

# HOW CAN



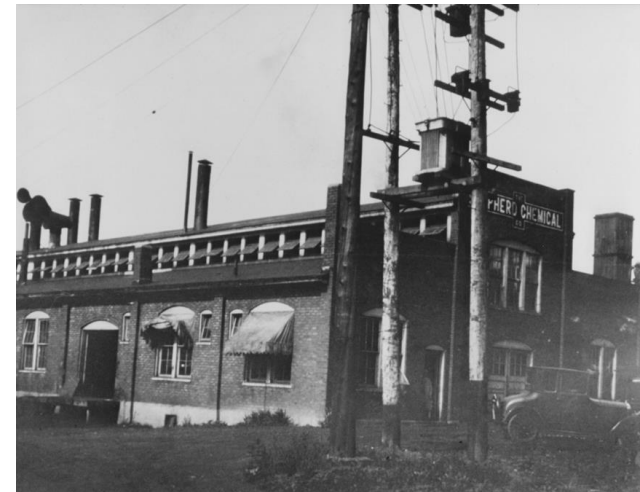
Ultra-High  
Performance  
Pigments bring  
Sustainability  
and Competitive  
Advantage



*The Shepherd Color Company*  
We Brighten Lives



- Established 1916
- Color production 1930
- 4<sup>th</sup> Generation



**MORE EXPERTISE**



**BETTER PERFORMANCE**



**BEST VALUE**



C omplex

I norganic

C olor

P igments

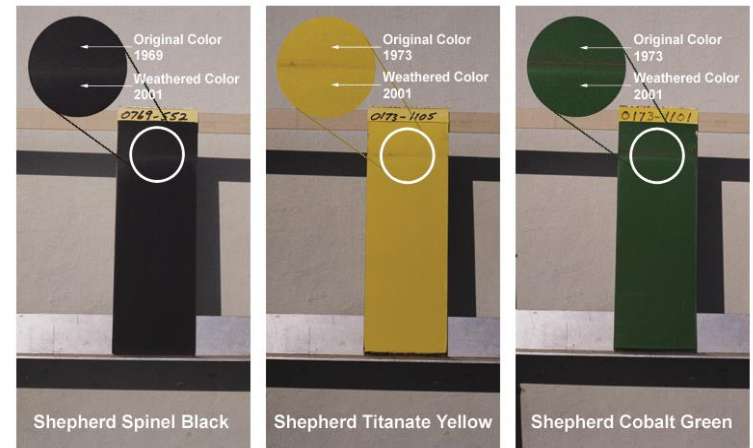






- Heat Stability
- Durability
  - UV resistance
  - chemicals
- Opacity
- Special Properties
  - functionality
  - regulatory (FDA, Reach, ...)

*45 years of weathering in South Florida*





Ultra High-Performance  
Easily-Dispersed Color



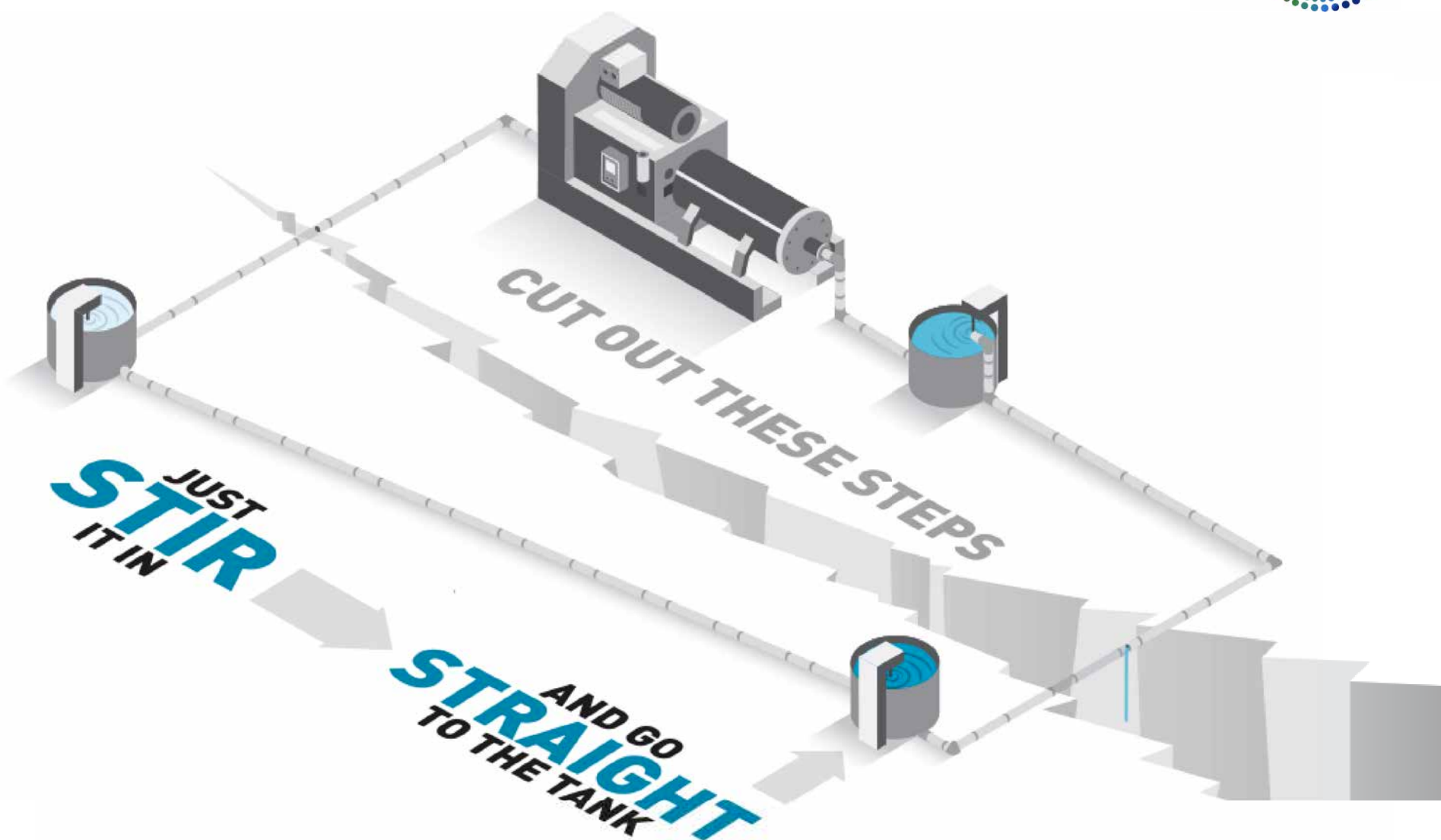
*The Shepherd Color Company*  
We Brighten Lives

# PURE CONVENIENCE



A close-up photograph showing a hand pouring a clear liquid from a glass beaker into a large metal pot. The pot already contains a blue liquid. A black strainer is visible above the pot. The text "JUST STIR IT IN" is overlaid in large white letters.

**JUST  
STIR  
IT IN**

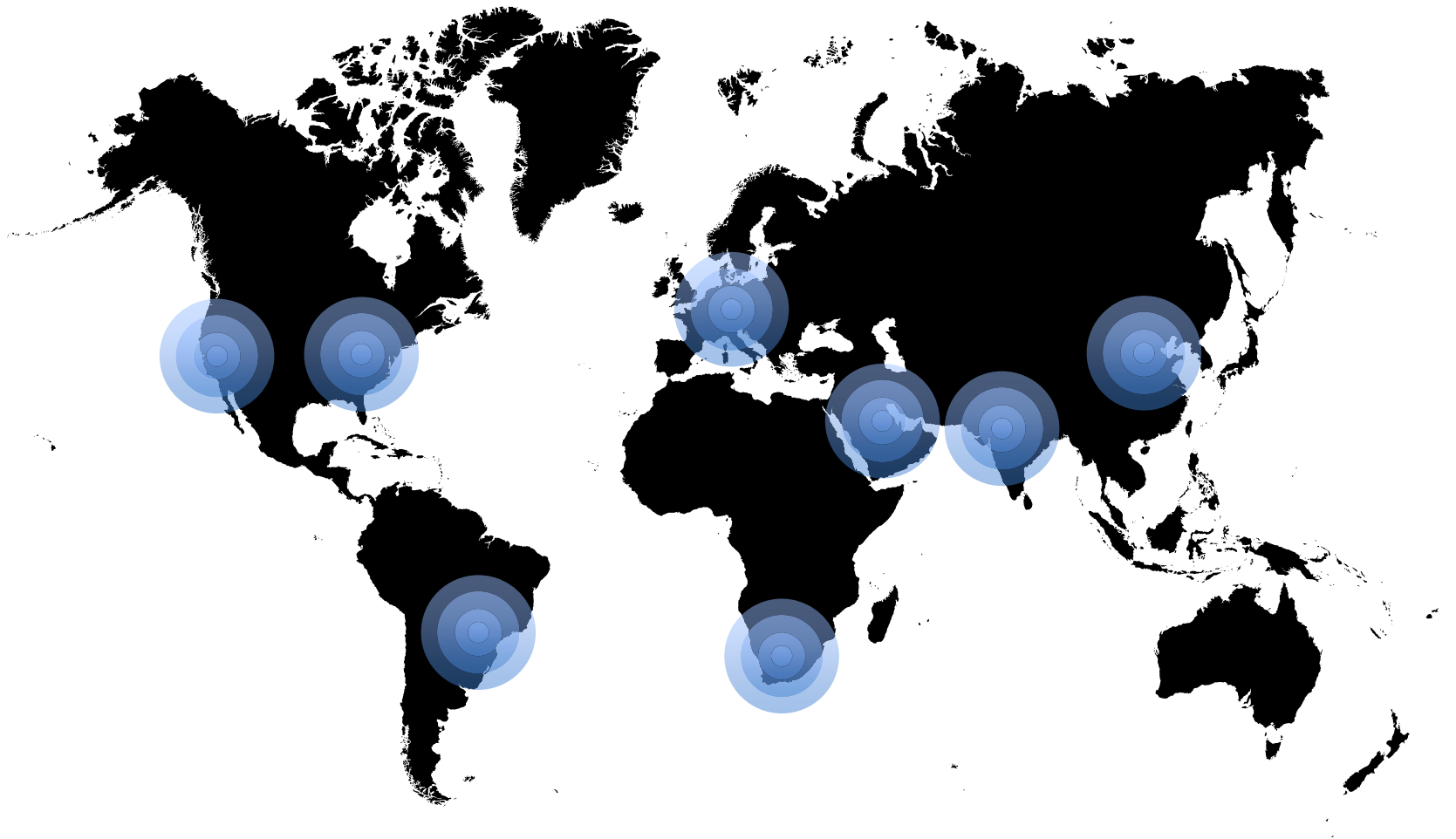


# LARGE OR SMALL BATCH SIZE



# SAME COLOR, ANYWHERE

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# PURE CONSISTENCY





# IMPROVE QUALITY AND CONSISTENCY

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- Tight control of masstone and tint
- Consistency Total Solar Reflectance
- Improved coatings properties
- Same weatherability as standard grades

**100%  
PURE  
COLOR**



THINK OF IT LIKE THIS



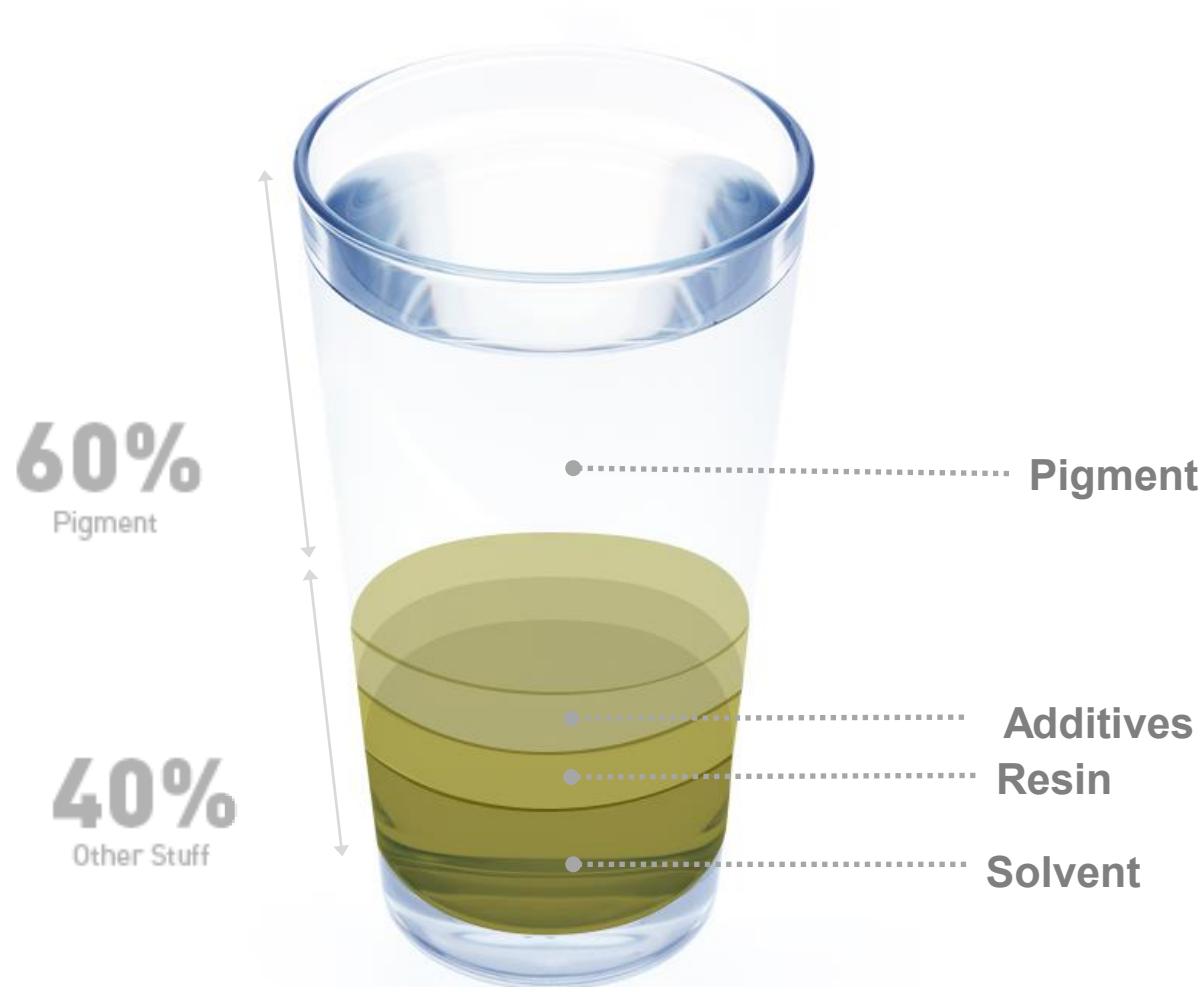
THINGS AREN'T ALWAYS WHAT THEY SEEM...



THINK OF IT LIKE THIS



THINGS AREN'T ALWAYS WHAT THEY SEEM...



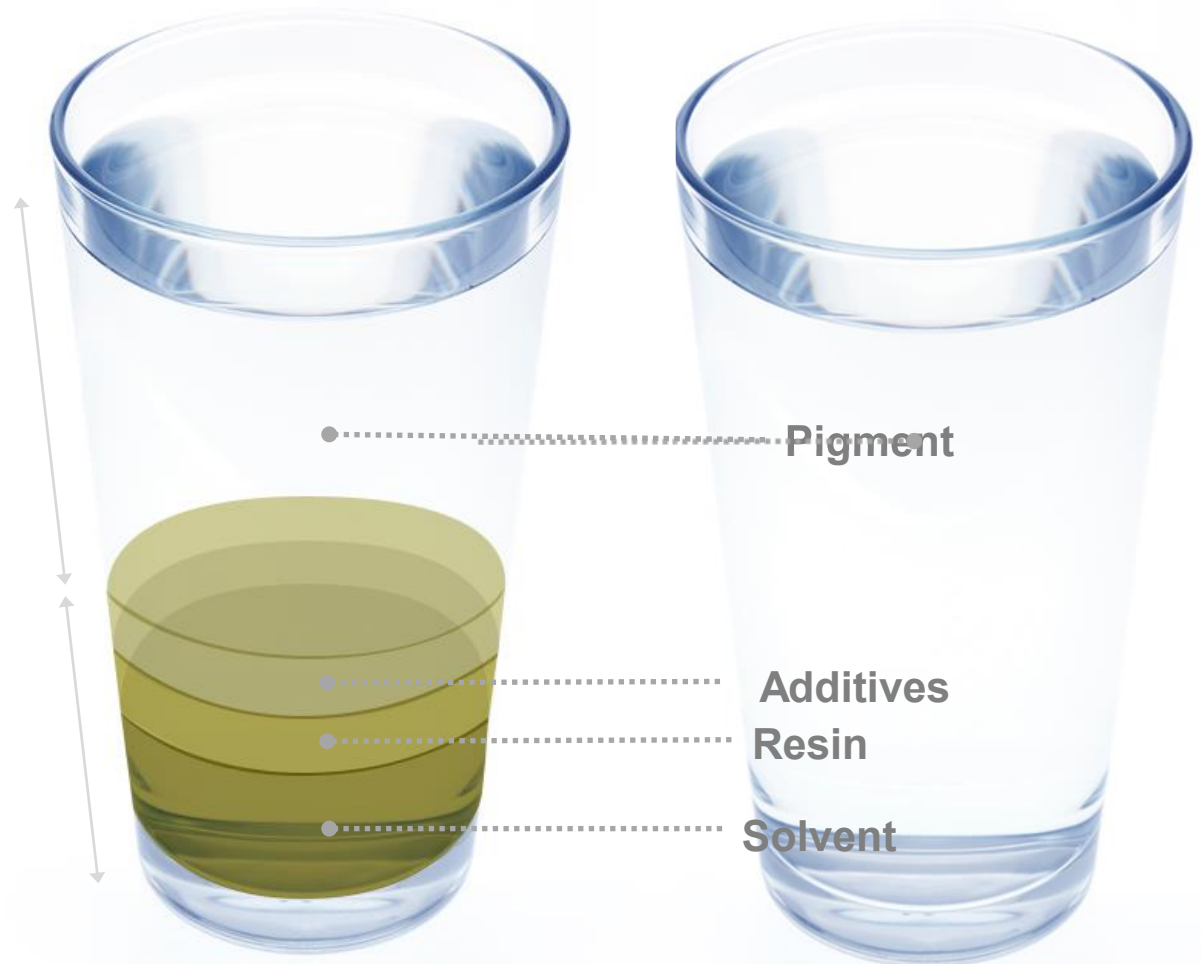


# STANDARD COLORANTS

# FULLY DISPERSABLE PIGMENTS

**60%**  
Pigment

**40%**  
Other Stuff

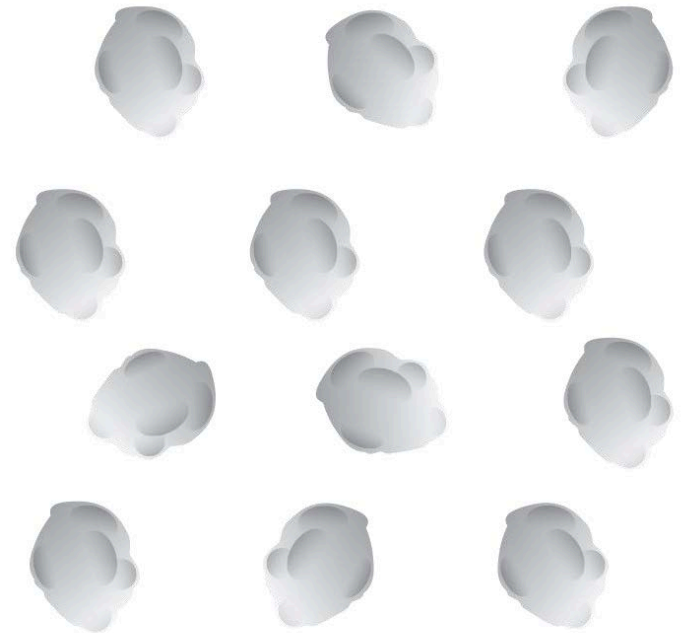




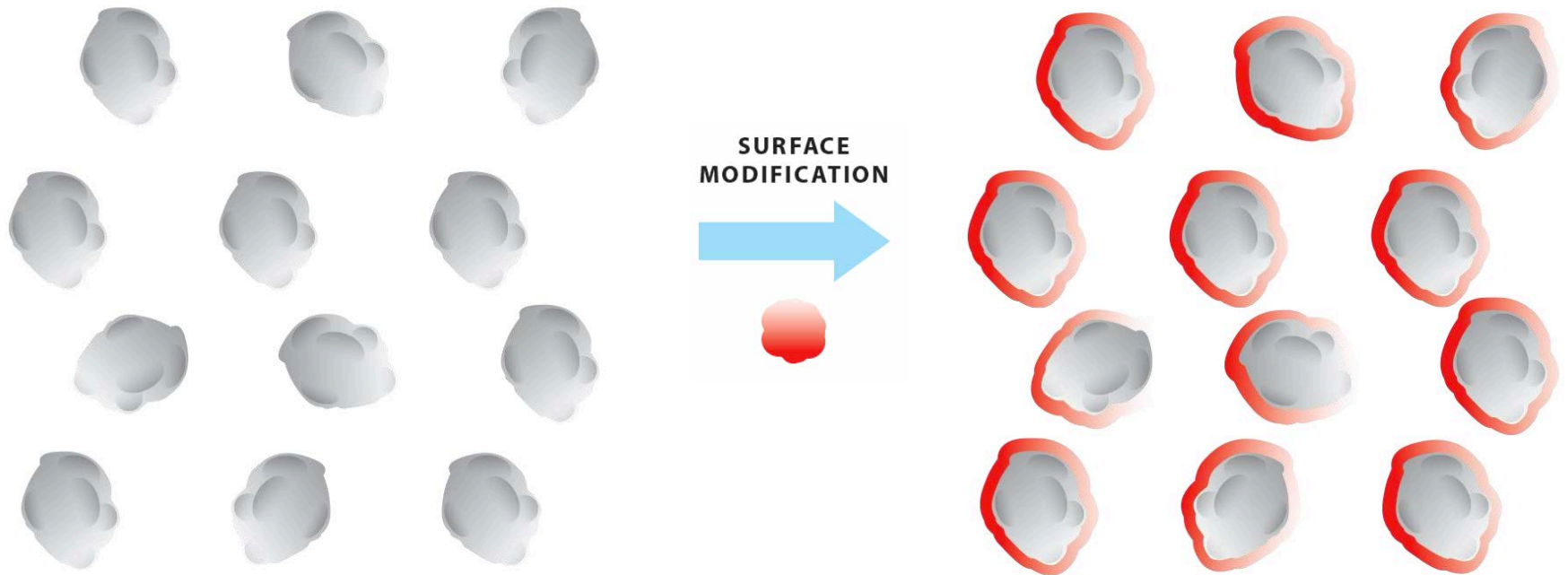
**Shepherd's micronizing technology reduces pigment particles to a uniform small size.**



Original Particle Size

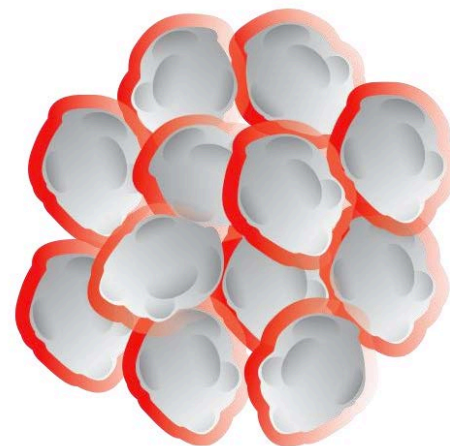
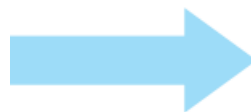
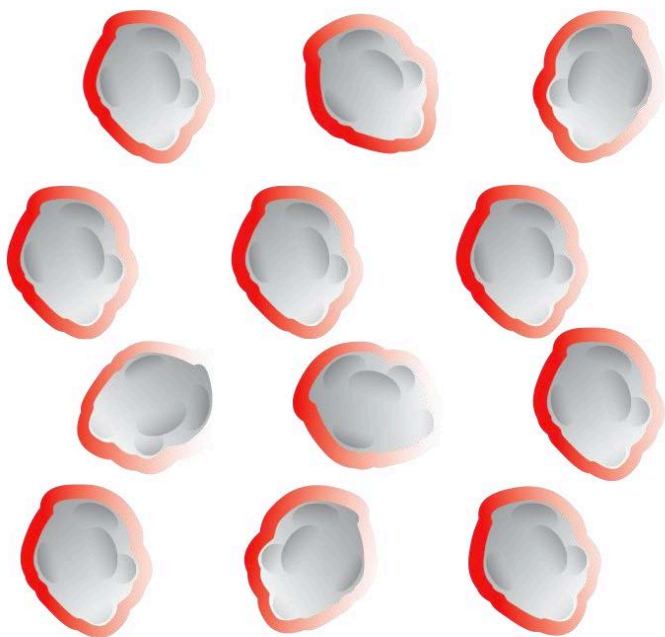


**A modification is applied  
to the small particles.**



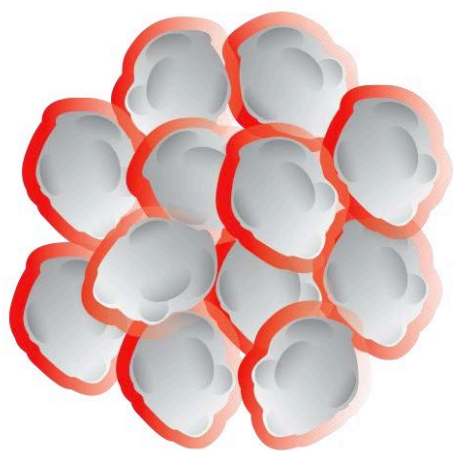
**Stabilized Dispersion**

**Stabilized particles are formed  
into a dry Stir-in pigment powder.**



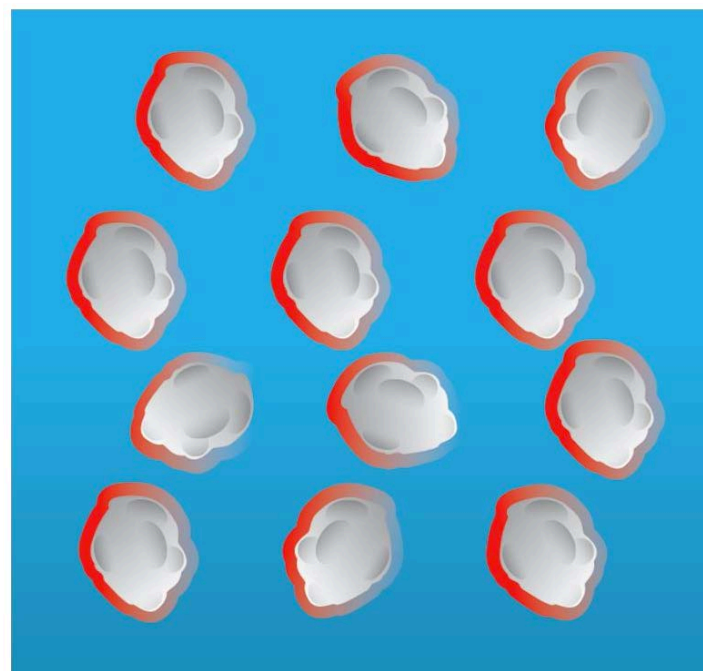
Dynamix Pigment

**Dynamix pigments form complete dispersions using High-Speed Disperser only – no milling is required.**



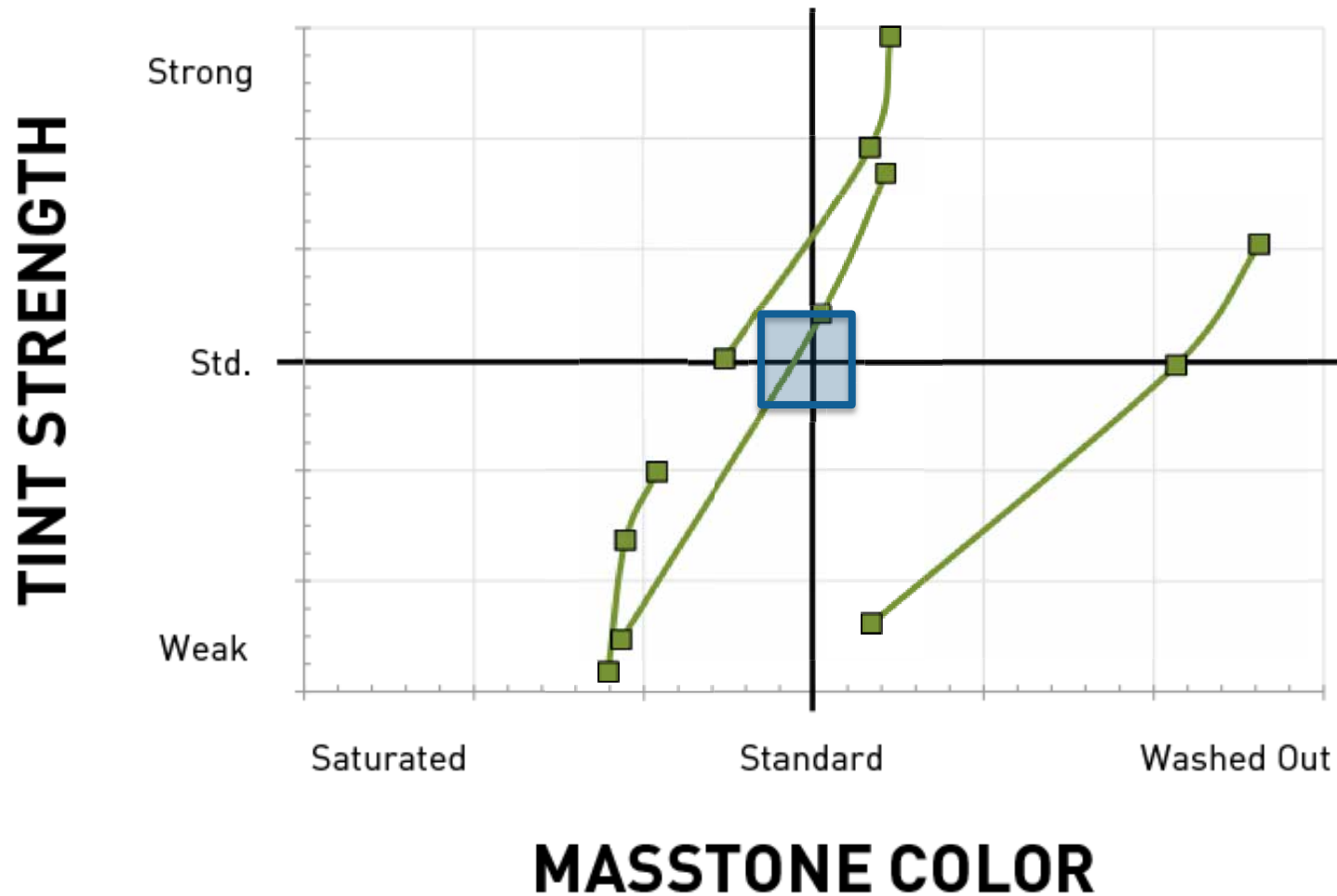
Dynamix Pigment

HIGH SPEED  
DISPERSER  
→  
RESIN

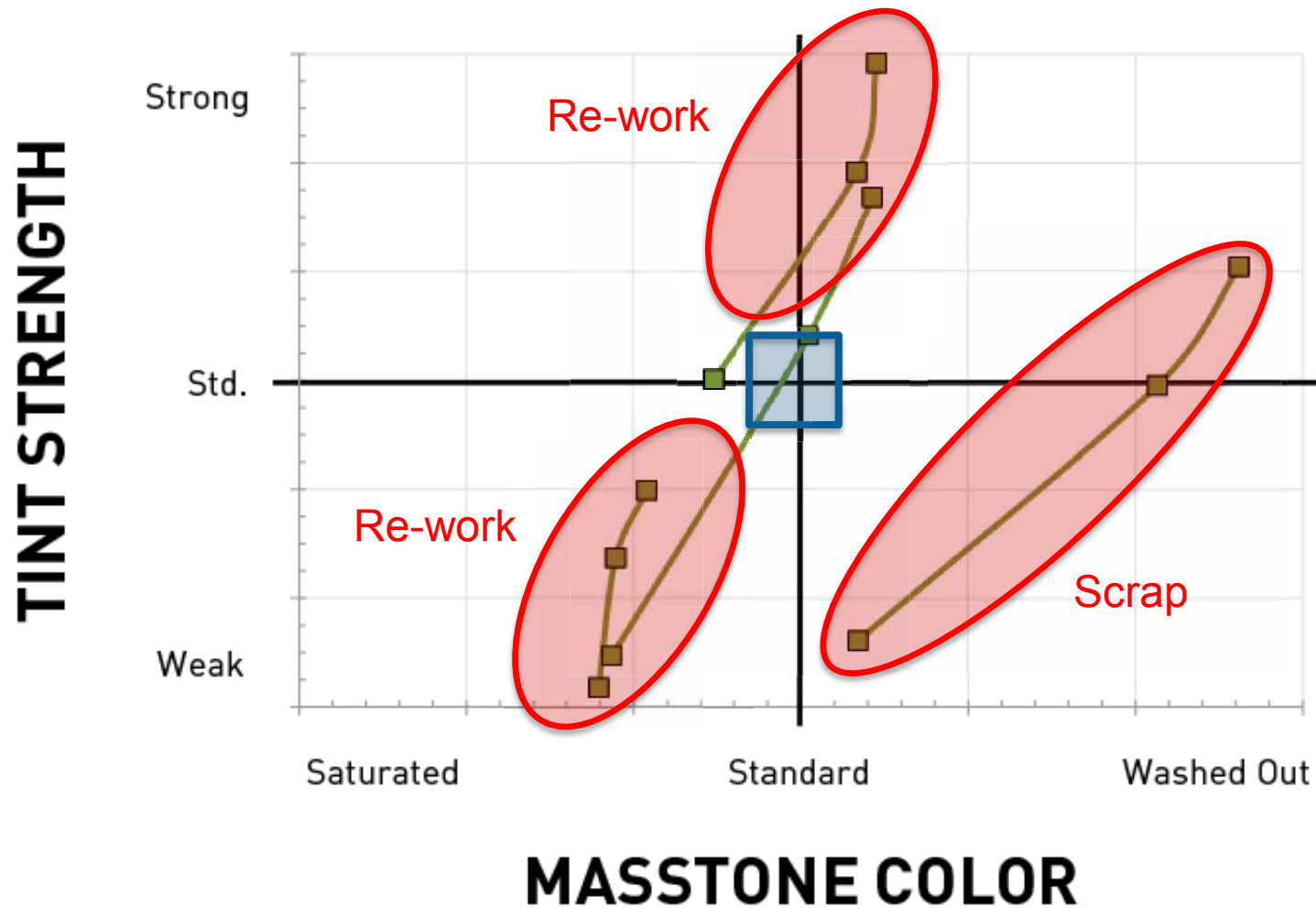


Stable Dispersion

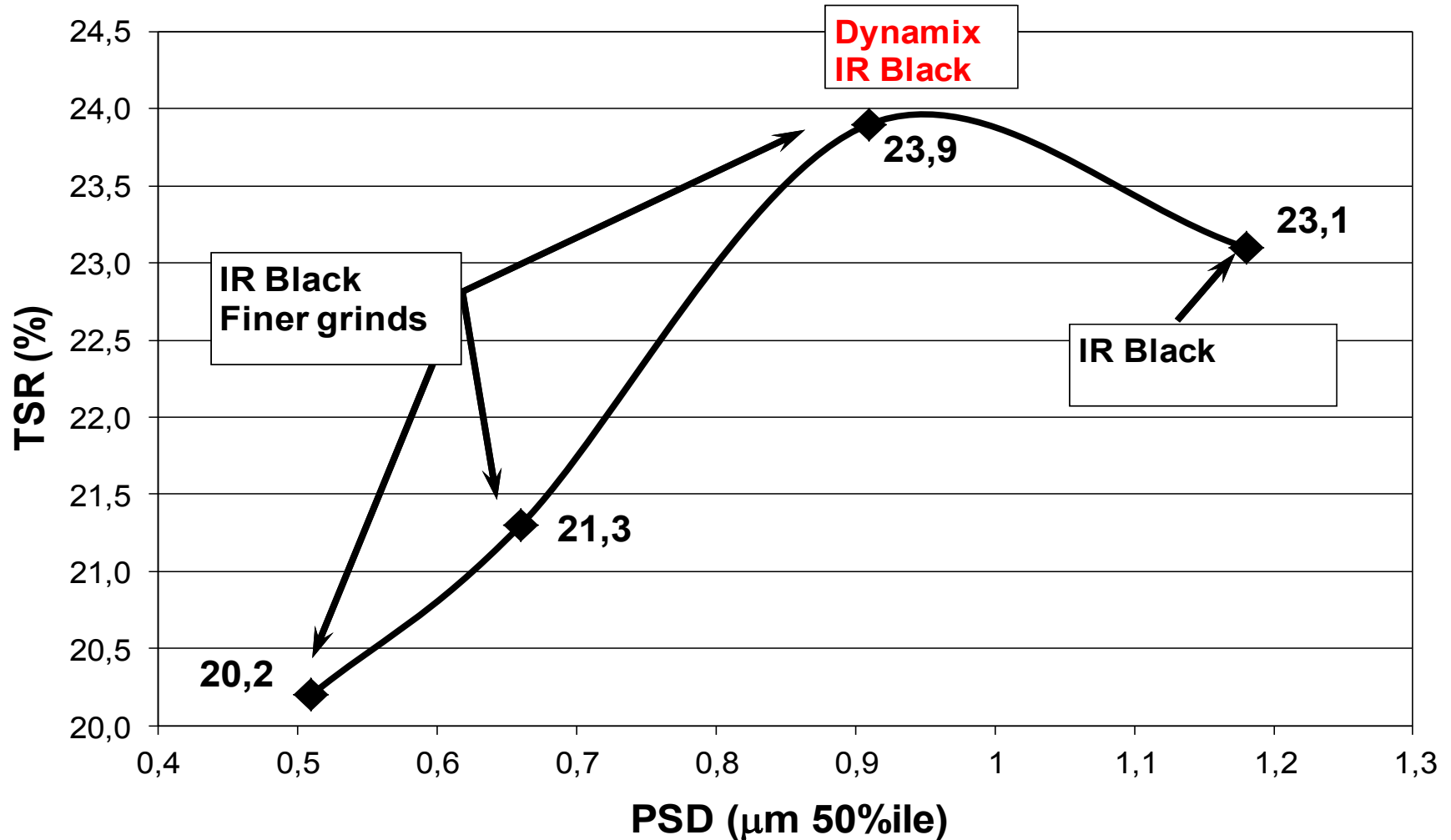
# LOCKED IN COLOR



# LOCKED IN COLOR



# LOCKED IN TSR



# SOLAR HEAT BUILD-UP MGT

- Pigment selection/interactions
- Application variables
- Contamination issues
- Measurement



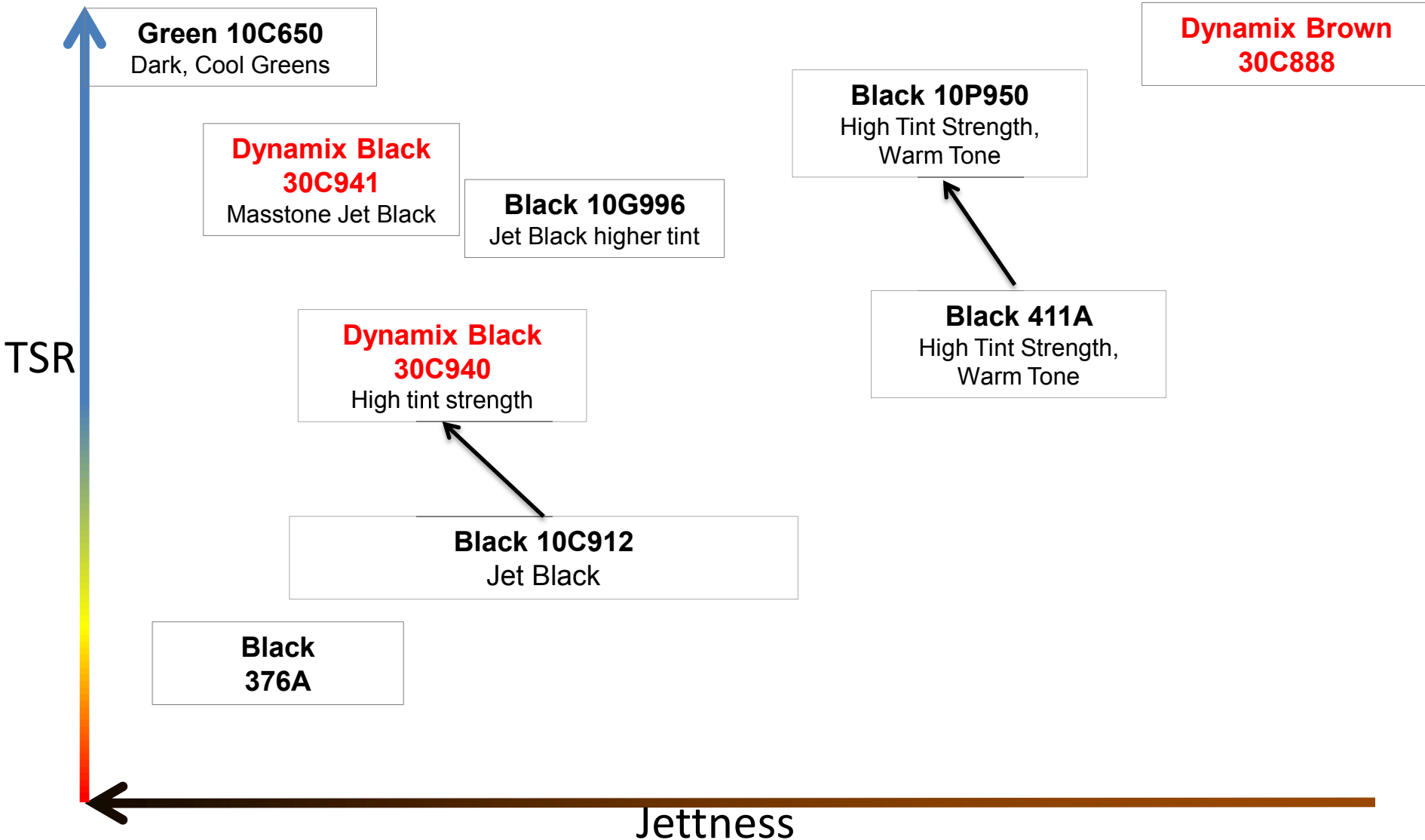
# SOLAR HEAT BUILD-UP MGT



**“Black  
Rainbow”**



# SOLAR HEAT BUILD-UP MGT



# PURE PROFITABILITY

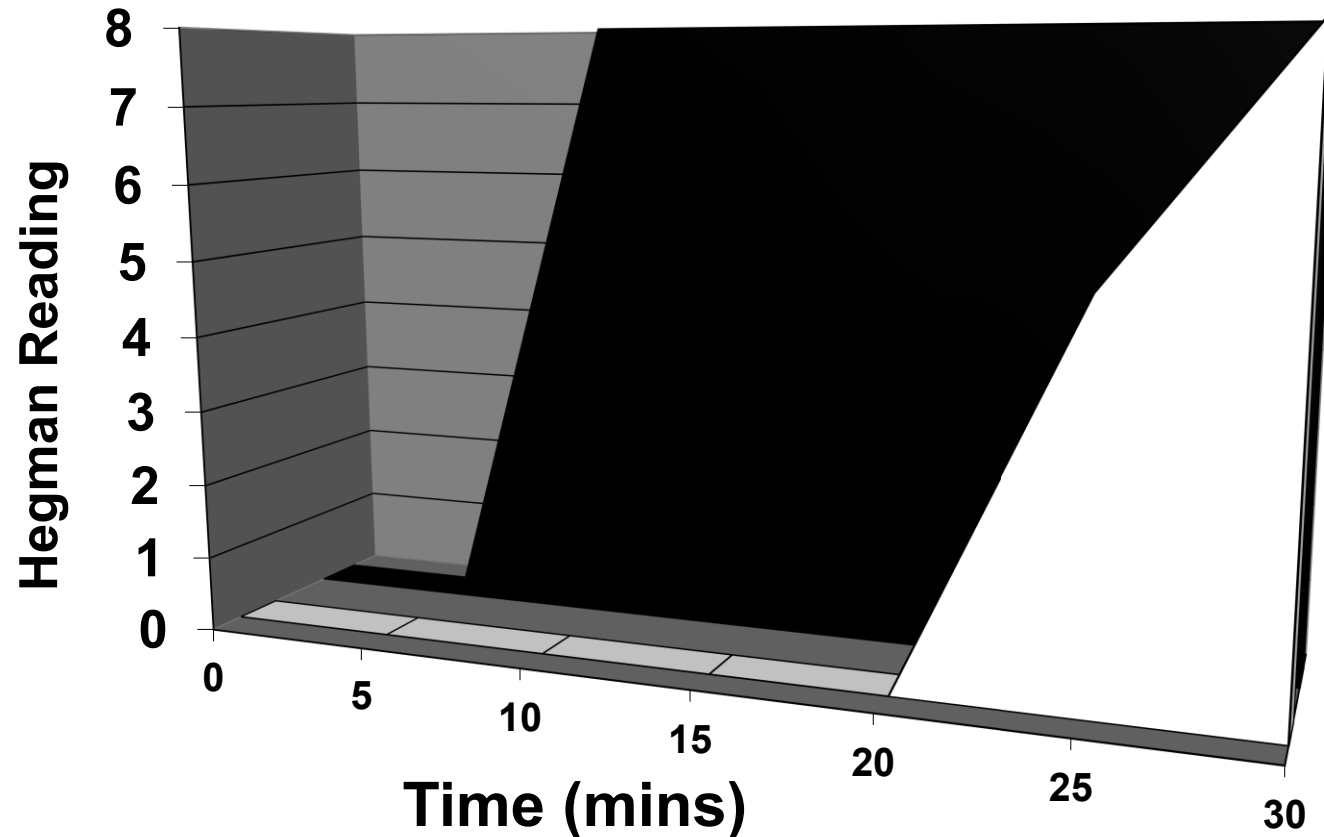


# SKIP STEPS

ACHIEVE 100% PURE COLOR  
DISPERSIONS WITH DYNAMIX

# CREATE PROFIT

# DISPERSION PERFORMANCE



Will disperse faster than easily dispersed  $\text{TiO}_2$


Note: Dispersion carried out with high speed dispersion and no additives

# PURE SPEED



DRAW-DOWNS DURING MIXING



 **1** minute



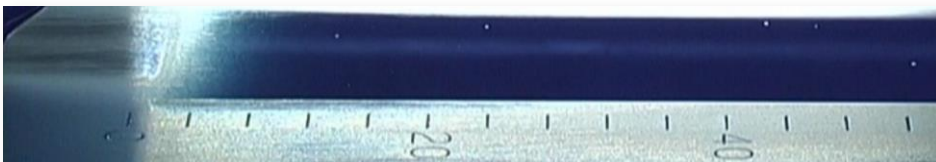
 **2** minutes



 **3** minutes



 **4** minutes



 **5** minutes

The background of the entire image is a dense, granular texture in various shades of green, ranging from a dark forest green to a lighter, almost lime green. The texture resembles crushed gravel or a microscopic view of a mineral surface.

# >50%

REDUCTION IN CYCLE TIME

# TINT STRENGTH IMPROVEMENT



## Black

Standard

100%

Dynamix

130-140%



## Yellow

Standard

100%

Dynamix

120-130%



Significant increases compared to conventionally dispersed pigments to >7.5 Hegman ( < 5 microns )

The background of the entire image is a dense, granular texture in various shades of green, resembling crushed stone or a similar natural material. The texture is uniform across the frame, with slight variations in tone and grain.

# 20%

**REDUCTION IN TOTAL COST**

# COST REDUCTIONS

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- **Raw Material Inventory**



- **Work In Progress**



- **Intermediate Inventory**



- **Saves CAPEX**



## PURE CONSISTENCY

Just Stir It In

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Large or Small  
Batch Size

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Skip Steps for  
100% Pure Color

## PURE CONVENIENCE

Superior Technology

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Always Behaves  
the Same

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Locked-in Color & TSR

## PURE PROFITABILITY

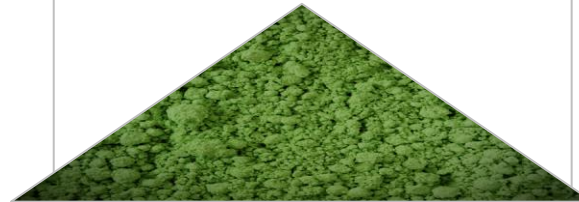
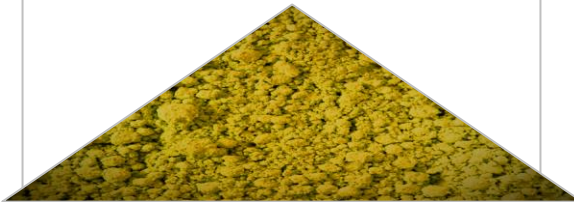
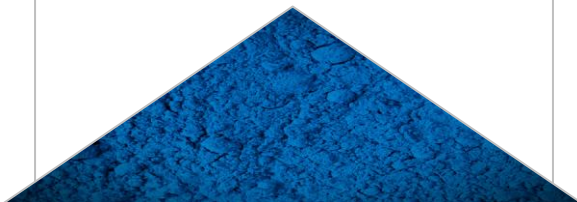
Increase Yields

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Spend Less

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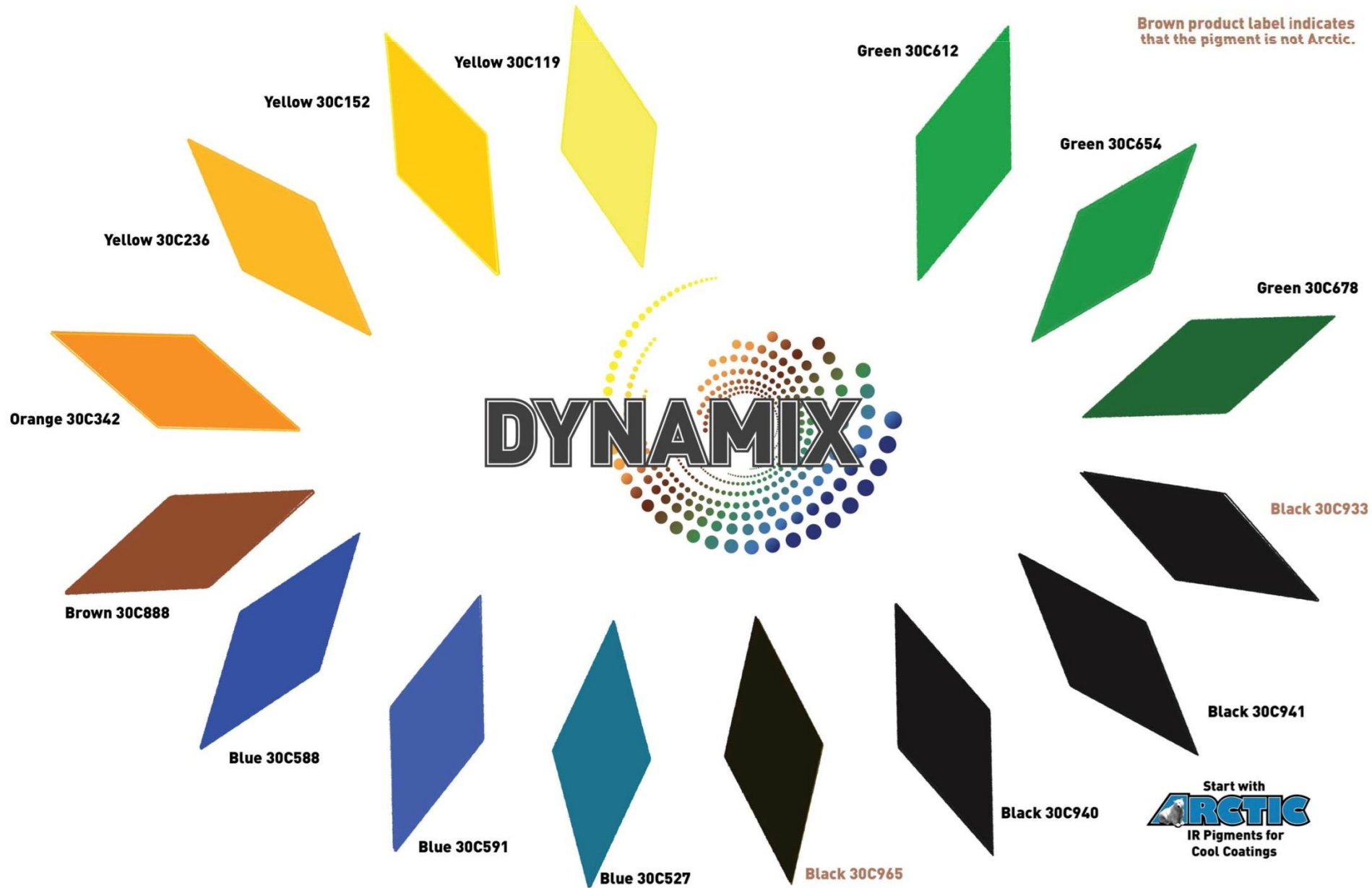
It's All in the Box







# COMPLETE COLOR PALETTE



# WHAT IT MEANS FOR YOU...



Reduce waste in clean up  
and less disposal

Reduce scrap rates by over 50%

Reduced rework

Reduced transportation footprint



Energy savings

More efficient use of pigments

Improved durability by extended  
product & polymer lifetime and  
color retention up to 50 %

Optimization of resources

**Product  
And  
Environmental  
Stewardship**

# Questions?

[www.DynamixPigments.com](http://www.DynamixPigments.com)



**MORE  
EXPERTISE**



**BETTER  
PERFORMANCE**



**BEST  
VALUE**