

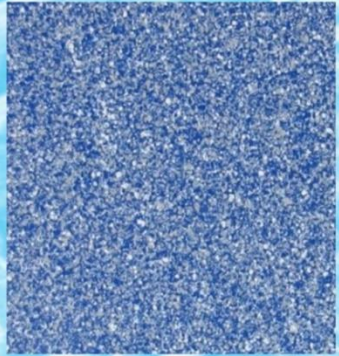
# Polymeric Finish Specifications and Information

Resodyn Pool & Spa Finishing Systems  
Distributed by  
All Island Group Pool Finish Supply  
200 Central Ave., Farmingdale, NY 11735  
631-753-0004

[poolfinishsupply.com](http://poolfinishsupply.com)

# all island

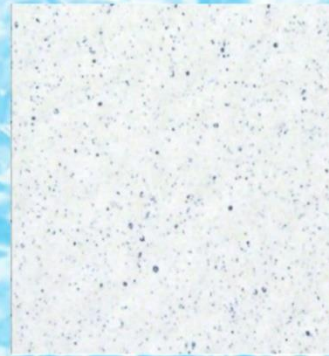
all island group pool finish supply



**Bahama Blue**



**Black Sand**



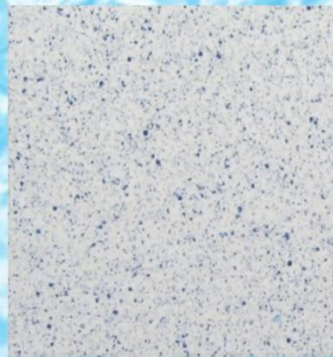
**Coral White**



**Driftwood Grey**



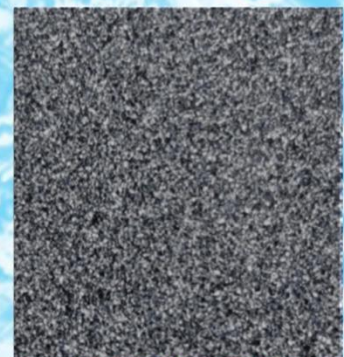
**Ocean Sand**



**Island Blue**



**Tahiti White**



**Woodland Grey**

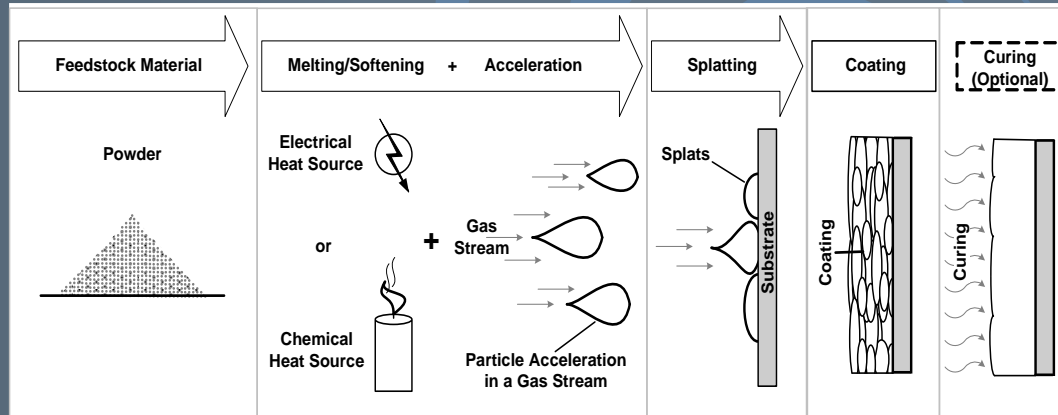
# Current Coating Development Projects

- **U.S. Air Force: Friction reducing wear coating for C-130 aircraft skids for Arctic region operation**
- **U.S. Navy: Life extension of above waterline radar installations through PTS field applied coating repairs**
- **U.S. Dept. of Homeland Security: Energy absorbing foam for blast protection of infrastructure**
- **U.S. Army Research Laboratory: CARC compliant powder coating qualified to MIL-PRF-32348**



# What is Polymer Thermal Spray?

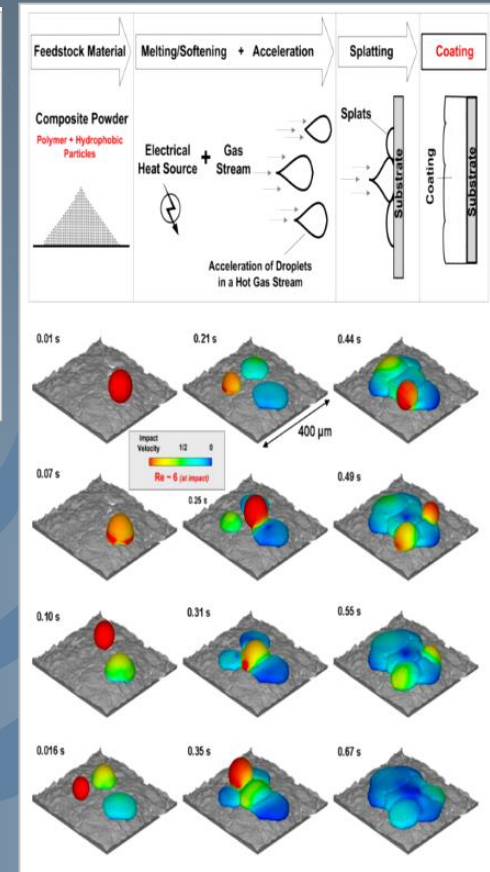
The deposition of semi-molten polymer particles onto a pre-heated surface whereby process heat causes the particles to flow and coalesce into a complete cohesive polymer coating.



**Splats** – unit building blocks of thermally sprayed coatings

- Polymer rheology
- Degree of melting
- Impact velocity

**Define Coating Formation Process**



# Portable Powder Coating Systems

## Competing Technology

### Wet Paint

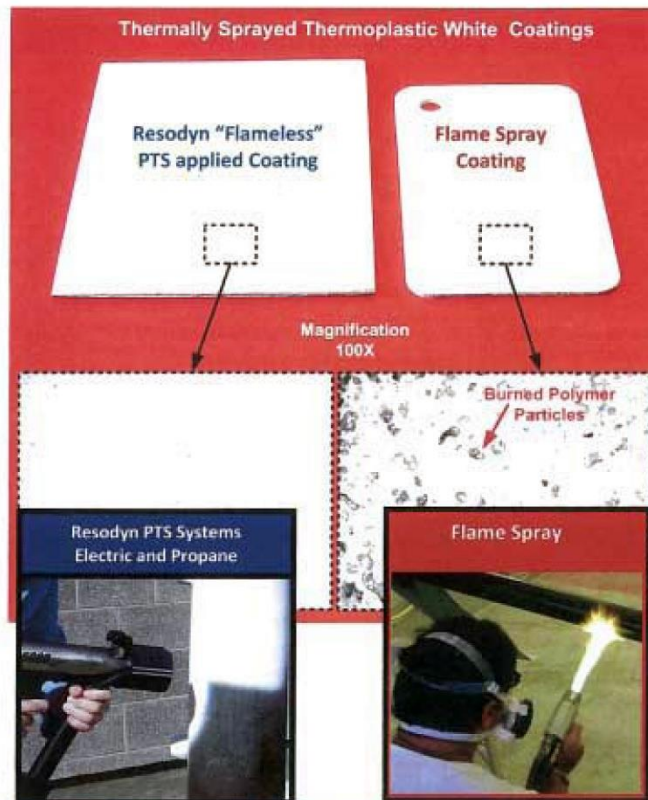
- Long cure times
- VOCs
- Limited durability

### Flame Spray

- Open Flame
- Polymer Degradation
- Limited Applications

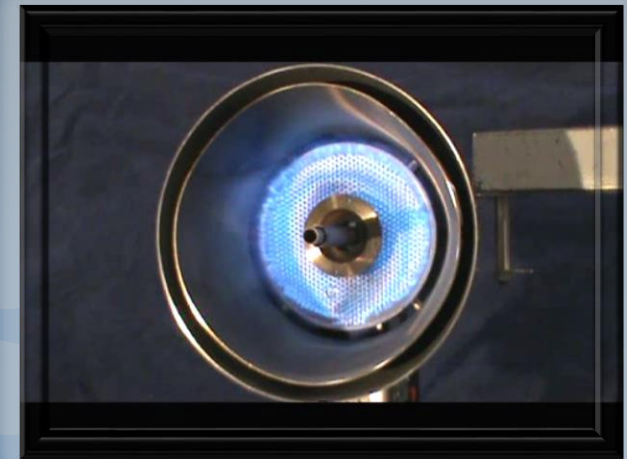
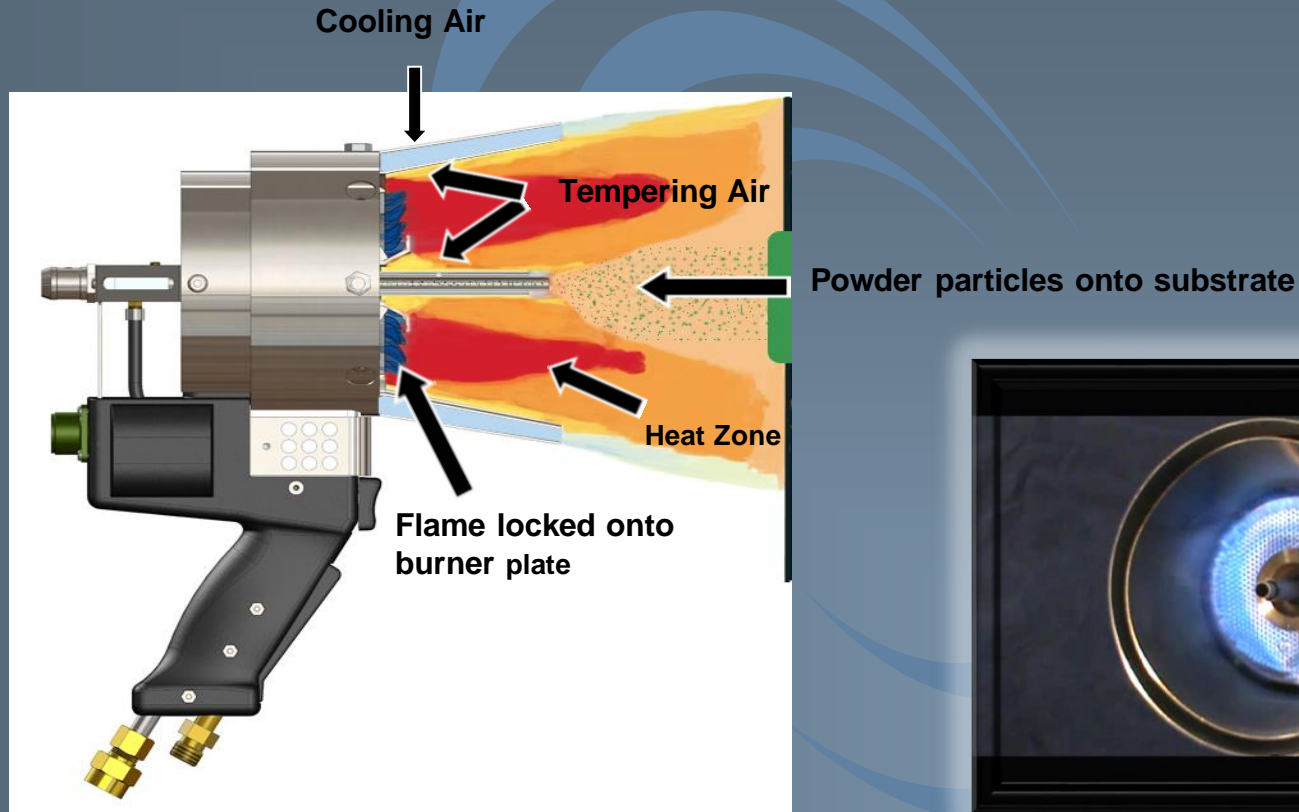
### Traditional Powder Coating

- Requires Oven Cure
- Limited Build Thickness
- Easily Impact damaged
- Not Repairable



# Illustration of PTS 30 Applicator

Engineered Polymeric Systems



# ResoCoat™ Pool Finishes

Engineered Polymeric Systems

## Benefits of ResoDyn™ Pool Finishes

Eliminates all plaster surface issues

- ✓ No Cracking
- ✓ No Mottling
- ✓ No Spalling
- ✓ No Leaching
- ✓ No Staining

Resurface/Restore most surfaces – concrete, plaster, fiberglass, stainless steel, steel, and aluminum

- ✓ Covers craze, spider, minor structural cracks
- ✓ Creates complete polymer coating seal
- ✓ Seals surface leaks
- ✓ Outstanding adhesion

Pool owner benefits

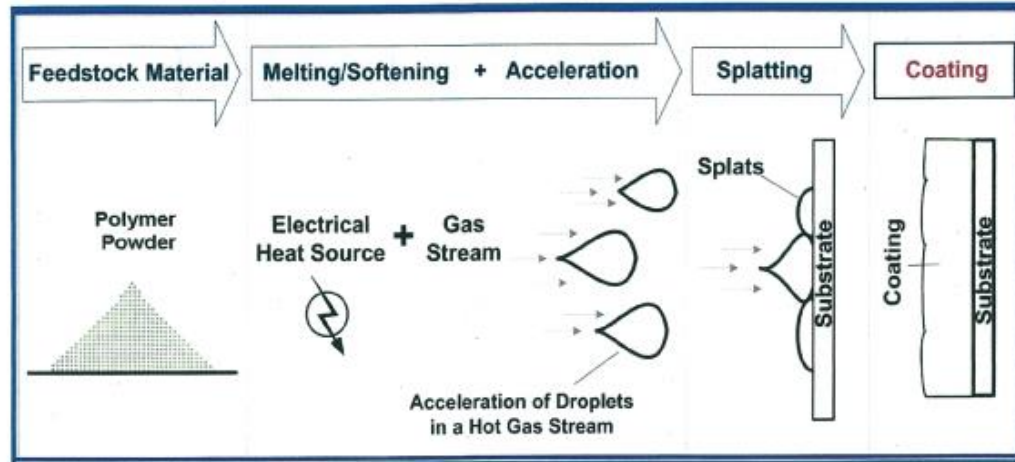
- ✓ Soft to the touch
- ✓ Durable, long lasting coating
- ✓ Choice of solid and blended color palette
- ✓ Slip resistant
- ✓ Easy balanced water chemistry
- ✓ No acid washing - Ever
- ✓ Lower heater energy use
- ✓ No start-up worries, Just Coat – Fill - Swim
- ✓ Extreme use damage is repairable for the life of the pool

 **Resodyn** Pool and Spa Finishing Systems

*Innovative Coating Technologies*

## Portable Powder Coating Systems

### Polymer Thermal Spray Fundamentals



### Polymer Thermal Spray Coating Advantages


- Zero Volatile Organic Compounds (VOCs)
- Non-toxic feed stock and finished coatings
- Extremely durable impact resistance
- Excellent adhesion
- Excellent weather resistance
- No thickness build limitations
- Indefinite storage life
- Indefinite working pot life
- No cure time—can use immediately
- Recyclable



# Background – PTS vs. Flame Spray

Engineered Polymeric Systems


**Flameless PTS Technology**



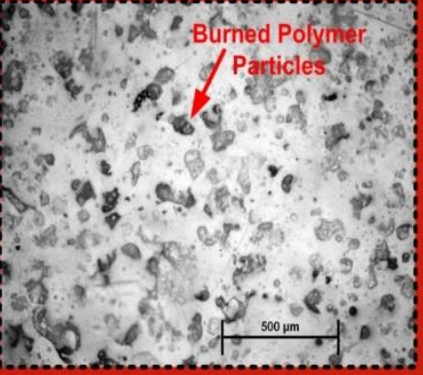
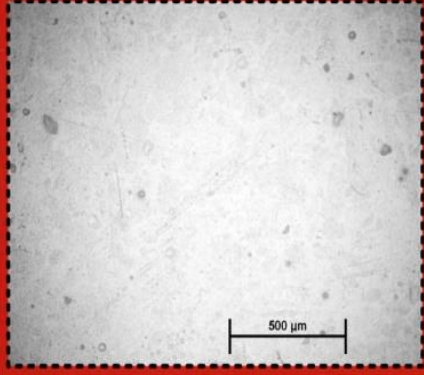
**Thermally Sprayed Thermoplastic White Coatings**

**Flameless PTS Coating**


**Flame Spray Coating**



Magnification 100X




**Polymers**



Mild Hot Gas

**Polymers**



Flame

# ResoCoat™ Pool Finishes

## ResoCoat 3 – Layer Concrete Coating System

### Step 1 : ResoSeal 800 Concrete Sealer

- Zero pinholes in top coat from outgassing
- Water borne sprayable liquid
- Bond adhesion stronger than concrete
- 2 thin coats completely seals surface
- Withstands thermal spray temperatures
- Patent pending formulation



ResoCoat 301 over  
**Resoseal 800** sealed concrete

### Step 2 : ResoBond 805 Tie-Coat

- Outstanding adhesion of ResoCoat 301
- 2-Part epoxy formulation
- Roll-On application

### Step 3 : ResoCoat 301 Polymer Pool Finish

- PTS-30 thermal spray application
- Dry powder, indefinite shelf life
- UV stabilizers, fade resistant color pigments
- Tough, flexible, durable
- Covers and seals minor concrete cracks
- Damage repairable throughout life of pool



Polymer coating over  
**unsealed** concrete

# ResoCoat™ Pool Finishes

## ResoCoat Fiberglass Pool Finish

- Colorize plain white or blue surfaces
- Salvage and restore sun damaged surfaces
- Outstanding adhesion
- UV stabilizers, fade resistant color pigments
- Flexible, tough, durable
- Will not peel, flake, or crack
- Fill, form, and radius transitions to tiles and fittings
- Damage repairable throughout life of pool

## Fiberglass Resurfacing

- ResoSeal 800 not required
- Roughen surface with 100 grit
- Clean with acetone wipe
- Apply ResoBond 805 for surface adhesion
- Apply ResoCoat 301

# Polymer Thermal Spray Coating Technology

Resodyn Corporation's Polymer Thermal Spray (PTS) coating system is a novel powder coating technology exclusively design and developed for the deposition of polymeric coatings directly from dry powder without need for oven baking, or curing. PTS coating technology can be used to thermally spray thin (< 200 µm) and robust coatings of unlimited thickness.

The PTS system can deposit thermoplastic and selected thermosetting polymers, as well as UV curable polymers and syntactic foams on metal, polymer and ceramic based substrates and even heat sensitive substrates such as cardboard, paper, and electronic circuits.

## POTENTIAL COATING APPLICATIONS



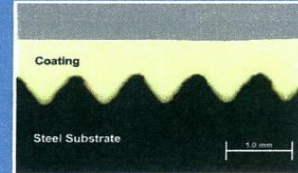
- Powder coating with no oven baking or curing
- Flameless powder path – no polymer degradation
- User friendly – “plug and spray” capabilities
- Environment friendly process – no VOCs
- Fully portable or fixed manufacturing operation
- Multi spray gun and robotic application capable
- Patents pending technology

- Corrosion Protection
- Thermal Barrier
- Anti-skid
- Anti-fouling
- Super-hydrophobic
- Anti-tamper
- Syntactic foams
- Anti-static
- Anti-microbial
- Acoustic insulation
- Blast mitigation

# PTS™



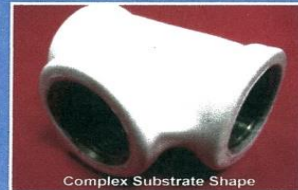
Polyimide Microballoon Foam Sprayed on Al Gas Cylinder



Coating  
Steel Substrate



Thick Coating on Concrete



Complex Substrate Shape



On-site Powder Coating

CONTACT US TO FIND  
OUT WHAT OUR UNIQUE  
COATING TECHNOLOGY  
CAN DO FOR YOU!

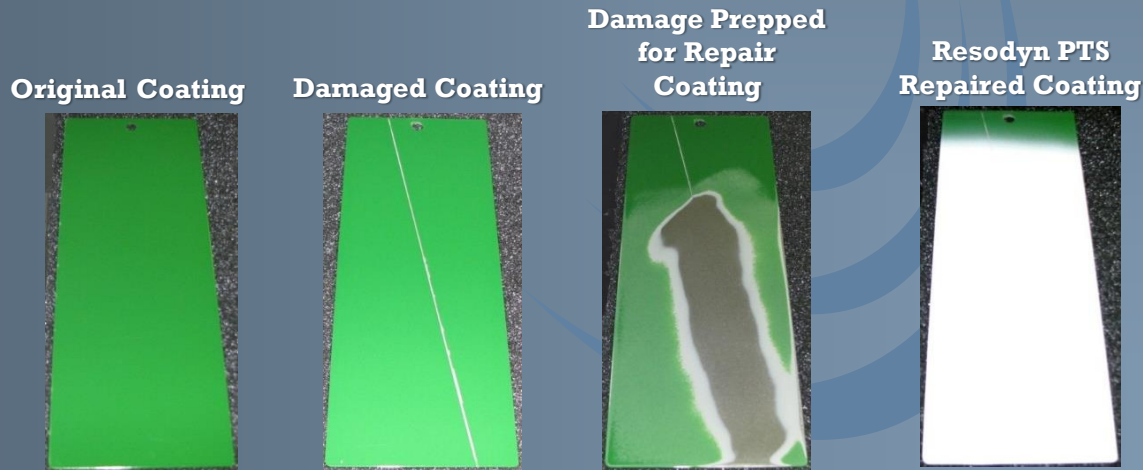
all island

all island group pool finish supply

200 Central Ave, Farmingdale, NY 11735  
Tel:631-753-0004 | Fax:631-753-9279 | poolfinishsupply.com

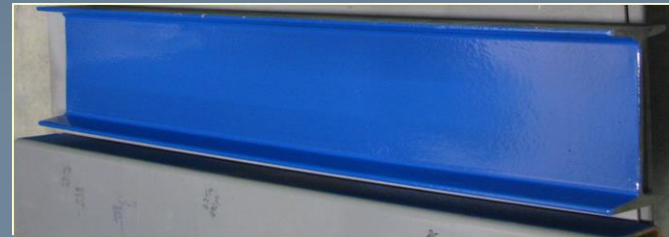
# Field Repairable Powder Coatings

- **Repair and touch-up damaged powder coated surfaces with same powder coating material**
- **Repair both thermoset and thermoplastic coatings**
- **Strip and recoat not required**
- **Prepare damaged area similar to paint touch-up**
- **Repair in-service components**
- **Powder coat fasteners, brackets, welds, etc. after installation**



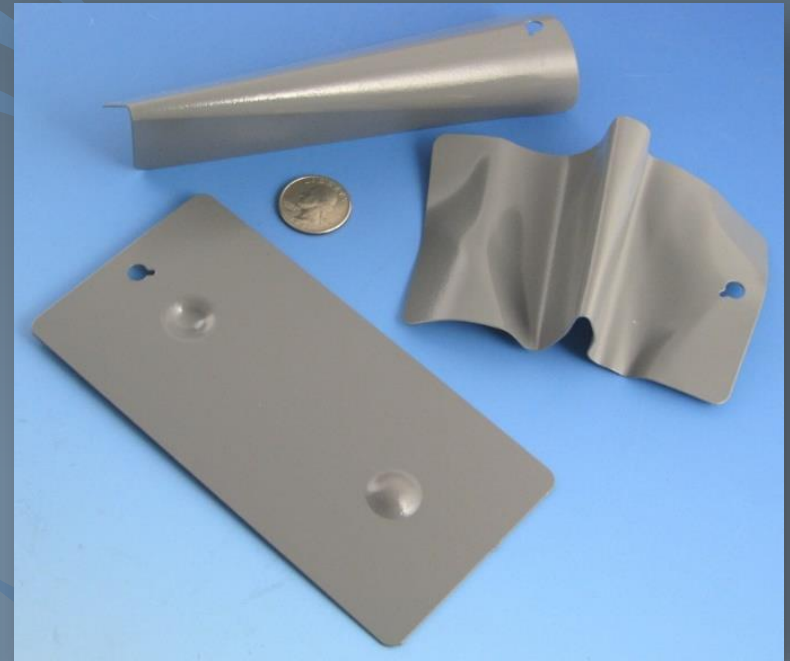
## Examples of Coated Structural Sections

- **Beams**
- **Channel**
- **Pipes**
- **Plates**



# Directed PTS Materials Development

- **Engineered coating formulations**
  - **Specific to PTS process requirements**
  - **Coating properties enhanced for peak performance**
- **Unique coating creations possible**
  - **Multi-component, in-flight materials blending (dry-blending)**
  - **Coating formulations with large disparity in component size**
  - **Spray method induced coating surface features**



# Authorized Dealer Opportunity

Engineered Polymeric Systems

## Dealer Equipment Package

- PTS-30 High output Polymer Thermal Spray System
- 25 or 50 lb powder hopper
- 10 ft standard length propane hose
- Water and oil trap filter unit on stand
- 25 ft – ½ " diameter air feed hose
- Infrared Thermometer
- Moisture Meter



**Resodyn** Pool and Spa Finishing Systems

Innovative Coating Technologies