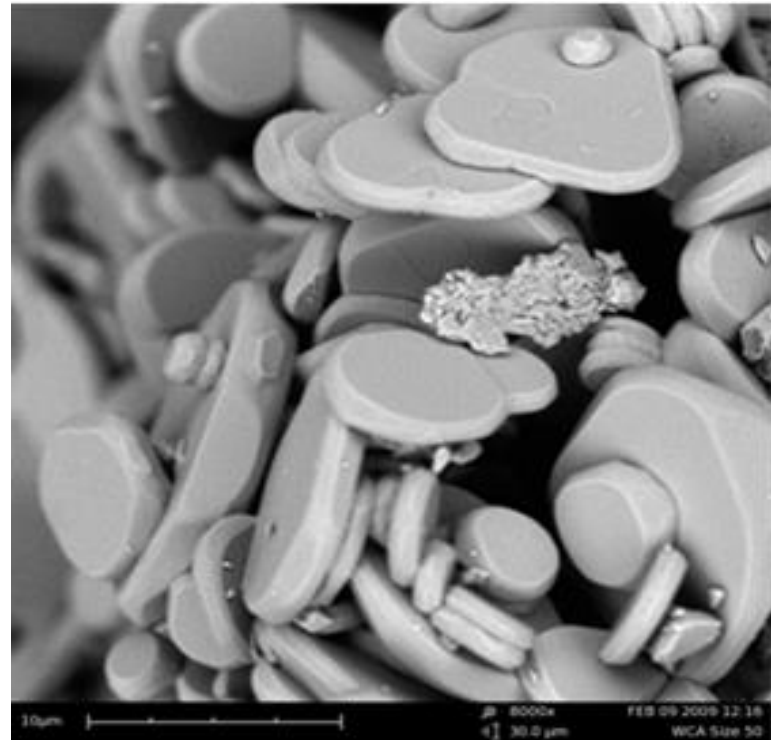
# White Calcined Pallet Alumina

WCA – Plate like Alumina crystals used exclusively for scratch and mar resistance.

These plate-like crystals orientate themselves flat along the paper matrix prolonging press plate life.

The 5 to 1 aspect ratio allows thinner scratch and mar top coats which reduces paper weight and cost.

The silane coating allows a perfect bond between the coating and the alumina which creates a haze free, glass like finish even on the darkest décor paper



# Micro Abrasives and the long history within the laminate market

- ▶ **Micro Abrasives Corporation has been the market leader in supplying “clarity enhanced” aluminum oxides for the laminate industry since 1972. Our “S” treatment gives an ultra clear glass like finish to any laminate surface.**
- ▶ **Our Water Classifying Manufacturing Process which was designed in 1956 for the automotive industry gave us the quality needed for our introduction to the laminate industry.**
- ▶ **Micro’s state of the art Silane Treating Process guarantees a uniform silane coating on each and every crystal. We have improved on this process over the past 40 years giving us a large market share here and abroad.**
- ▶ **From our humble beginnings in the 1970’s with the counter top market to our 1990’s expansion into the flooring market and now to our current role as the leader in “Scratch and Mar” protection in both the laminate and coatings (EB, UV) markets.**

# Particle Size Distribution Aluminum Oxide and Alumina

## ▶ White Fused Alumina

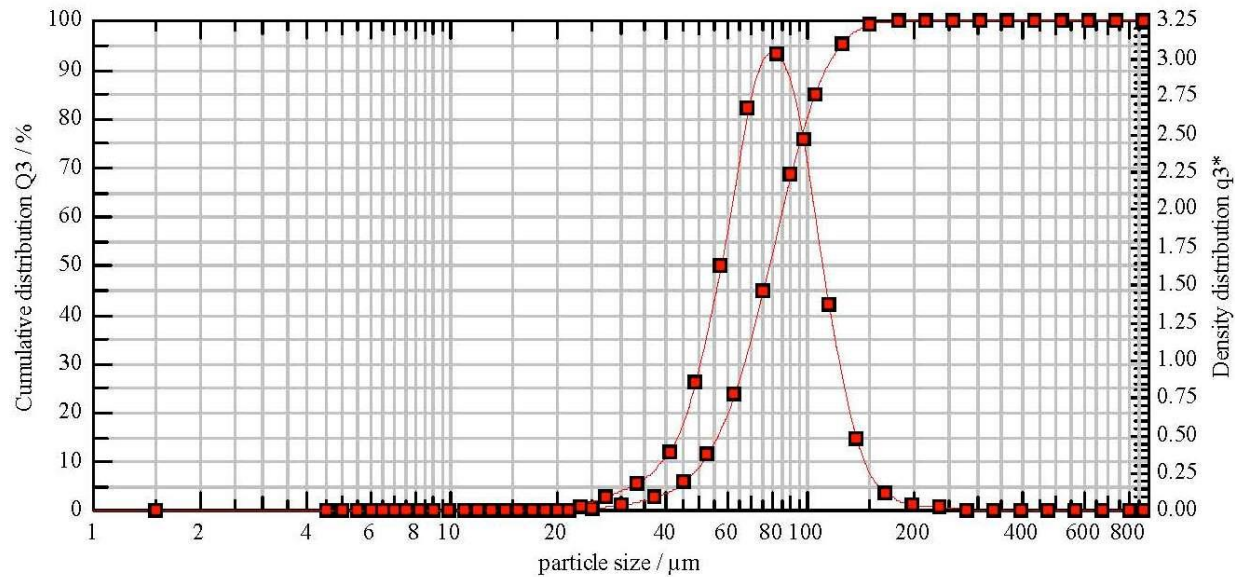
### Custom laminate grades include

- ▶ **WA 240 M Ultra      50%55u**
- ▶ **WA 220 M Ultra      50%75u**
- ▶ **WA 200 M Ultra      50%90u**
- ▶ **WA 180 M Ultra      50%108u**
- ▶ **As well as all FEPA F grades.**

Size	94% MIN	50%	3% MAX
WCA 1	0.21	1.77-2.25	6.23
WCA 2	-	2.09-2.77	-
WCA 3	0.25	2.97-3.85	9.52
WCA 5	0.54	3.72-4.74	11.40
WCA 9	1.50	5.60-6.85	13.60
WCA 12	2.45	7.05-8.50	17.60
WCA 15	3.96	9.06-11.13	21.36
WCA 20	4.76	12.40-14.66	30.11
WCA 25	7.37	16.92-20.60	41.00
WCA 30	10.30	23.67-27.45	52.77
WCA 40	13.65	31.70-37.60	62.30
WCA 50	16.12	42.81-52.50	102.00

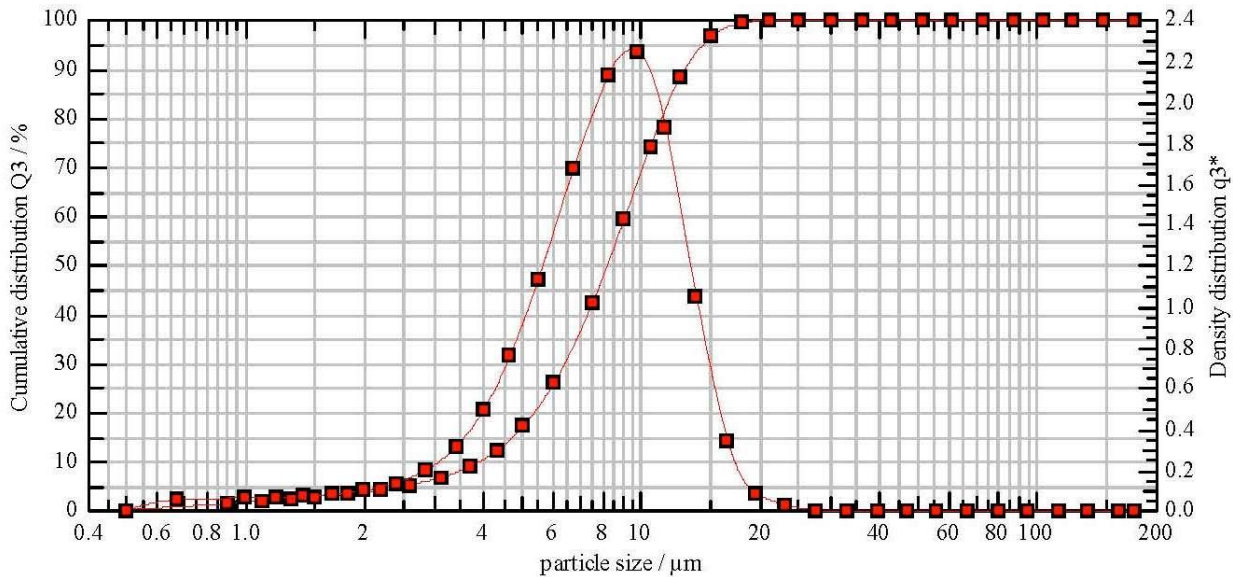
# WA 220 SSW – Aluminum oxide PSD

$x_{99} = 30.70 \mu\text{m}$	$x_{90} = 50.85 \mu\text{m}$	$x_{50} = 78.43 \mu\text{m}$	$x_{10} = 115.00 \mu\text{m}$	$x_3 = 137.58 \mu\text{m}$
$x_{94} = 45.55 \mu\text{m}$	$x_{75} = 63.40 \mu\text{m}$	$x_{25} = 95.99 \mu\text{m}$	$x_5 = 124.73 \mu\text{m}$	$x_1 = 155.67 \mu\text{m}$



# WCA 12 - Alumina PSD

$x_{99} = 0.81 \mu\text{m}$	$x_{90} = 3.89 \mu\text{m}$	$x_{50} = 8.18 \mu\text{m}$	$x_{10} = 13.00 \mu\text{m}$	$x_3 = 15.44 \mu\text{m}$
$x_{94} = 2.89 \mu\text{m}$	$x_{75} = 5.87 \mu\text{m}$	$x_{25} = 10.62 \mu\text{m}$	$x_5 = 14.51 \mu\text{m}$	$x_1 = 17.69 \mu\text{m}$





# Micro Abrasives the perfect fit for your wear needs

- ▶ US manufacture - Certificate of Origin USA
- ▶ Capacity of 10,000 Metric tons per year
- ▶ Knows and understands your markets and industry
- ▶ ISO 9001:2008 Registered
- ▶ Currently supplying large volumes of Al<sub>2</sub>O<sub>3</sub> into the Industry
- ▶ Micro can custom make material for you needs

Thank You!

