

Application Process of GRINICE® Automotive Refinish

1 Substrate treatment

1. Remove the oil, rust, etc.
2. Clean the substrate completely.
3. Keep the substrate still for half an hour after cleaning.

2 Apply two component epoxy primer

Suitable Substrate	OEM paints, stainless steel, wood, aluminum, galvanized sheet, putty, galvanized steel, glass fibre reinforced plastic				
Sanding	Sand after the finish become drying and solid, wet sanding with P800#~P1000#				
Mix Ratio (by volume)	2K Epoxy Primer : 3 parts Hardener : 1 part Thinner : 1~2 parts				
Pot Life	4 hours@20°C			Spray Equipment	Gravity type: 1.2~1.5mm, 3~4Pa Suction type: 1.2~1.7mm
Spray	1~2 layers coatings can be sprayed				
Flash-off	5~10 minutes between coats				
Temperature	10°C	20°C	40°C	70°C	Precautions 1. Remove oil and then sand the surface with P180 before spray, use degreaser to clean the surface. Keep it 10 minutes before spray. 2. The epoxy primer must be sanded if the drying time exceeds 24 hours@20°C before spraying the new surface. 3. It is a must to use the supporting hardener and thinner. 4. Close the tin cover shortly after taking some paints from the tin.
Non Cohesive time	60 minutes	15 minutes	10 minutes	5 minutes	
DryingTime before Sanding	24 hours	12 hours	2 hours	30 minutes	
If the drying time exceeds 48 hours@20°C, the 2K epoxy primer must be sanded.					

3 Apply putty

Mix Ratio (by weight)	Putty : 100 parts Special hardener: 2~3 parts
Procedure	<ol style="list-style-type: none"> 1. Remove the rusted phosphor, oil, old paint film, and water completely with solvent and sanding machine. 2. The mix ratio between main component and hardener by volume: 100:2 3. Prepare the main component and hardener, after the colour is mixed evenly, please use it within 8 to 15 minutes. The pot life is affected by temperature and humidity. 4. When embedding the putty, do not make bubble inside, trim it with putty knife. 5. It cannot be grinded until it become solid completely. It need more than 1 hour@20°C to be hard. 6. It takes longer time to be hard in rainy season.

4 Apply 2K primer surfacer

Suitable Substrate	All original coatings, nude iron surface, putty		
Unapplicable Substrate	Galvanized steel, stainless steel	Colour	Light yellow, grey, white
Mix Ratio (by volume)	2K Surfacer : 5 parts Hardener : 1 part Thinner : 1 part		
Pot Life	2 hours@20°C	Spray Tool and Pressure	Gravity type: 1.2~1.5mm, 4Pa Suction type: 1.4~1.6mm (Spray 30~50?m)
Spray	2~3 layers		Procedure 1. 2K surfacer can be sprayed after sanding and removing the oil and stain on the surface of the putty, epoxy primer, old paints. 2. 30µm must be kept after sanding on the intermediate coating layer.
Flash-off	5~10 minutes between coats		
Drying Time before Sanding	3 hours@20°C 30 minutes@60°C		
Sanding	Before spray: P180~P400 by dry sanding After spray: P800~P1000 by wet sanding		

5 Apply the following 2K topcoat and basecoat

*1K metallic paint or pearl paint (M&P series)

Suitable Substrate	Old finish and surface of primer	Colour	According to the choices of the customers	
Sanding	Sanding by 1000# sand paper			
Mix Ratio (by volume)	Temperature	1 part	0.8-1 parts	
	<15°C	M&P series	Thinner GN-901	
	15-25°C	M&P series	Thinner GN-902	
	>25°C	M&P series	Thinner GN-903	
Spray Tool and Pressure	Gravity type: 1.2~1.5mm, Suction type: 1.2~1.7mm, Spray pressure: 3-5KG/cm ²		Precautions	After spray 1K metallic basecoat, please spray the varnish within 1 hour in order to guarantee the accuracy and repetitiveness of the colour formulation. Please stir the paint evenly before use.
Drying Time	Between 15 minutes to 1 hour@20°C, spray the varnish			

*2K solid colour paint (S series)

Suitable Substrate	Old finish and all kinds of primer and grey surface	Colour	According to the choices of the customers		
Sanding	Wet sanding by 800# and 1000# sand paper				
Mix Ratio (by volume)	Temperature	2 parts	1 part	0.5~0.8 parts	
	<15°C	2K solid paint	Hardener GN-611	Thinner GN-901	Pot Life
	15-25°C	2K solid paint	Hardener GN-612	Thinner GN-902	
	>25°C	2K solid paint	Hardener GN-613	Thinner GN-903	
					4 hours@20°C

Spray Gun & Air Pressure	Gravity type: 1.2~1.5mm, Suction type: 1.2~1.7mm, Spray pressure: 3-5KG/cm ²			
Spray Method	Apply two coats or three coats with single spray, volatilization time of each layer: 5 to 10 minutes@20°C. Film thickness: 40~50µm			
Drying Time	Temperature	Non cohesive dust	Touchable with finger	Drying & Curing
	20°C	1 hour	1~2 hours	24 hours
	60°C	5 minutes	10 minutes	60 minutes
Precautions	<ol style="list-style-type: none"> 1. It is necessary to spray the plastic primer if the users want to spray on the plastic surface, 3 single coats should be sprayed, the volatile time is 10 to 15 minutes. 2. The paint film can be repaired or polished after specific drying time. 3. Mix colours according to the formulation. It is requested to stir the paint evenly before use. 			

6 Apply clearcoat

Suitable Substrate	The surface of 1K basecoat		Colour	Transparent		
Mix Ratio (by volume)	Temperature	2 parts	1 part	0.2~0.5 parts	Pot Life	3-4 hours @20°C
		Varnish	Hardener	Thinner		
	<15°C	GN-889	GN-611	GN-901		
	15-25°C	GN-888	GN-612	GN-902		
>25°C	GN-666	GN-613	GN-903			
Spray Gun & Air Pressure	Gravity type: 1.2~1.5mm, Suction type: 1.2~1.7mm, Spray pressure: 3-5KG/cm ²					
Spray Method	Apply two coats or three coats. Paint film thickness: 30-40µm		Drying time	30 minutes@80°C 24 hours@20°C		

7 Polishing & waxing

1. Sanded with sand paper, remove the dust particles and curtaining, then polish again.
2. Polish with wax stone, then polish with sand paper, make the surface flat and glossy.
3. Use the wax water to polish the surface in order to keep the gloss for long time.

Precautions	<ol style="list-style-type: none"> 1. Do not wash the wool ball with corrosive materials. 2. Make sure the wool ball does not include sands or other hard material.
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