

# BONNFLON M Coating system

## 5 main features of BONNFLON M Coating system

BONNFLON M coating system is coating system using normal temperature drying fluoropolymer-resin as top coat on metal materials. This coating system prevents the material's deterioration for long term and protects the material and rust prevention coating by high weatherability fluoropolymer-resin paint.

- 1 Excellent weatherability and anti UV**  
Weatherability and anti ultra violet ray, which is the basic performance of fluoropolymer-resin paint, will prevent the deterioration of the paint's weatherability performance. Therefore, material protection, gloss and color beauty is kept for long term.

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- 2 Chemical resistances (Salt pollution, Acid rain etc)**  
BONNFLON marked excellent characteristic to the chemicals products, solvents like alkaline and acid. For the above reason, it is very affective to cruel area such as chemical factory area or salt polluted area suffered by salt pollution.

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- 3 Economical**  
The high weatherability makes the maintenance cycle far longer than the paints as usual. If you calculate the cost by each repainting (temporary work fee + construction fee) the running cost will be remarkably low.

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- 4 Great recoat ability**  
BONNFLON has excellent recoat system. It is possible to coat over the same type of paints and it is also easy to repaint.

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- 5 Excellent anti dirt system (SR)**  
BONNFLON SR has hydrophilic and oil repelling system in it. This helps to avoid the dirt to adherence to substrate and avoid making specific rivulets from the rainfall.

## Surface Preparation

Performance of rust prevention by paint depends on the elaboration of substrate preparation to the metal surface. Surface preparation is the most important process and painting durability is also influenced. Therefore, consideration is needed. Each painting's anticorrosive, wet ability, drying time and other painting's relation also depends on the suitability to the substrate. Consideration is needed for substrate preparation from application itself. The level of substrate preparation desirable to be high level than minimum level requested. The method and level of substrate preparation written in application is on below.

Type of Surface Preparation		
Preparation type	ISO standard	Surface Preparation
Blast Cleaning	Sa2 1/2	New: Prepare to metal color uniformly after removing the mill scale, rust, paint, oil and fats Renovation: Prepare the substrate to ash gray color uniformly and remove the deteriorated film and rust
Power tools Cleaning	St3	Remove deteriorated film and rust manually or by powered tools(electric sander grinder, scraper, wire, wheels, etc.) then expose the steel
Hand tools or Power tools Cleaning	St2	Remove deteriorated film and rust manually or by powered tools(electric sander grinder, scraper, wire, wheels, etc.) Scrape the rust generated portions until the steel exposed.

### Notice

#### 1 About the application

Bonnflon protects the material for long term because of its high weatherability. Although, the rust prevention and corrosion protection to the substrate is insufficient, paintings life will be short. Please plan and construct correspond with Bonnflon's weatherability.

#### 2 Treatment to the processing department and projected corner

Please do rust prevention on welded part and projected corner

#### 3 Secondary adjustments to the substrate (cleaning at construction site)

##### ①Welded part

Please prepare the surface by power tools or blast after flatten the welding flux sputter and grinder. Alkaline slug is adhered to the welded part. Please exposures about a month after welding or wash by neutralize liquid. Burned paint, marking materials and penetrate solution also must be removed carefully. When repainting the welded part, thick painting is needed to the recessed part to penetrate the paint.

##### ②Bolt parts, Rivet parts

If strong black scale is adhered, removing work is needed by power tools or hand tools. However, perfect removal is possible only by blast treatment. Therefore, substrate preparation will be insufficient. Please careful to this point and choose appropriate paint as well as thick painting process.

##### ③Rusted parts

If the material is damaged during constructing, transportation after coating in factory or rust occurred by degradation, please remove the rust till about SSPC-SP3 (SIS St3) by power tools.

##### ④Common parts

During transportation, safe keeping or construction, sea salt particle may stick and water wash may be needed. After water washing, please dry enough and remove moisture. Please remove concrete, oils and bituminous substance by scraper or disk sander. If it is impossible to remove by these tools, thinner wiping is useful. If zinc-rich typed painting is only used in factory painting, white rust may occur by long term exposure. Please remove by buff if white rust occurred.

# APPLICATION

## BONNIFLON GT M-50SR system (NEW Construction)

◇Applicable Substrate : Zinc plated surface (chemical conversion treatment), Aluminum material (chemical treatment), Bonderizing steel plate, Galvanized steel plate

Process	Materials to be used	Mixing M:H	Dilution (%)	Standard Coverage (kg / m <sup>2</sup> )	Times of coating	Coating Interval (23°C)		Coating Method
						In process	Out of process	
Surface Preparation	Chemical conversion treatment Degreasing, Cleaning Check the surface to be coated, remove adhered materials, stains that will work against the coating work.							
1 Under coat	BONN EPOCOAT #30HB M / H = 10 / 5	12.8 : 3.2	Exclusive Thinner 0 ~ 5	0.17	1	—	More than 16 h	Brush Roller Airless
2 Middle coat	BONNIFLON GT#2000 M / H = 15 / 3	13.0 : 1.0	Exclusive Thinner 10 ~ 40	0.15	1	—	More than 16 h	Brush Roller Airless
3 Top coat	BONNIFLON GT#2000SR Topcoat M / H = 12.5 / 2.5	12.5 : 2.5	Exclusive Thinner 20 ~ 30	0.15	1	—	—	Brush Roller Airless
Total times of coating					3			

## BONNIFLON GT M-60SR system (Renovation)

◇Applicable Substrate : Galvanized steel sheet (existing an old film: alkyd resin, chlorinated rubber, epoxy resin, urethane)

Process	Materials to be used	Mixing M:H	Dilution (%)	Standard Coverage (kg / m <sup>2</sup> )	Times of coating	Coating Interval (23°C)		Coating Method
						In process	Out of process	
Surface Preparation	Scraping: Remove deteriorated film and rust manually or by powered tools (electric sander grinder, scraper, wire wheels etc.) Remains the active films. Check the surface to be coated, remove adhered materials, stains that will work against the coating work.							
1 Under coat	BONN EPO COAT #55MP M / H = 10 / 5	12.8 : 3.2	Exclusive Thinner 0 ~ 5	0.17	1	—	More than 16 h ~ Within 7days	Brush Roller Airless
2 Middle coat	BONNIFLON GT#2000 M / H = 15 / 3	13.0 : 1.0	Exclusive Thinner 10 ~ 40	0.15	1	—	More than 16 h ~ Within 7days	Brush Roller Airless
3 Top coat	BONNIFLON GT#2000SR Topcoat M / H = 12.5 / 2.5	12.5 : 2.5	Exclusive Thinner 20 ~ 30	0.15	1	—	—	Brush Roller Airless
Total times of coating					3			

Notice1) Standard coverage is recalculated based on the coating efficiency of every coating method.

Coating method	Coating efficiency(%)
<b>Brush , Roller</b>	<b>80 ~ 100</b>
<b>Airless</b>	<b>60 ~ 80</b>
<b>Every spray gun</b>	<b>50 ~ 70</b>

Notice2) M stands for main agent, and H stands for hardener.

Notice3) The range of matt arrangement

	Full Gloss	Semi Gloss	Matt
BONNIFLON GT#2000	○	○	○
BONNIFLON GT#2000SR topcoat	○	○	○

※Please avoid using the paint of Matt and Semi gloss by roller because of surface irregularity.