Anti-Corrosion, Anti-Flame Silicone Based Hard Coating (NWK-910D,NWK-910VF)

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Anti-corrosion Silicone Based Hard Coating (NWK-910D or VF)

Ⅰ Summary of NWK-910D or VF

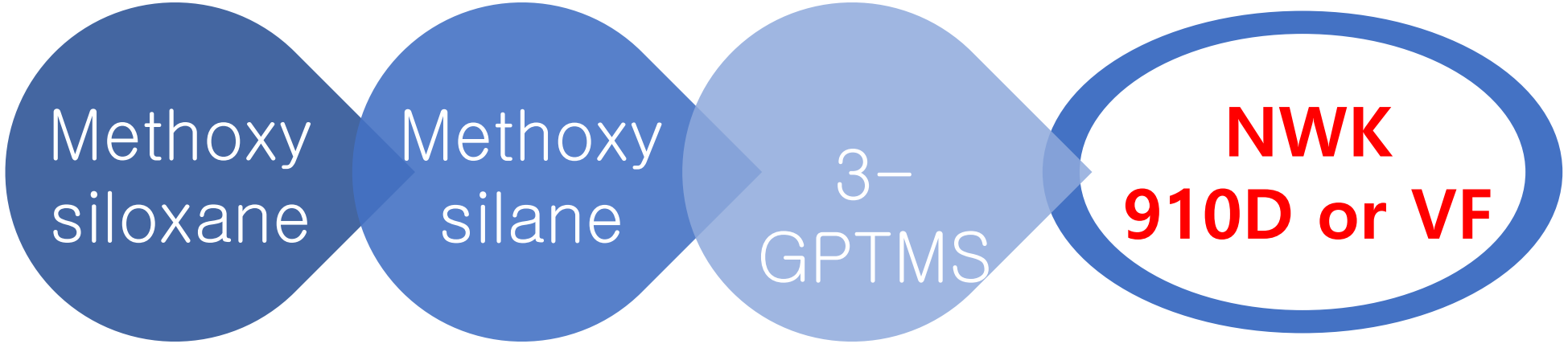
NWK's technology for silicon-based polymers offers coating products with a wide array of applications, including protection of metal surfaces from corrosion. Corrosion will destroy the most critical parts of a machine, bridge, or building, reducing its useful lifetime while creating the risk of destructive failure and pollution causing material waste. Risks associated with metal corrosion range from simple aesthetics problems to serious structural instability.

Ⅰ Summary of NWK-910D or VF

NWK-910D or VF

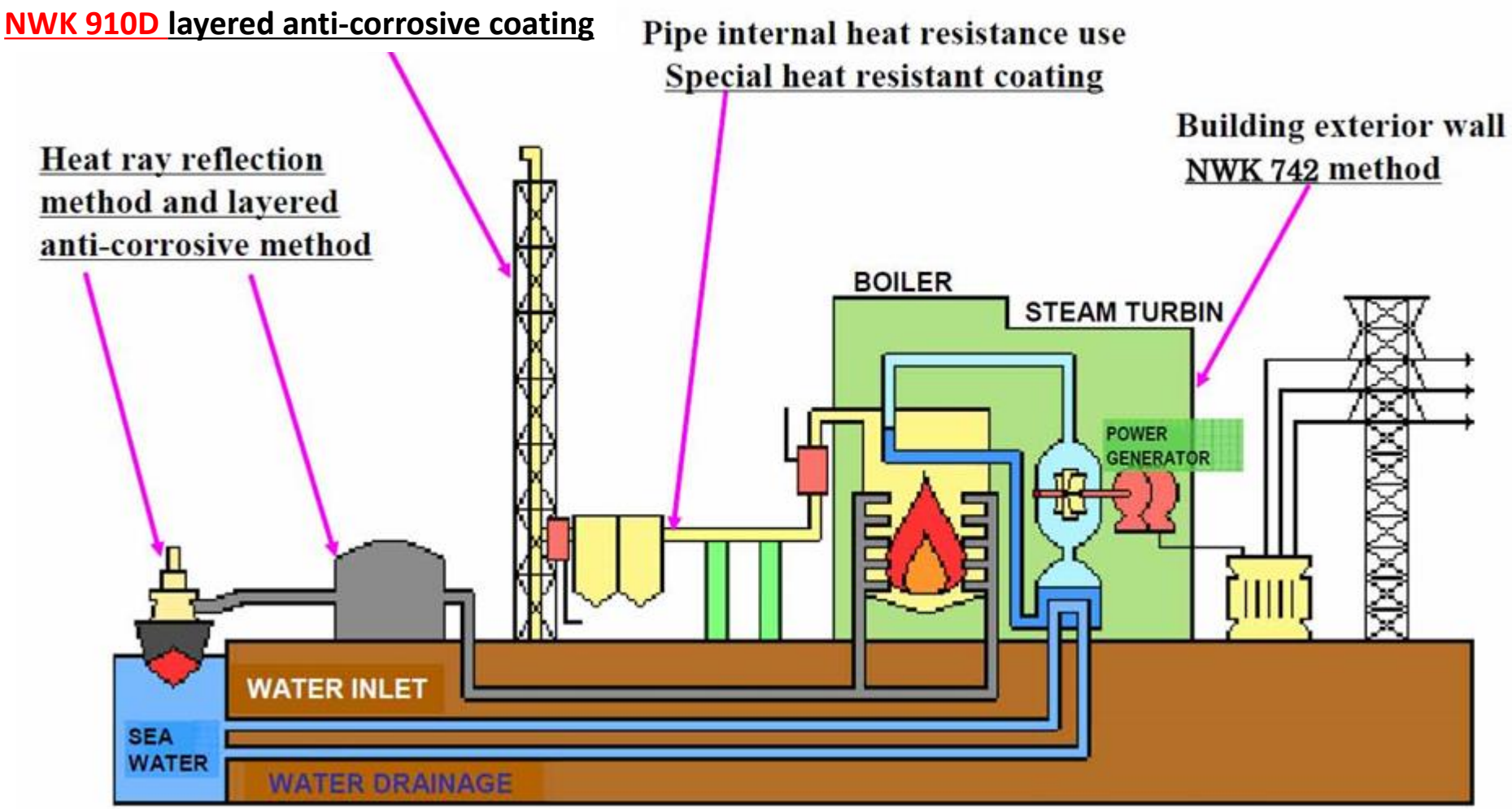
- **Incombustible**
- High surface hardness
  : Min 5H
- Natural Curing temperaure
  10~14days
  Heating cube setting
  35mins with 130℃
- Anti-corrosion
- Fire-resistant (1200℃)
- Anti-scratching (Min 5H)

II Schema of NWK-910D or VF



III Usage of NWK-910D or VF

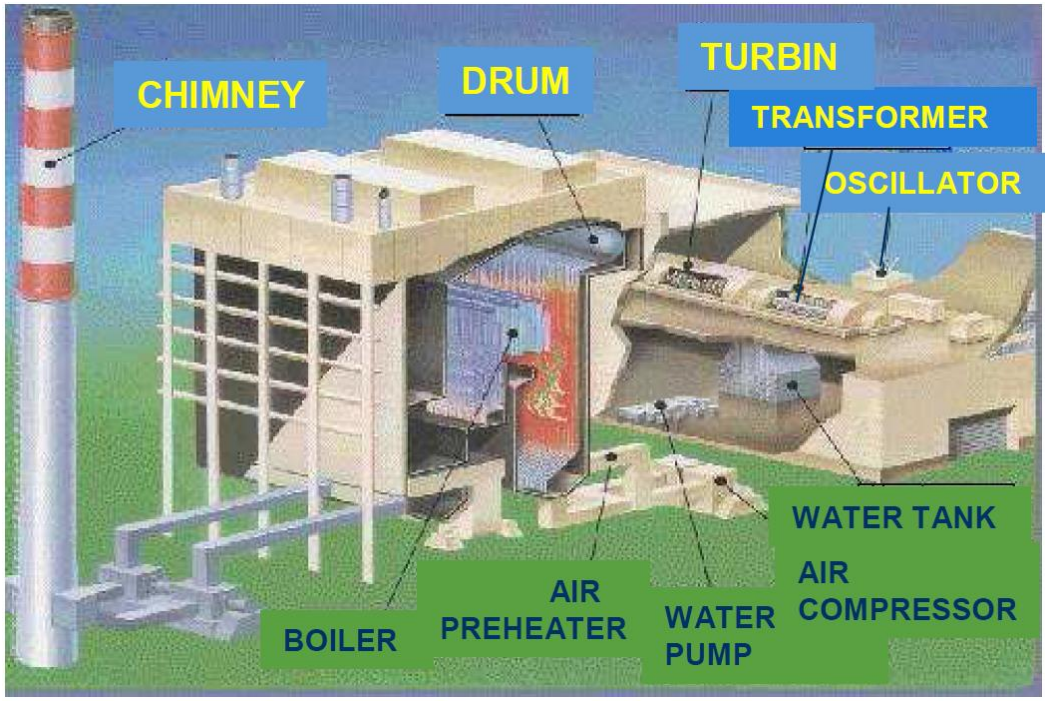
Ⅲ- Ⅰ Coating Application Examples



Ⅲ- Ⅱ Heat Resistant Coating Material

This line includes products that can resist temperatures as high as 1200℃

Power generation plants, high-temperature incinerators, smokestacks, etc.



Uses are diverse as the variety of facilities where heat is used.
This excellent coating materials is not only heat resistant,
it is also resistant to sulfurous acid gas and other chemicals!

Ⅲ-Ⅲ Heat Resistant Coating Application Examples

Thermal power station flue interior heat resistant coating installation
(resistant to sustained heat of 1200℃)

Ⅲ-Ⅳ Block Water(Steam) and Salt

1. Good stream blocking and low vapor permeability
2. High salt resistance (Content 20% salt)

Ⅳ Painting methods of NWK-910D or VF

1 -2COAT

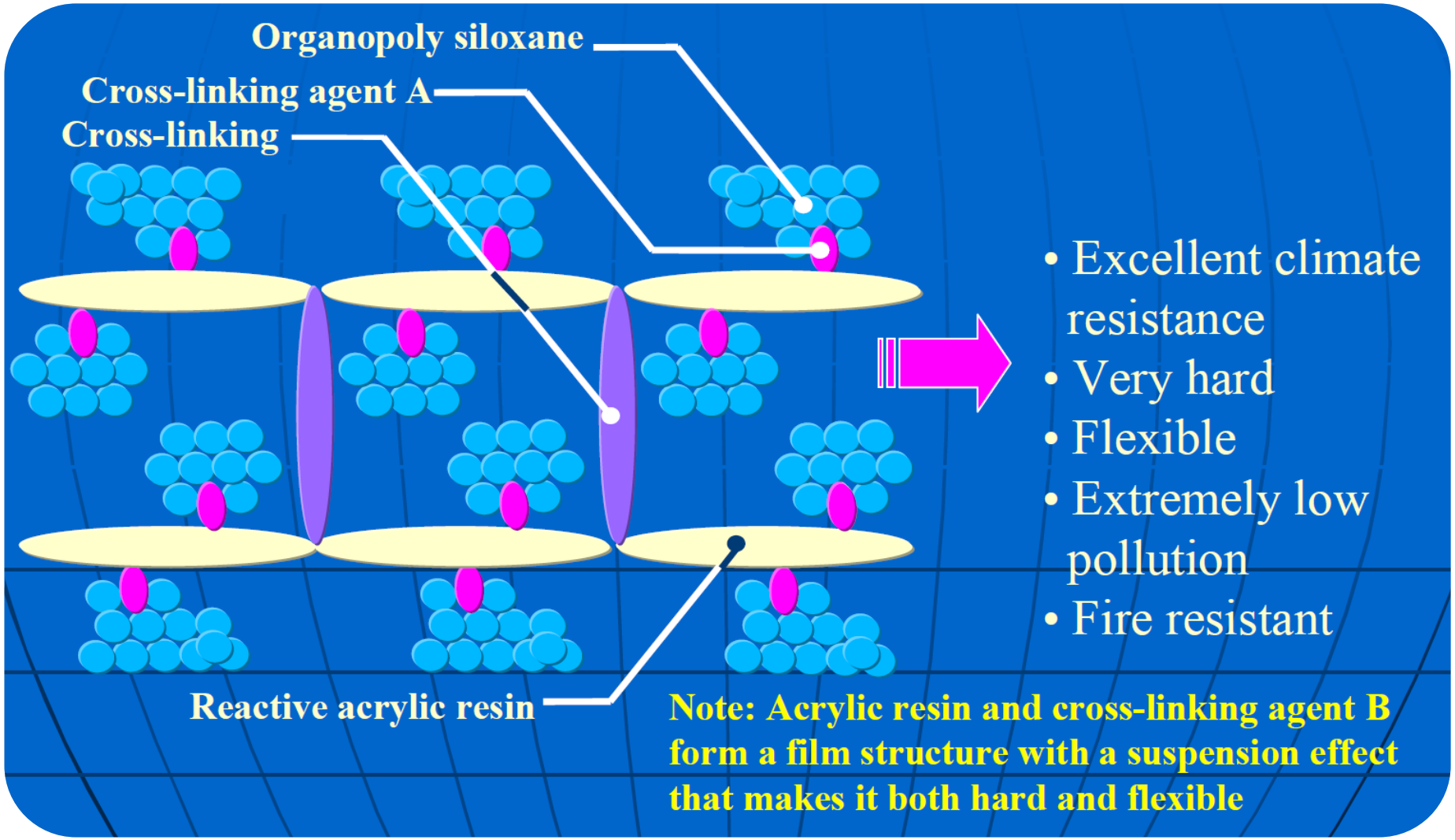
(Wet on wet with 15 minute)

Transparent

Construction tools Can be applied by air gun, spray

Standard Usage 1kg → 25~30㎡ (1 coat)

Ⅳ- Ⅰ Introduction to NWK-910D or VF

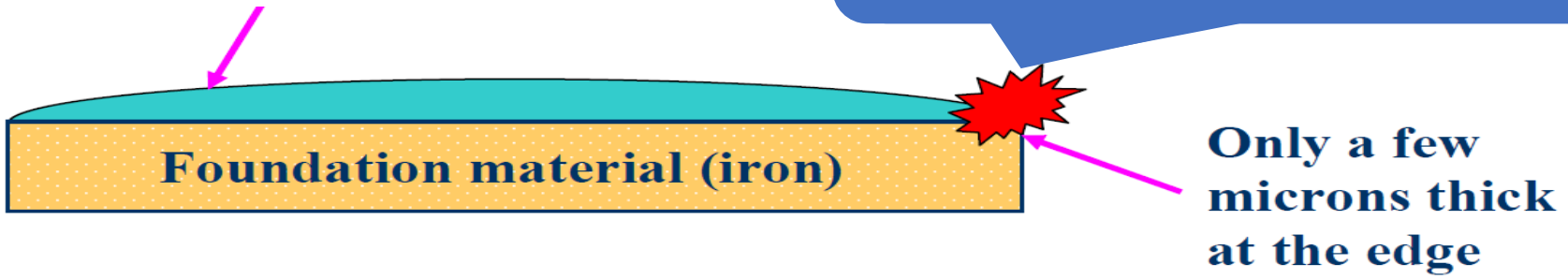


IV-II Rust-resistant Coating Material

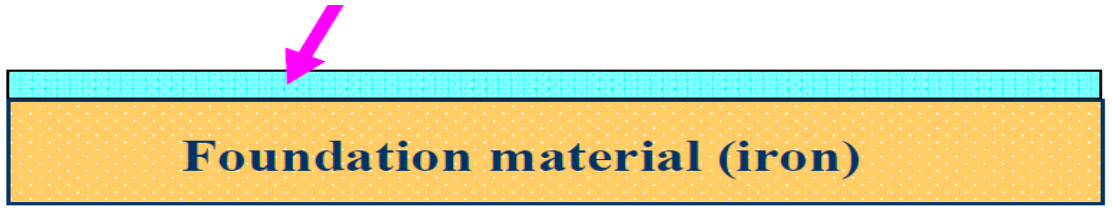
- Steam blocking, low vapor permeability are excellent.
- Salt-resistance is high

Organic coating material 100 μ – 200 μ

For any installation on earth, the coating is inevitably thinner at the edge because of surface tension



NWK-910D or VF system coating materials is protected by a top coating



NWK-910D or VF top coating film is only about 50μ, making it a thin film design from the outset.

Ⅳ-Ⅲ Realization of Amazing Durability

- NWK-910D or VF system is silicon technology.
- By combining the strengths of silicon materials, an excellent coating film that surpasses fluorine resin coating is achieved.
- As a finishing material, NWK-910D or VF(completely silicon, Natural Curing or Heating Curing System) is coated on metal.

Super long-term protection for coated materials that is impossible with conventional organic coating materials has been realized.

Ⅳ-Ⅳ What's the difference between 910D and 910VF

- NWK-910D : Natural Curing Temperature, No Pigment mixing, No Zinc powder or phosphate, 10~14days, Air gun spray

- NWK-910VF : Heat Curing System, Pigment and Zinc powder and phosphate mix possible

  2mins with max RPM by homogenizer, 35mins with 130°C, Air gun spray

Ⅴ Specification and properties of NWK-910D or VF

SECTION	NWK 910D or VF
Density(g/㎖)	0.87±0.04
Solids(%)	28±2
Appearance	Transparent
Chief Ingredients	poly(alkoxy-siloxane) in organic solvent mixture
Standard amount use(ℓ/㎡)	0.05~0.08
Shelf life	12 Months(Keep to room temperature in sealed)
Mixing ratio	Undiluted liquid

Div.	Pencil hardness	Wear resistance	Adhesion	Direct impact resistance	Corrosion Weathering
Results	Above 5H	Test O.K	Test O.K	Test O.K	Test O.K
Test method	ASTM D 3363	ASTM D 4060	ASTM D 4541	ASTM G 14	ASTM D 5894

※ This is our self test result. Can make difference by other experimental condition.