

Autowave 2.0

Product Data

Final Preparation

Application

2 Coat System

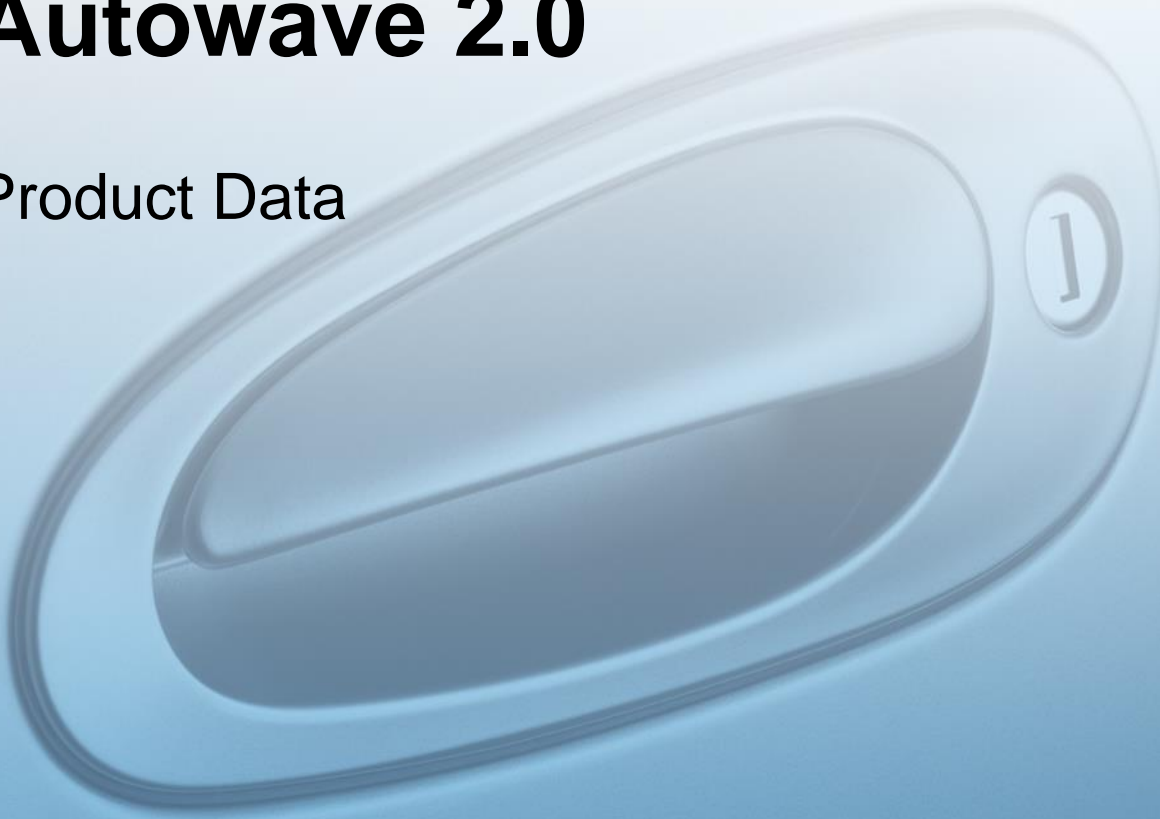
Flash process

3 Coat System

Cleaning equipment

Autowave 2.0

Product Data



Suitable substrates

Autowave can be applied on:

- All existing OEM finishes
- All current Sikkens preparatory products.
 - With the exception of direct application on acid containing washprimers.



Autowave MM toners

Autowave MM toners

- Solids
- Non stirring metallic toners
- Xirralic MM toners
- Pearls
- SEC colors

Binder - MM600

Flip tone controllers

MM700-MM101



Point of attention - mixing

Gently shake the can before mixing



Easier to pour

Stir thoroughly



Directly after mixing

Use preferably plastic cans



Point of attention - mixing

Metallic MM800 toners

- Stir thoroughly before first use

Once installed

- Handle like any other MM toner



Activator WB

Activator WB

- For optimum application viscosity

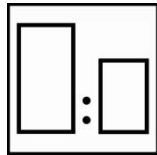
Mixing ratio is mainly determined by:

- Relative humidity
- Temperature



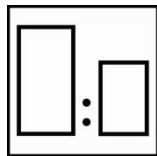
Variable mixing ratios

Solid color



100:10

- Standard mixing ratio
- Temp. 20°C-25°C



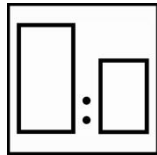
100:20

- Easier color blend
- RH around 20% or < 20%
- Temp. >25°C



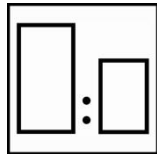
Variable mixing ratios

Metallic color



100 : 10-20

- Standard mixing ratio
- Temp. 20°C-25°C



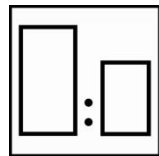
100 : 30

- Optimum metallic control
- Easier colour blending
- Temp. 20°C-25°C



Variable mixing ratio

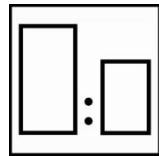
Metallic color; Change of ambient conditions



100 : 40

Temperatures $>35^{\circ}\text{C}$

Relative humidity $\pm 20\%$



100 : 50

Temperatures $>40^{\circ}\text{C}$

Relative humidity $<10\%$



Waterborne paint strainers

Suitable waterborne paint strainers

- Minimum strainer size 125µm



Autowave Guncleaner

Waterbased cleaning agent

- For cleaning the Autowave spray-gun
- Consists of water and co-solvents (alcohol)
- Can be re-used after coagulation process



Autowave Separator

Coagulation process, add 1-1½% to contaminated

- Autowave Guncleaner
- Water

Separates contaminated Autowave Guncleaner or water from the Autowave paint residue



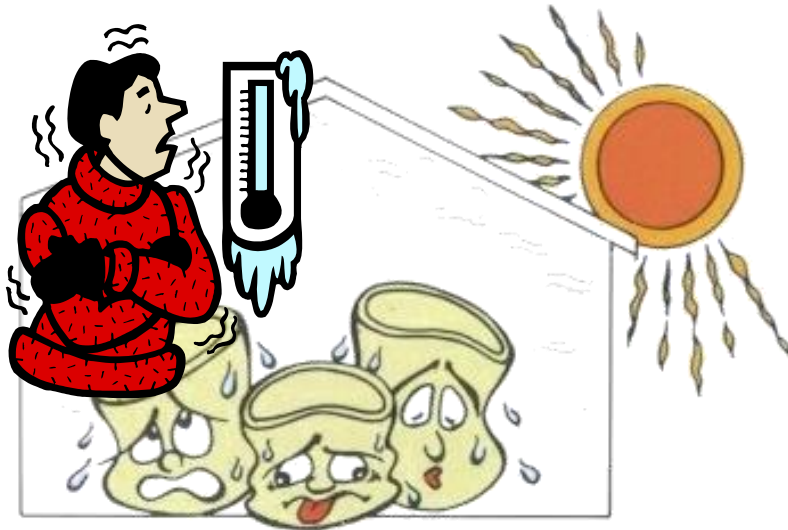
When pouring Autowave Guncleaner



Storage and shelf-life

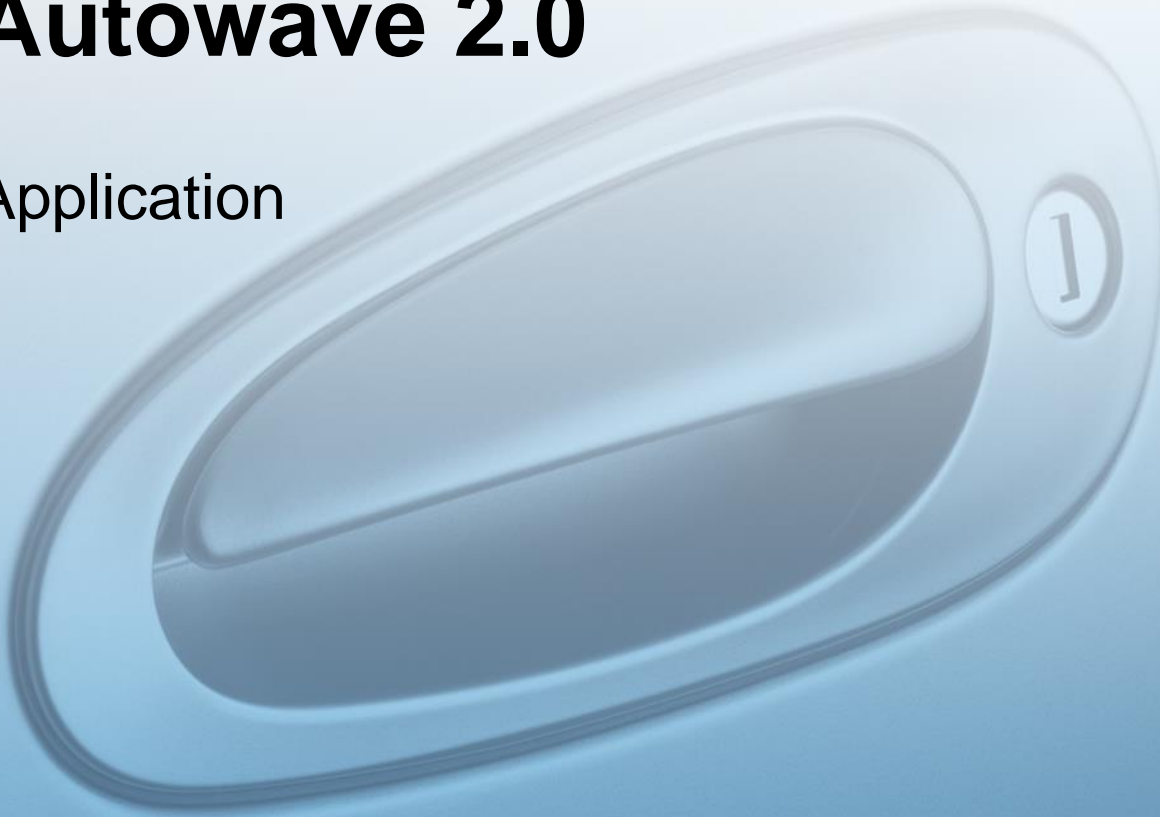
Store at application temperature

- Storage temperature 3°C-35°C
- Avoid extreme temperature fluctuation
- Products shelf-life TDS S9.02.01



Autowave 2.0

Application



Preparation



P500 dry sanding



Abrade the rest and adjoining panels with P1000 (3M 260L)

- Removing all surface texture of the panel's



Abrade the edges by using a copper scuffing pad



Clean thoroughly

- Combined waterborne/solvent borne surface cleaners

Application conditions

Thorough surface cleaning

- Waterborne paint is more sensitive for surface contamination

Clean application equipment

- Flush thoroughly prior to use with Guncleaner/Activator WB

Recommended application temperature 20°C-25°C

- For optimum application conditions
- Slight decrease humidity, improves water evaporation

Spray gun

Spray gun set up:

- 1.2 - 1.5

Application pressure:

- 1.7-2.2 bar at the spray-gun air inlet
- HVLP max. 0.7-1 bar

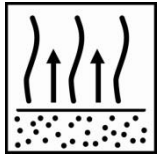


Autowave 2.0 solid application



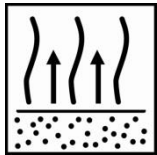
Apply two full coats

- Until hiding is achieved



Between coats

- Until the surface is completely matt



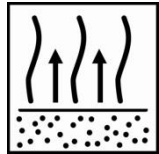
Minimum 15 minutes at 25°C

- Before clearcoat application
- Recoat within maximum 24 hours at 25°C

Autowave 2.0 metallic application



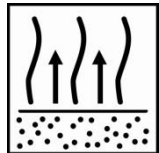
Apply one full coat



Until the surface is completely matt



Apply a intermediate coat; until hiding is achieved



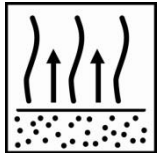
Until the surface is completely matt

Autowave 2.0 metallic application



Apply a drop coat

- For an even metallic orientation/appearance



Minimum 15 minutes at 25°C

- Before clearcoat application
- Recoat within maximum 24 hours at 25°C



Colour fade-out

Pre-coat application AW 666



Easier colour blend

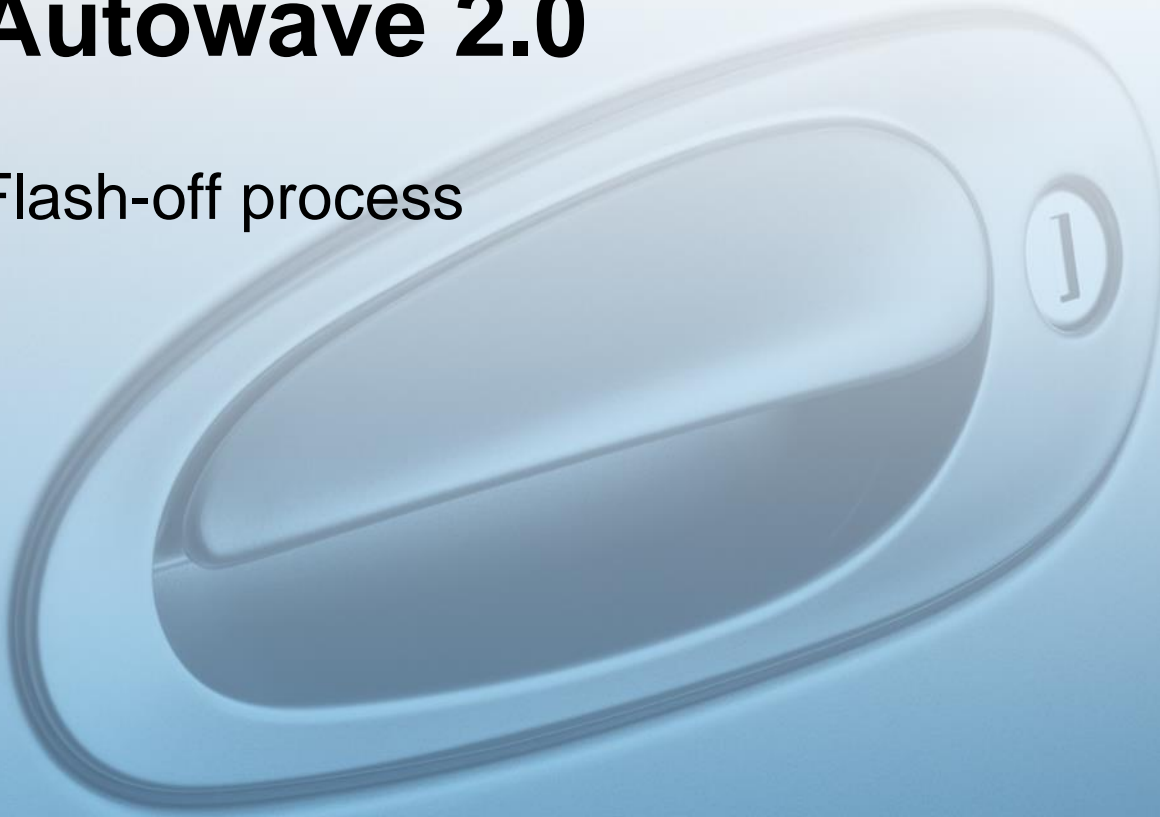


Less risk for halo



Autowave 2.0

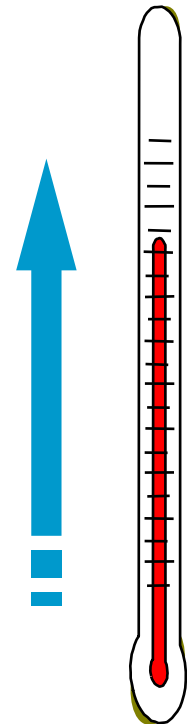
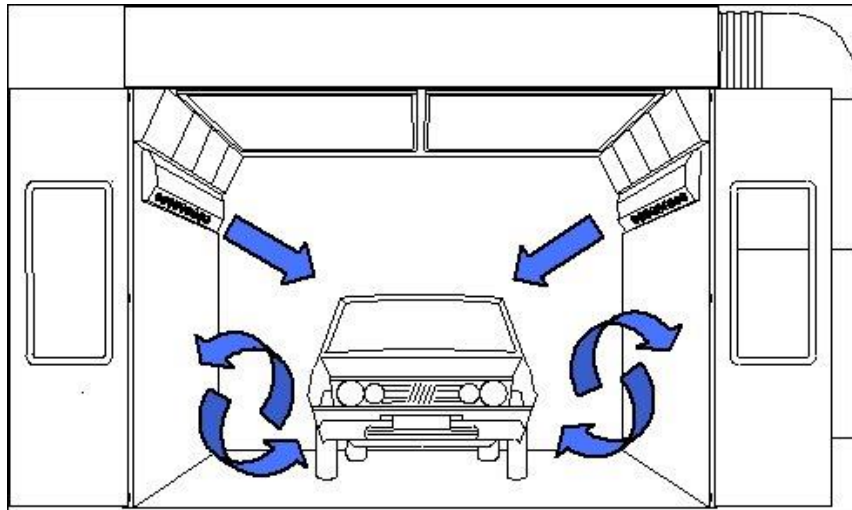
Flash-off process



Autowave[®] flash-off process

Flash-off times are reduced by

- Temperature increase
- Air turbulence inside the spraybooth



Temperature increase

Heat up for approximately 10 minutes at 60°C

- Object temperature will rise

Cool down to ambient temperature

- Approximately 5 minutes

Continue Autowave[®] application after cool down



Air movement

WindJet



Air Jets

- Hand held or on stand



AirWave system



Open fans system

Fitted on ceiling, walls, or on rail system

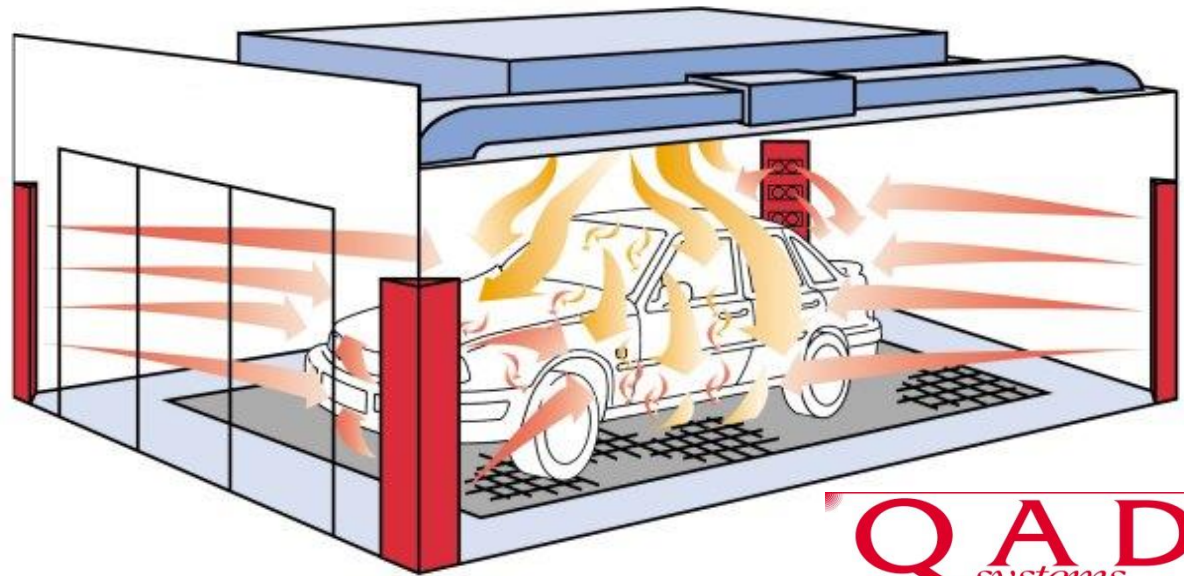
- Automatic air temperature raise up till $\pm 40^{\circ}\text{C}$



Qad system

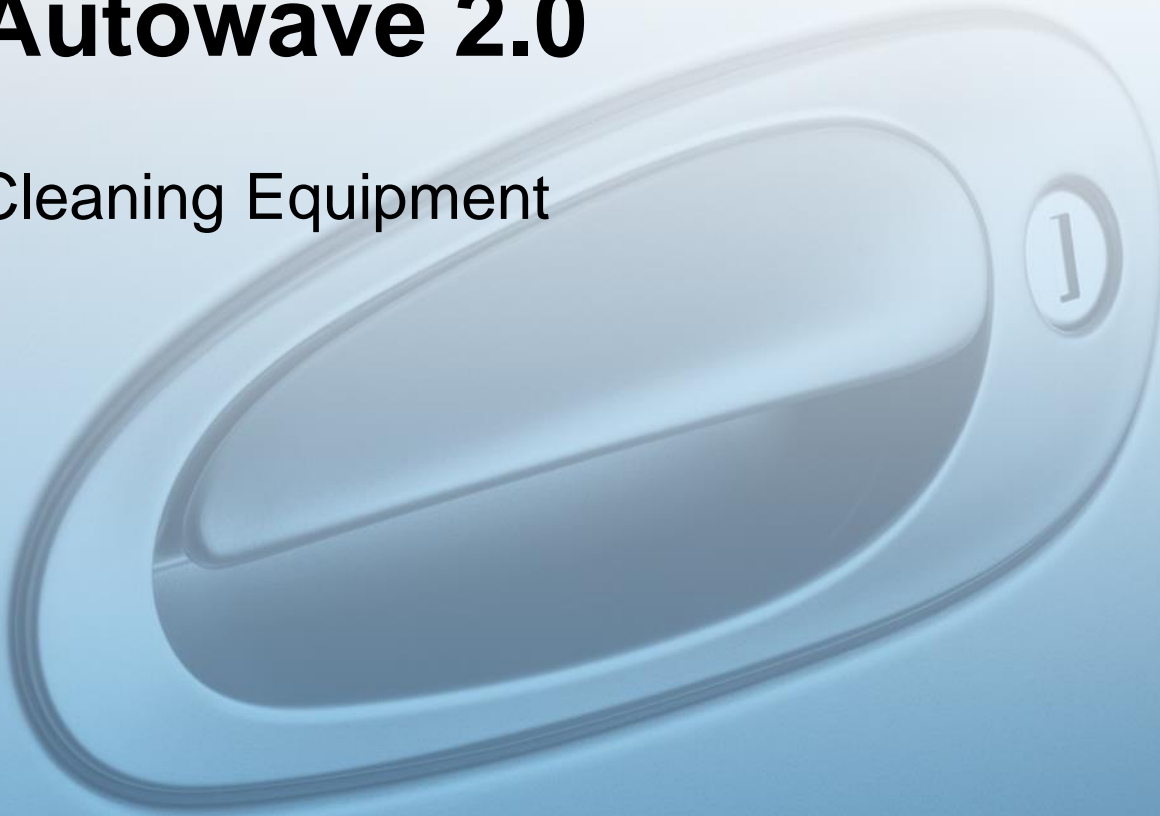
Integrated at spraybooth corners

- Automatic air temperature raise up till $\pm 40^{\circ}\text{C}$

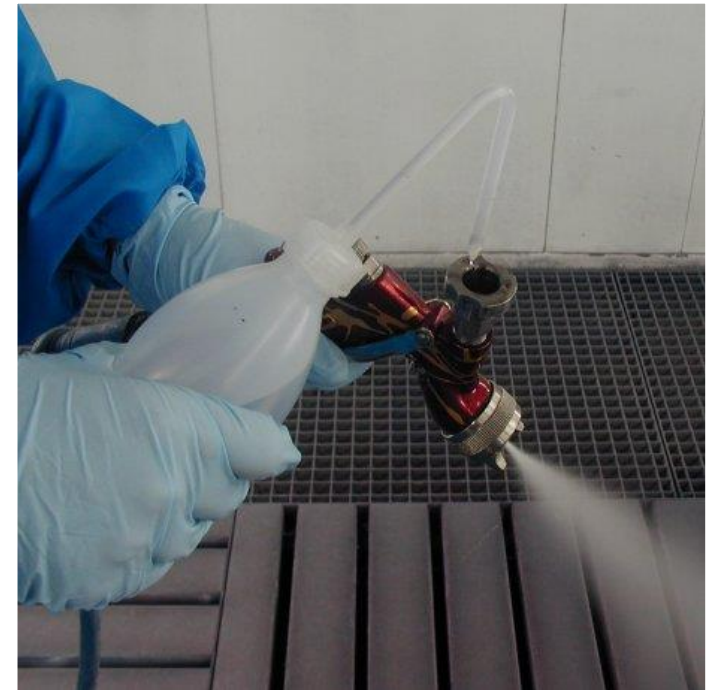


Autowave 2.0

Cleaning Equipment



RPS / PPS use



Spray gun cleaning

Solvent borne



Water borne



Spray gun cleaning

Filled with Autowave[®] Guncleaner

- Autowave[®] Guncleaner contains co-solvents
- Dissolves waterborne paint residue

Uses Autowave Separator for
standard coagulation process

After filtering; re-use
Autowave[®] Guncleaner



Spray gun cleaning with water

Connected to regular tap water supply

- Can be connected to boiler system
- Warm water for optimum cleaning!

Uses Autowave Separator for standard coagulation process

Once coagulated the water can be drained

Check with local legislation!



Guncleaner and Separator

Autowave[®] Guncleaner

- Contains co-solvents
- Can be regenerated / re-used

Autowave[®] Separator

- Separates paint from Guncleaner
- Add 1-1½% into dirty Guncleaner



Wear respirator



Coagulation process (Guncleaner)

Step 1



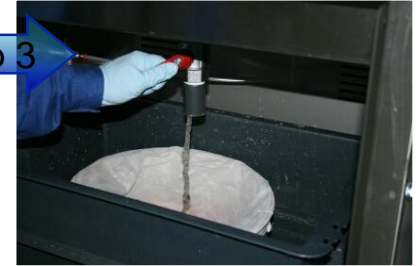
Add Autowave Separator to contaminated Guncleaner

Step 2



Stir Autowave Separator & contaminated Guncleaner

Step 3



Drain the coagulated Guncleaner through the filter

Step 4



Re-use the cleaned Autowave Guncleaner

Step 5



Solid waste in to chemical bin

Step 6



Replace the filter

Coagulation process (water)

Step 1



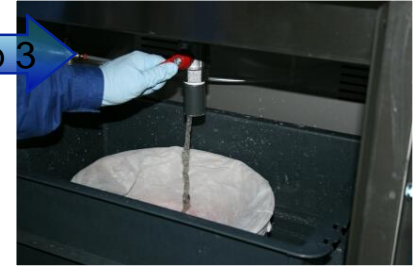
Add Autowave Separator

Step 2



Stir Autowave Separator & contaminated water

Step 3



Run the coagulated water through the filter

Step 4



Release the water from the container

Step 5



Solid waste in to chemical bin

Step 6



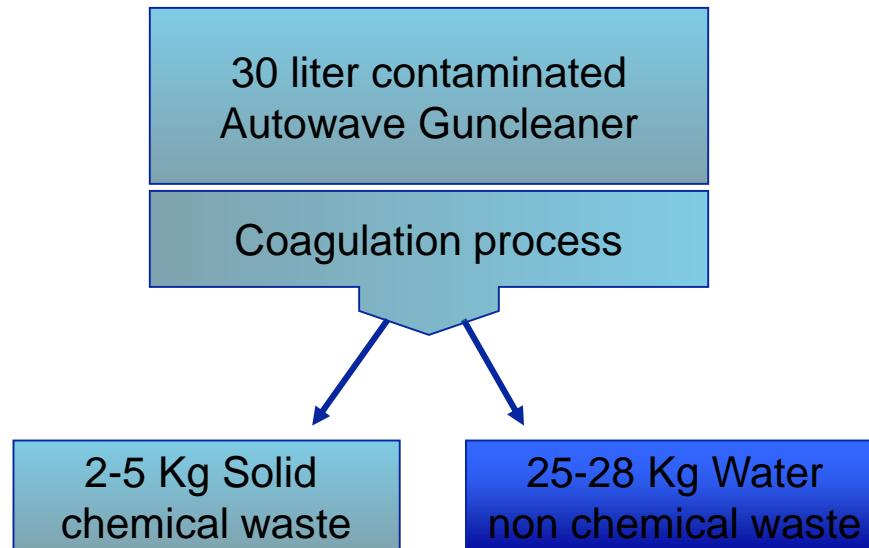
Replace the filter



Waterborne coagulation

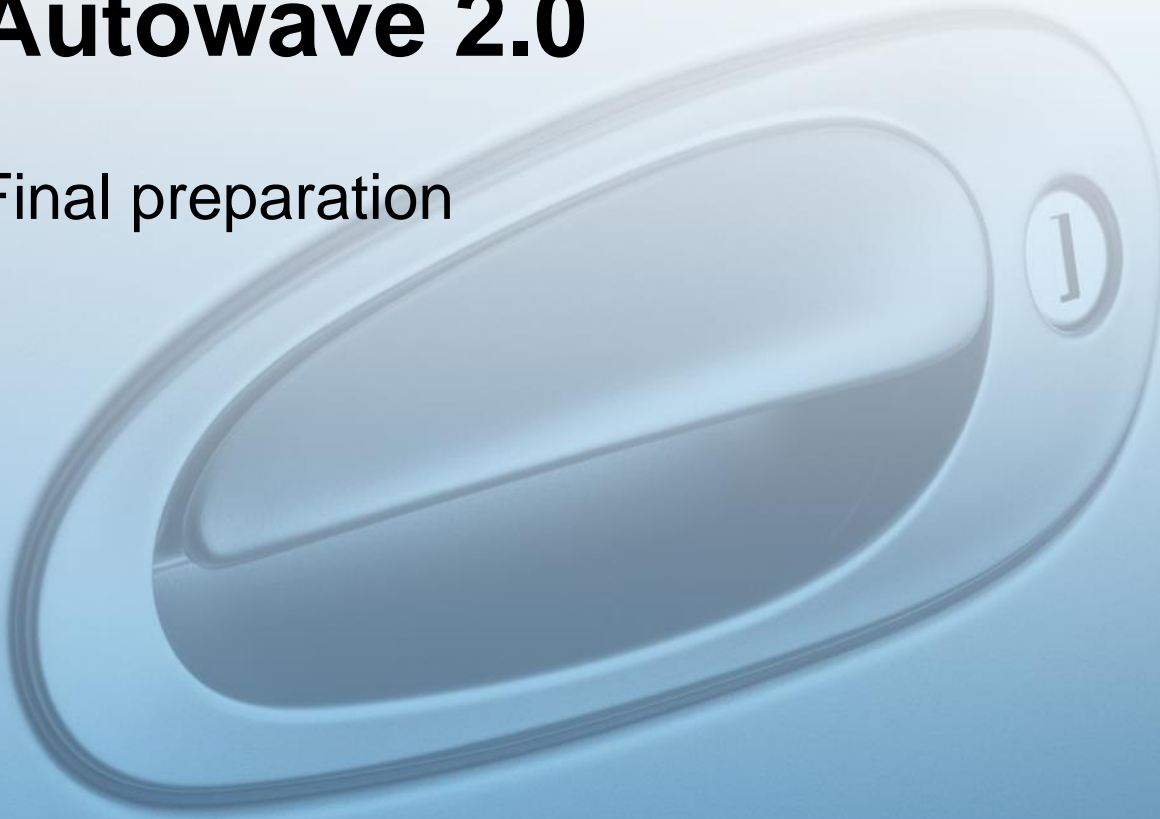
Up to 90% waste reduction

- After coagulation process
- 10% solid paint residue
- 90% water or regenerated Autowave Guncleaner



Autowave 2.0

Final preparation



Final sanding

Advised dry sanding steps

- P400
- P500



Advised wet sanding steps

- P800
- P1000



Panel preparation

Panel sanding, i.e. P1000 260L

- Removing surface texture
- Using a soft back pad



Scuffing pad, i.e. Scotch Brite

- Water
- Blend Prep



Masking

Mask tide to the object

- Loosely paper or plastic can generate dust



Final surface cleaning

Use high quality absorbent cloths

- One wet cloth
- Wipe with one dry cloth

Wipe dry before evaporation

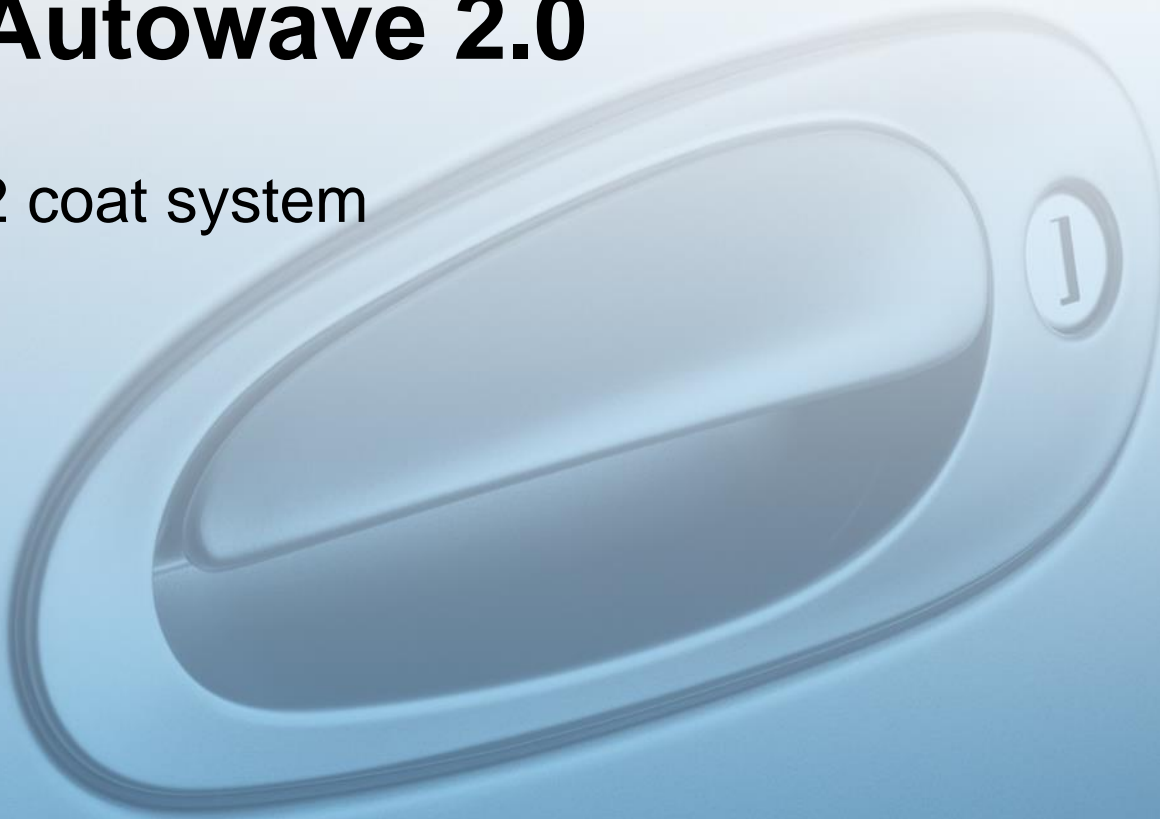


Dust prevention

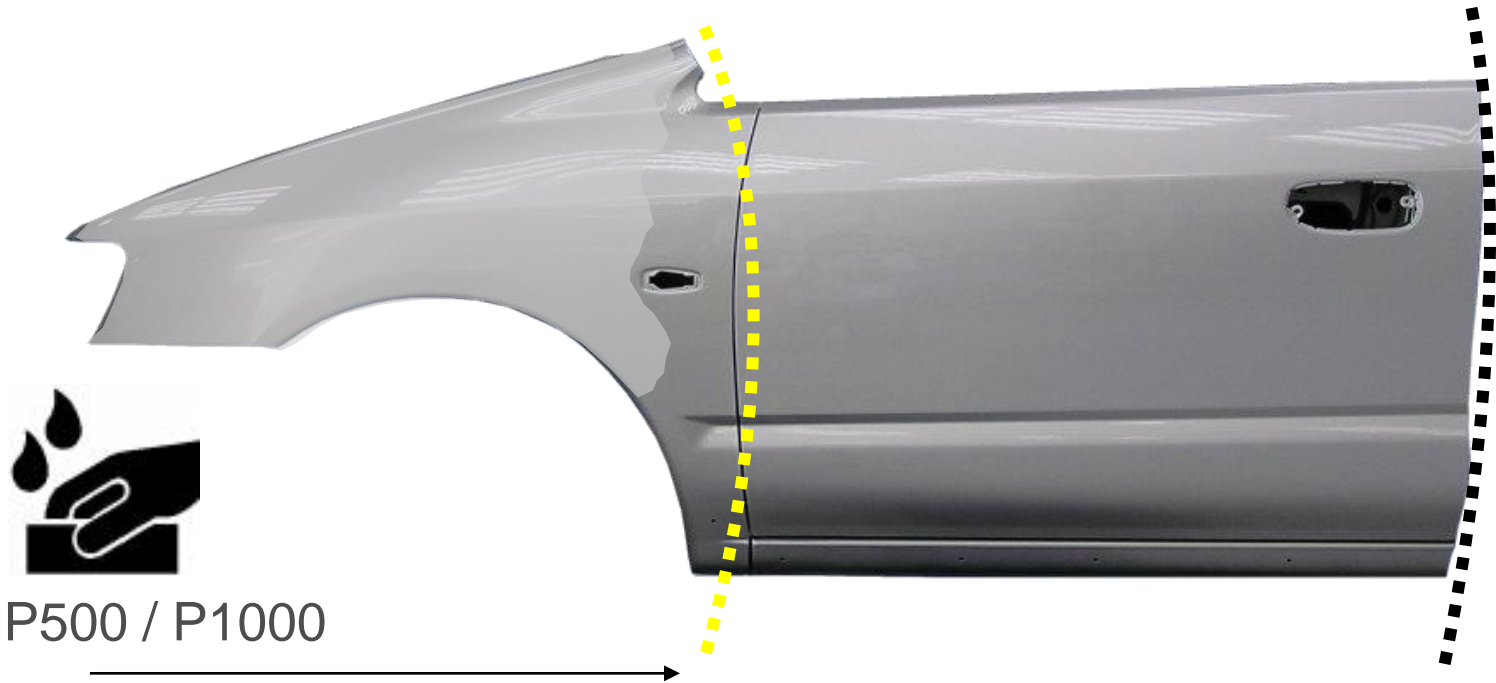


Autowave 2.0

2 coat system



Panel-repair

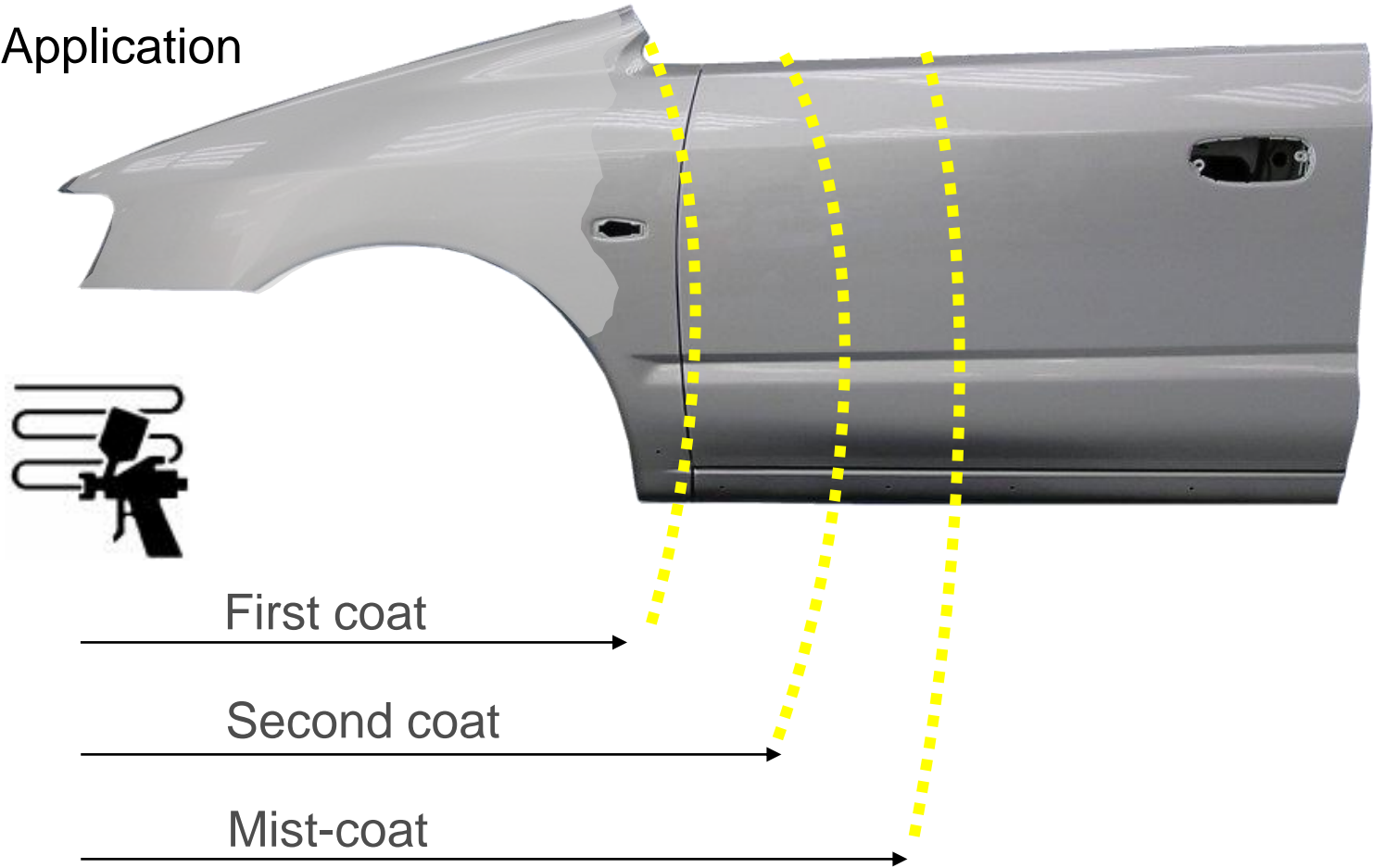


Scotch Brite

Degreaser

Panel-repair

Application



Panel-repair

Clearcoat



First coat

Second coat



2-C Spot-repair

Preparation



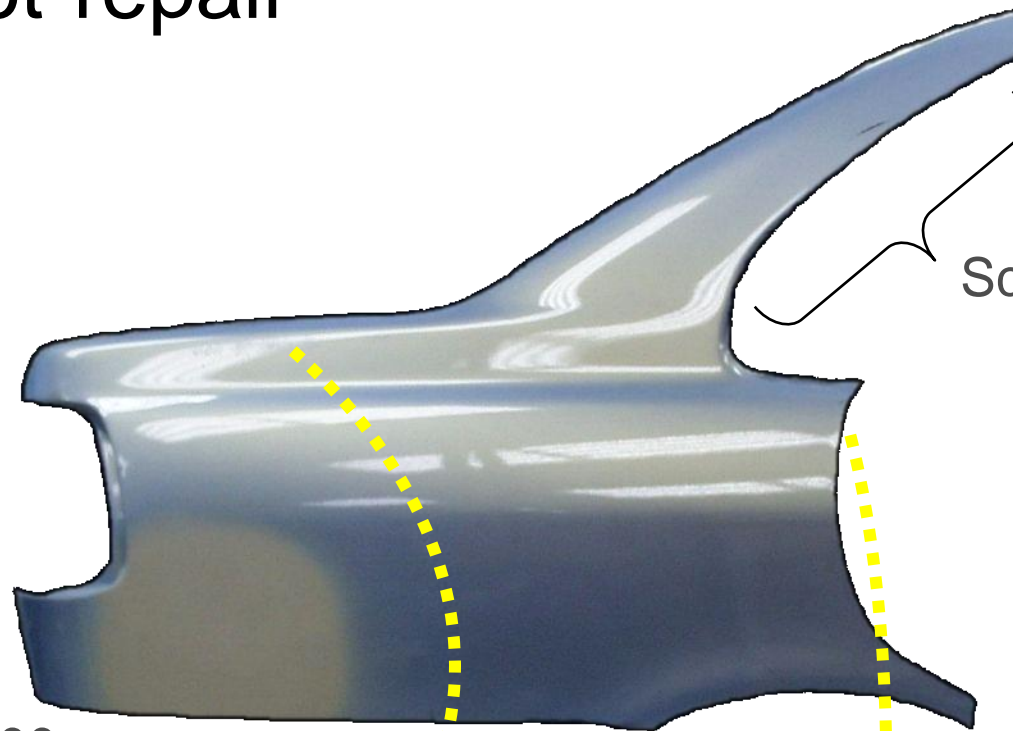
P500 / P1000



Scotch Brite

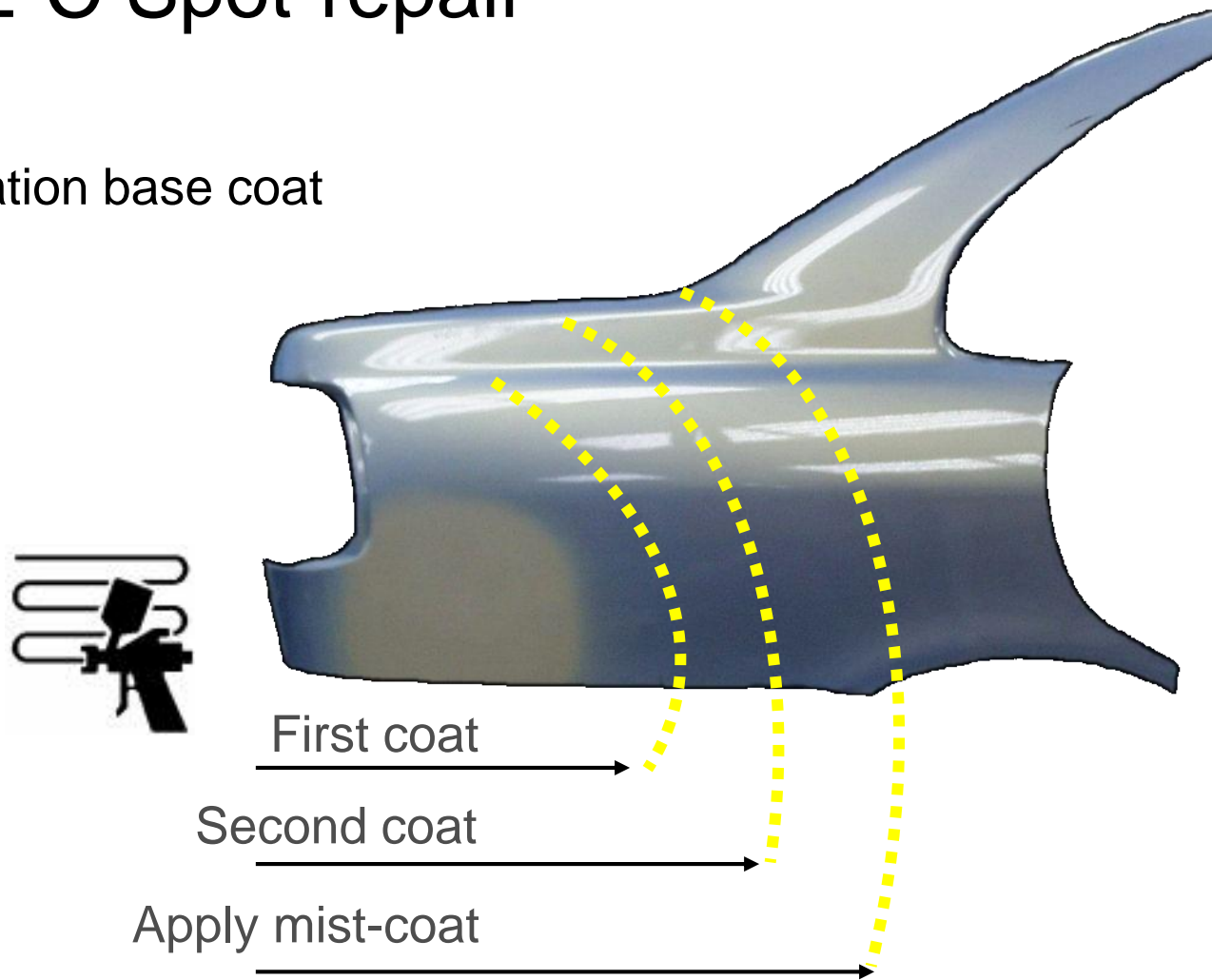
Degreaser

Scuff/polish

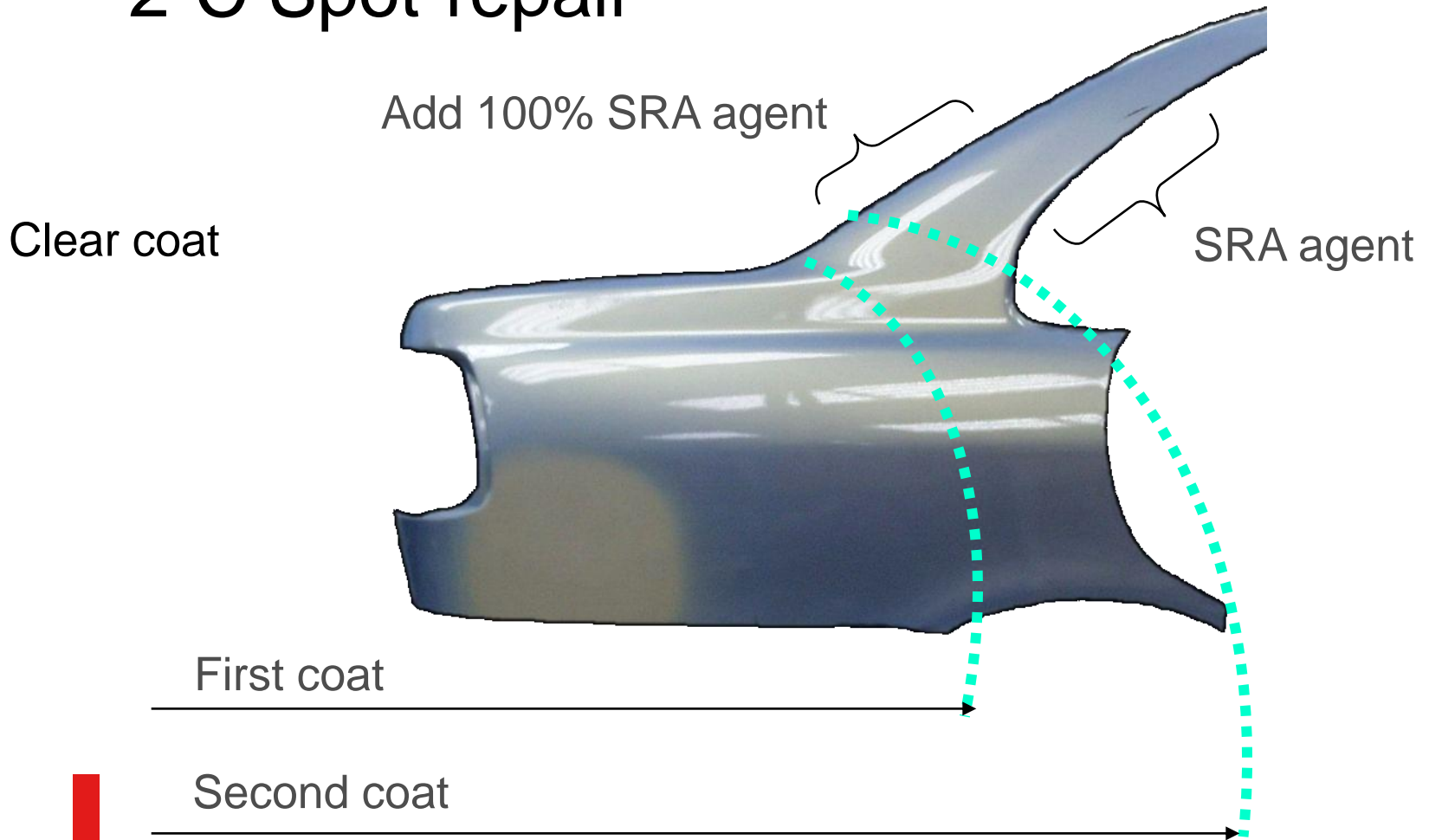


2-C Spot-repair

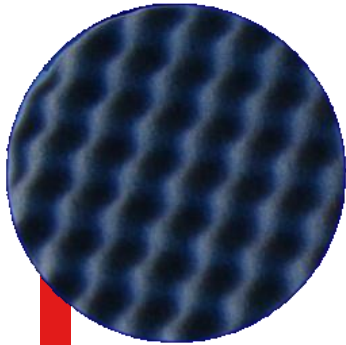
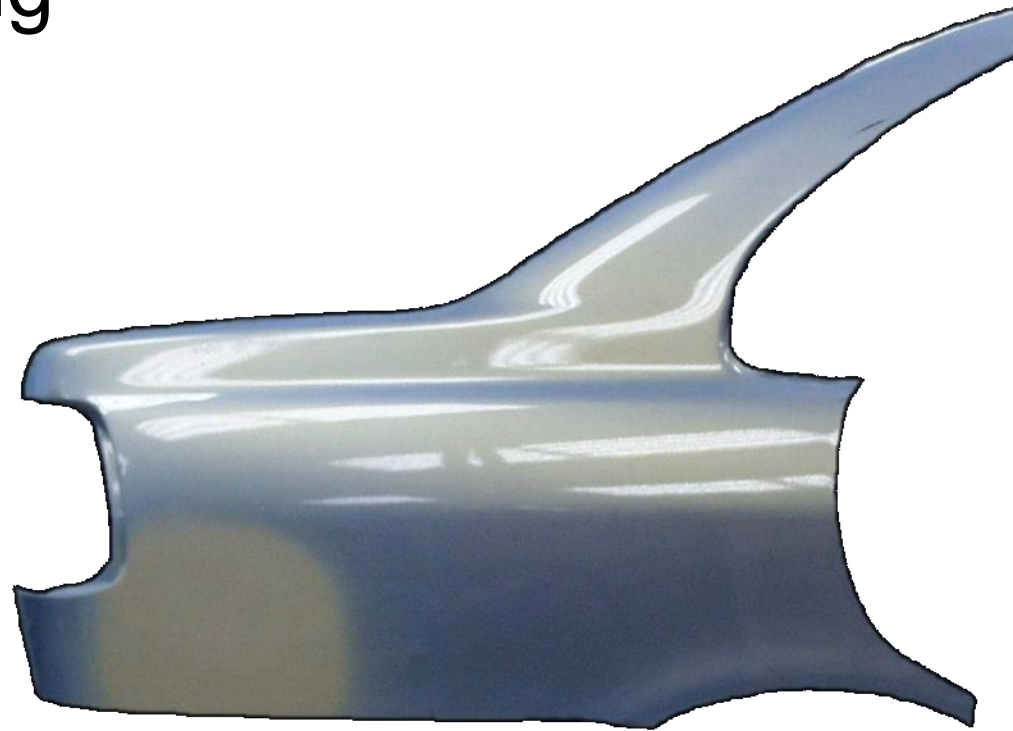
Application base coat



2-C Spot-repair



Polishing

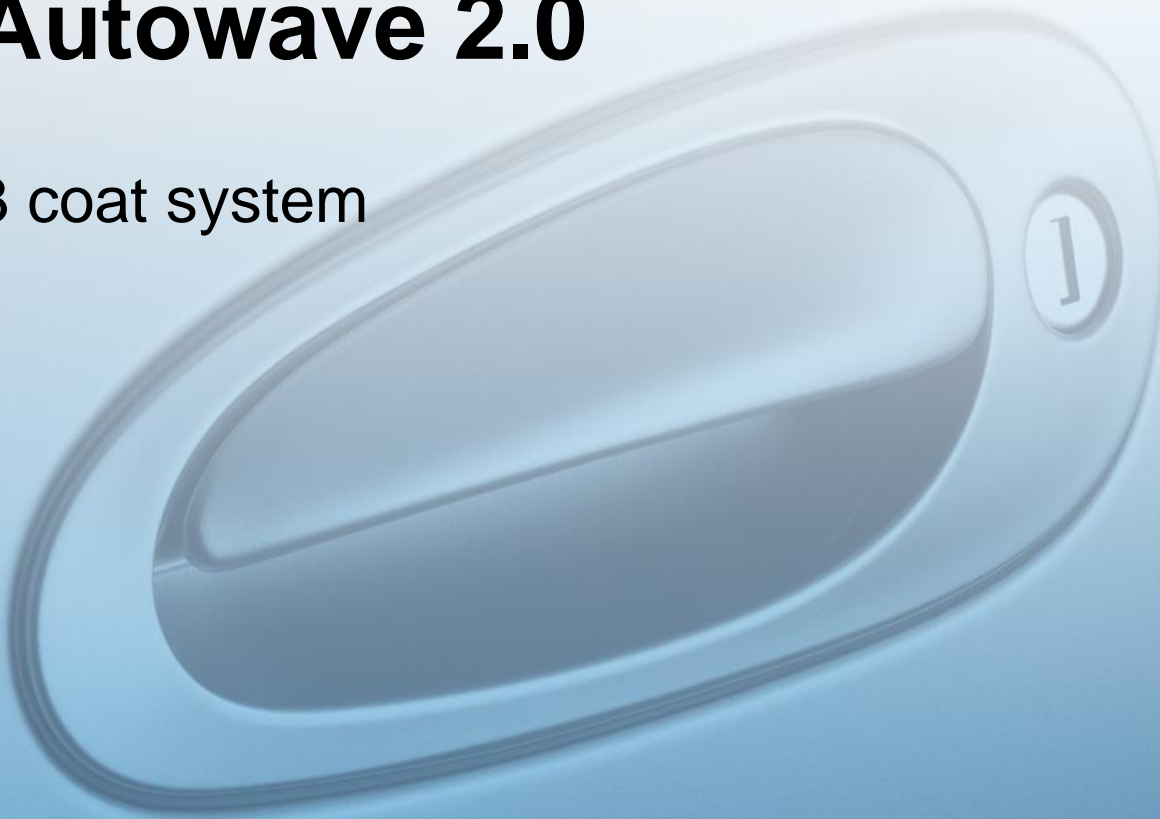


Soft pad with fine polish



Autowave 2.0

3 coat system



Program

Introduction

Theory – TDS explanation

3 coat system application

Theory – TDS explanation

Repair 3 coat system

Evaluation 3 coat system

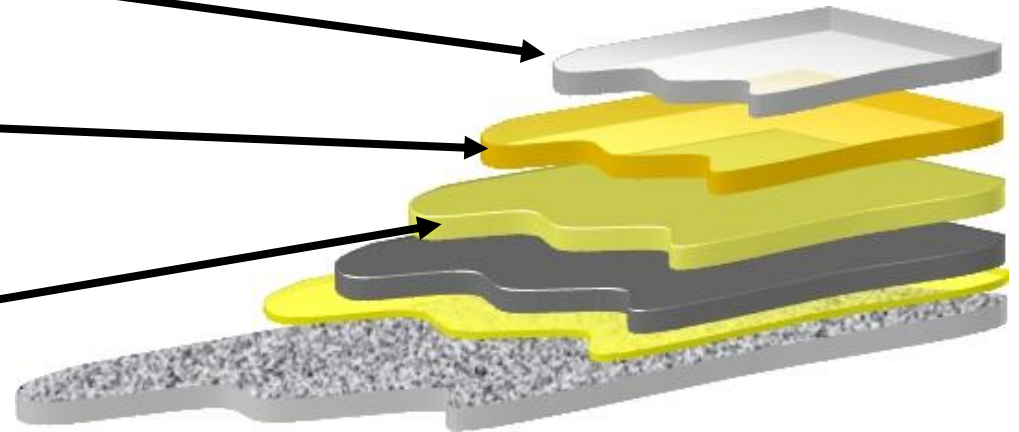


Most common 3 coat system

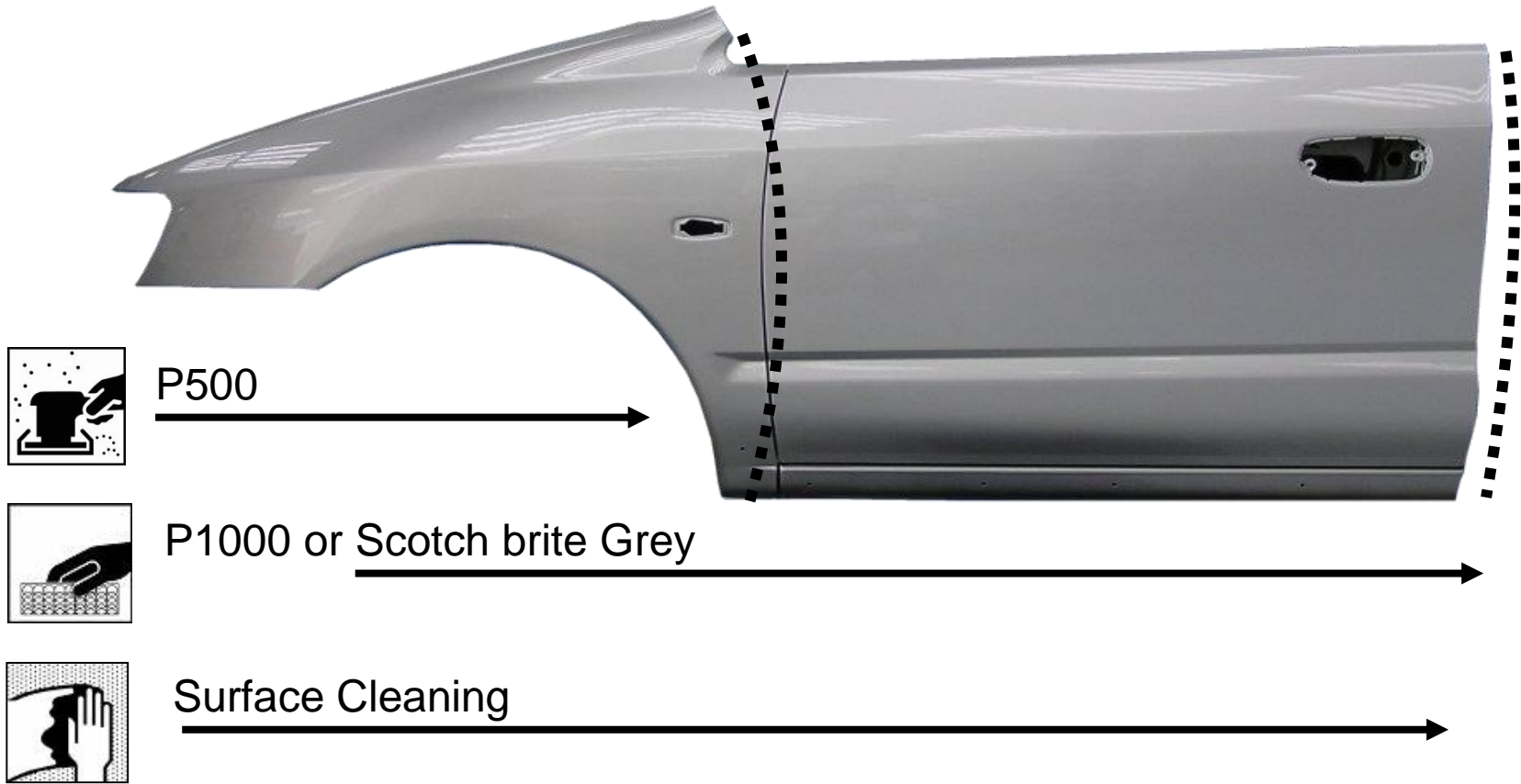
Clearcoat

Pearl effect coat

Solid Foundation coat



3 coat system preparation

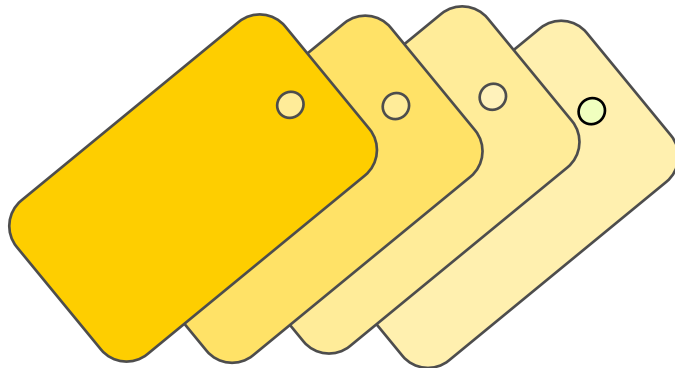


Color check (video)

Multiple number of layers creating the color effect

- 5 panels in the foundation coat
- Cover with 1-5 coats of the effect color

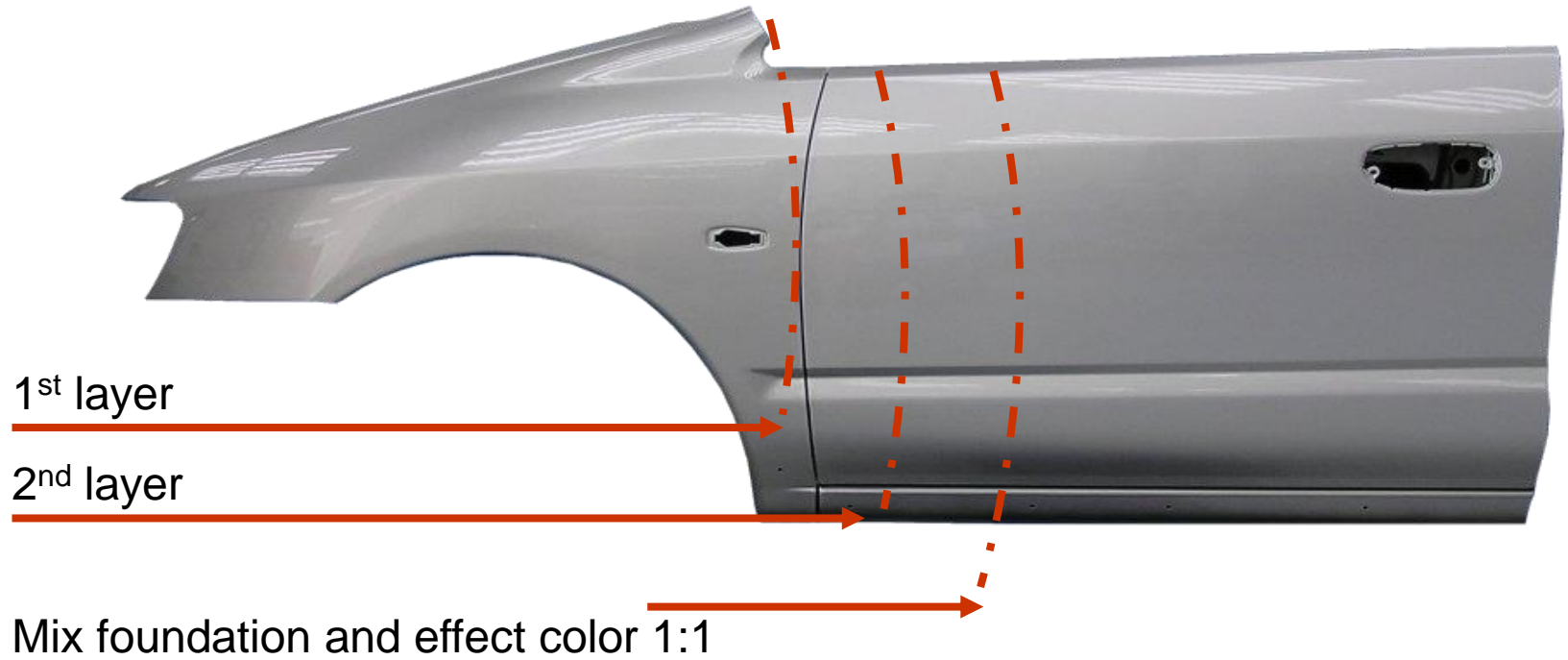
Always cover with a clearcoat



Select the closest matching panel



Application foundation coat



Application effect coat



3rd layer

2nd layer

1st layer



Clearcoat application



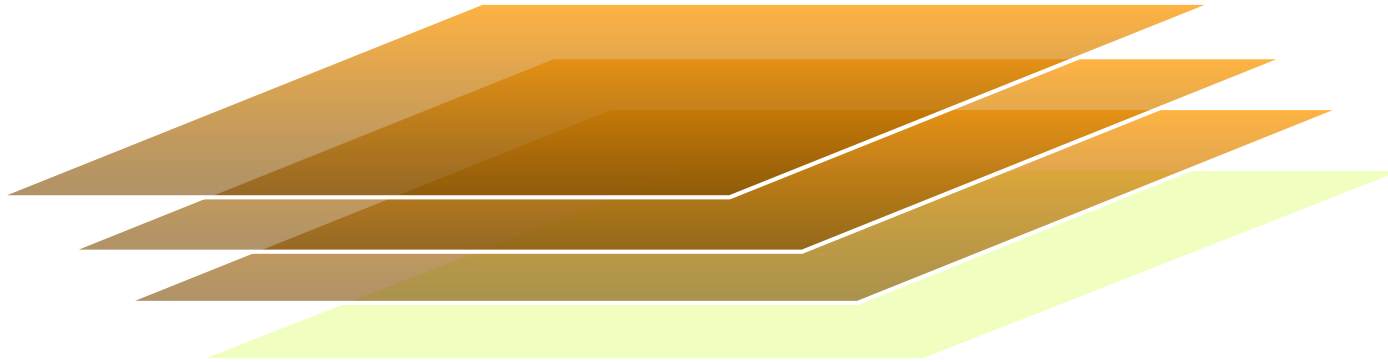
1st layer



2nd layer



Multiple layers & system properties



Higher layer thickness requires:

- Longer flash-off times between the layers
- Temperature increase between foundation & effect color
- Extra temperature and longer flash-off time before clearcoat application



To secure optimum system properties

1. ± 10 minutes temperature rise to 60°C after foundation coat
2. ± 15 minutes temperature rise to 60°C after effect coat
3. Sufficient cool down before Clearcoat application

