

WIRE TUBE CONDENSER (SINGLE LAYER)

- Raw material:**
- 1. Rolling welded steel tube: $\varnothing 4.76 \sim \varnothing 8 \times 0.71$
 - 2. low carbon steel wire $\varnothing 1.2 \sim \varnothing 1.6 \text{mm}$
 - 3. Bracket: Steel plate (SPCC) thickness: $T = 0.6 \sim 2.0 \text{mm}$
 - 4. Steel plate: SPCC thickness $T = 0.6 \sim 0.8 \text{mm}$

- Structure:**
- 1. Flat type of wire on tube condenser used at the back.
 - 2. Bended or spiral type of wire on tube condenser used at the bottom
 - 3. Wrapped type of tube embed on plate.

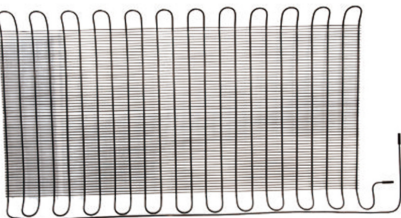
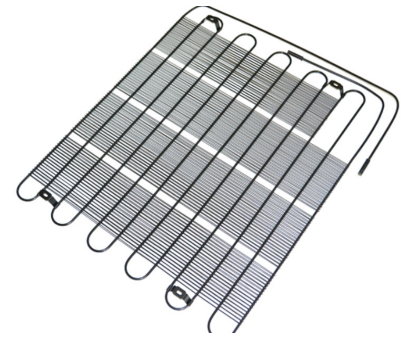
Key process:

Tube Bending, Welding, Fix the bracket, Weld the suction tube, (Folding or bending to shape), Leakage test, Cleaning, Coating, Inspection, Packing.

- Performance:**
- 1. Surface with electrophoresis coating to prevent the corrosion.
 - 2. Inner cleanness can meet the requirements of R134a & CFC cooling system.
 - 3. Can satisfy the cooling capability requirements.

Technical standards:

R134a Cooling system Tube Inside standards	Specification of E-coating
Residual moisture $\leq 5 \text{mg}/100 \text{cm}^3$ Residual impurity $\leq 10 \text{mg}/100 \text{cm}^3$ Residual mineral oil $\leq 100 \text{mg}/100 \text{cm}^3$ Residual chlorine $\leq 5 \text{vppm}$ Residual paraffin $\leq 3 \text{mg}/\text{m}^3$ Biggest single impurity $\leq 0.5 \text{mm}$	Coating thickness: Thickness of cathodic electrophoresis coating $15 \sim 20 \mu\text{m}$ Hardness of coating: $\geq 2 \text{H}$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: $R=3 \text{D}$ bend 180° . no crack or no fall off. Corrosion resistant (Salt spray GB2423): Cathodic electrophoresis coating $\geq 72 \text{h}$



WIRE TUBE CONDENSER (MULTILAYER)

- Raw material:**
- 1. Rolling welded steel tube: $\varnothing 4.76 \sim \varnothing 8 \times 0.71$
 - 2. low carbon steel wire $\varnothing 1.2 \sim \varnothing 1.6 \text{mm}$
 - 3. Bracket: Steel plate (SPCC) thickness: $T = 0.6 \sim 2.0 \text{mm}$
 - 4. Steel plate: SPCC thickness $T = 0.6 \sim 0.8 \text{mm}$

- Structure:**
- 1. Multilayer folding
 - 2. Multi-layer reel type
 - 3. Multi-layer welding assembled

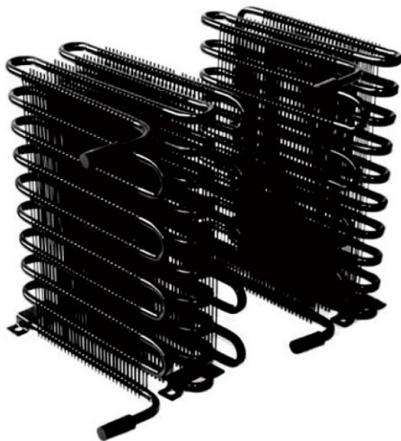
Key process:

Tube Bending, Welding, Fix the bracket, Weld the suction tube, (Folding or bending to shape), Leakage test, Cleaning, Coating, Inspection, Packing.

- Performance:**
- 1. Surface with electrophoresis coating to prevent the corrosion.
 - 2. Inner cleanness can meet the requirements of R134a & CFC cooling system.
 - 3. Can satisfy the cooling capability requirements.

Technical standards:

R134a Cooling system Tube Inside standards	Specification of E-coating
Residual moisture $\leq 5 \text{mg}/100 \text{cm}^3$ Residual impurity $\leq 10 \text{mg}/100 \text{cm}^3$ Residual mineral oil $\leq 100 \text{mg}/100 \text{cm}^3$ Residual chlorine $\leq 5 \text{vppm}$ Residual paraffin $\leq 3 \text{mg}/\text{m}^3$ Biggest single impurity $\leq 0.5 \text{mm}$	Coating thickness: Thickness of cathodic electrophoresis coating $15 \sim 20 \mu\text{m}$ Hardness of coating: $\geq 2 \text{H}$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: $R=3 \text{D}$ bend 180° . no crack or no fall off. Corrosion resistant (Salt spray GB2423): Cathodic electrophoresis coating $\geq 72 \text{h}$



TUBE ON PLATE CONDENSER

Raw material:

- 1. Rolling welded steel tube: $\varnothing 4.76 \sim \varnothing 8 \times 0.71$
- 2. Steel plate: SPCC thickness $T=0.28 \sim 0.40\text{mm}$
- 3. Bracket: Steel plate (SPCC) thickness: $T=0.6 \sim 2.0\text{mm}$

Structure:

- 1. The type of floding drum
- 2. Welding Assembled type



Key process:

Tube Bending, fin punching. Plate tube welding, Folding or bending to shape, Fix the bracket. Welding and assembling, Leakage test, Cleaning, Coating, Inspection, Packing.



Performance:

- 1. Surface with electrophoresis coating to prevent corrosion.
- 2. Inner cleanness can meet the requirements of R134a & CFC cooling system.
- 3. Can satisfy the cooling capability requirements.

Technical standards:

R134a Cooling system Tube Inside standards	Specification of E-coating
Residual moisture $\leq 5\text{mg}/100\text{cm}^3$ Residual impurity $\leq 10\text{mg}/100\text{cm}^3$ Residual mineral oil $\leq 100\text{mg}/100\text{cm}^3$ Residual chlorine $\leq 5\text{vlopmm}$ Residual paraffin $\leq 3\text{mg}/\text{m}^3$ Biggest single impurity $\leq 0.5\text{mm}$	Coating thickness 1. Thickness of cathodic electrophoresis coating $15 \sim 20\mu\text{m}$ 2. Powder coating thick plate and tube < omdenser: $60 \sim 300\mu\text{m}$ Hardness of coating: $\geq 2\text{H}$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: $R=3\text{D}$ bend 180° . no crack or no fall off. Color tolerance of powder painting: $\Delta E \leq 1.5$ Corrosion resistant (Salt spray GB2423): 1. Cathodic electrophoresis coating $\geq 72\text{h}$ 2. Powder painig $\geq 200\text{h}$

WINDOW BLIND CONDENSER OF TUBE ON PLATE CONDENSER

Raw material:

- 1. Rolling welded steel tube: $\varnothing 4.76 \sim \varnothing 8 \times 0.71$
- 2. Steel plate: SPCC thickness $T=0.28 \sim 0.40\text{mm}$
- 3. Bracket: Steel plate (SPCC) thickness: $T=0.3 \sim 0.6\text{mm}$

Structure:

- 1. The type of floding drum
- 2. Flat type of wire on tube condenser used at the back



Key process:

Tube Bending, fin punching. window blind welding, Folding or bending to shape, Fix the bracket. Welding and assembling, Leakage test, Cleaning, Coating, Inspection, Packing.



Performance:

- 1. Surface with electrophoresis coating to prevent corrosion.
- 2. Inner cleanness can meet the requirements of R134a & CFC cooling system.
- 3. Can satisfy the cooling capability requirements.

Technical standards:

R134a Cooling system Tube Inside standards	Specification of E-coating
Residual moisture $\leq 5\text{mg}/100\text{cm}^3$ Residual impurity $\leq 10\text{mg}/100\text{cm}^3$ Residual mineral oil $\leq 100\text{mg}/100\text{cm}^3$ Residual chlorine $\leq 5\text{vlopmm}$ Residual paraffin $\leq 3\text{mg}/\text{m}^3$ Biggest single impurity $\leq 0.5\text{mm}$	Coating thickness: Thickness of cathodic electrophoresis coating $15 \sim 20\mu\text{m}$ Hardness of coating: $\geq 2\text{H}$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: $R=3\text{D}$ bend 180° . no crack or no fall off. Corrosion resistant (Salt spray GB2423): Cathodic electrophoresis coating $\geq 72\text{h}$

WIRE TUBE EVAPORATOR

Raw material:

- 1. Rolling welded steel pipe: $\varnothing 8 \times 0.71$, with wall thickness 0.7
- 2. low carbon steel wire $\varnothing 1.2 \sim \varnothing 1.6$ mm
- 3. Bracket: Steel plate (SPCC) thickness 0.6~0.9mm

Structure:

- Structure 1: evaporator for single temperature control system
- Structure 2: evaporator for double temperature control system
- Structure 3: evaporator for three way temperature control system

Key process:

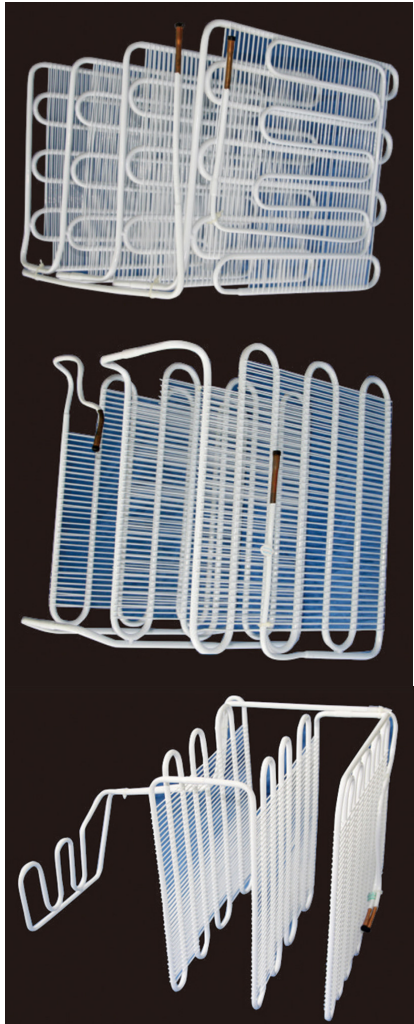
Tube bending, Welding, Mono shelf assemble, Assembly welding.
Leakage test, Cleaning, Coating, Inspection, Packing

Performance:

- 1. Surface treated with electrophoresis or powder painting to prevent corrosion.
- 2. Inner cleanness can meet the requirements of R134a & CFC cooling system.
- 3. Can satisfy the cooling capability requirements.

Technical standards:

R134a Cooling system Tube Inside standards		Specification of E-coating
Linear measure	$\leq 0.004L$	Coating thickness 1. Thickness of cathodic electrophoresis coating 15~20 μ m 2. Thickness of wire-tube evaporator powder coating: 60-300 μ m Hardness of coating: $\geq 2H$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: R=3D bend 180°, no crack or no fall off. Color tolerance of powder painting: $\Delta E \leq 1.5$ Corrosion resistant (Salt spray GB2423): 1. Cathodic electrophoresis coating $\geq 72h$ 2. Powder painting $\geq 200h$
Verticality	$\leq 0.0047B2$	
Residual moisture	$\leq 5mg/100cm^3$	
Residual impurity	$\leq 10mg/100cm^3$	
Residual mineral oil	$\leq 10mg/100cm^3$	
Residual chlorine	$\leq 5vppm$	
Residual paraffin	$\leq 3mg/cm^3$	
Biggest single impurity	$\leq 0.5mm$	



CONDENSER USED INSIDE

Raw material:

Galvanized steel or aluminum tube: $\varnothing 4.0 \sim \varnothing 8.0 \times 0.71$

Structure:

Flat type of wire on tube condenser used inside

Key process:

Tube Bending, Leakage test, Drying, Inspection, Packing

Performance:

- 1. The product surface galvanized or painted PVC, meet the product
- 2. Inner cleanness can meet the requirements of R134a & CFC cooling system
- 3. Can satisfy the cooling capability requirements

Technical standards:

R134a Cooling system Tube Inside standards		Specification of E-coating
Residual moisture	$\leq 5mg/100cm^3$	Coating thickness Zinc coating thickness 3.0 μ m ~ 5.0 μ m Hardness of coating: $\geq 2H$ Impact of coating: 50cmg. kg/cm impact, no crack Adhesion of coating: \geq two grade Flexibility of coating Around: R=3D bend 180°, no crack or no fall off Corrosion resistant (Salt spray GB2423): $\geq 72h$
Residual impurity	$\leq 10mg/100cm^3$	
Residual mineral oil	$\leq 100mg/100cm^3$	
Residual chlorine	$\leq 5vppm$	
Residual paraffin	$\leq 3mg/m^3$	
Biggest single impurity	$\leq 0.5mm$	

