# Model XLT

Flat Plate Cross Flow Heat Exchanger

Sizes from 50 to 80,000 cfm

Standard Operating Temperatures to 190 °F with Optional Capability to 390 °F

Standard Operating Pressure Differential to 7.2 Inches w.g. with Optional Capability to 27 Inches w.g.

**Flat or Corrugated Plate Surfaces** 

Vertical or Horizontal Mounting Options

Aluminum, Epoxy Coated Aluminum, or Stainless Steel Plates

Performance Verified by Certified Laboratories under ASHRAE and ARI Standards

The Model XLT is a top performer with high heat transfer effectiveness, low pressure drop, and minimum maintenance.









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#### Introduction

## **Applications**

The Model XLT<sup>™</sup> heat exchanger can be applied to all kinds of indoor air quality control and improvement applications as well as to a variety of industrial applications including, but not limited to:

- Auditoriums
- Child Care Facilities
- Churches
- City Halls and Community Facilities
- Commercial and Military Offices
- Conference Centers
- Controlled Climate Factories
- Correctional Facilities
- Healthcare Facilities, Hospitals, Clinics, and Laboratories
- Hotels
- Industrial Process Air Management
- Libraries
- Maintenance Facilities
- Museums
- Nursing Homes
- Pet, Veterinary Care, and Kennels
- Pools, Water Parks, and Natatoriums
- Process Manufacturing Facilities
- Recreational and Fitness Centers
- Schools and Universities
- Welding Areas
- Waste and Water Treatment Plants
- Zoos

#### Value

 Payback for Model XLT exchangers begins prior to installation. Their ability to recover exhaust energy reduces the demands of the mechanical heating and cooling equipment and energy by up to 75%, allowing smaller equipment to be selected.

- High energy transfer effectiveness, low pressure drop, minimum maintenance, and a wide variety of sizes make the Model XLT a unique product among its competitors.
- Highly effective sensible energy transfer, from 50 to 70%.
- Plate edges are sealed and folded for tightness and low leakage resulting in higher performance and noncontaminating energy transfer. Additional sealing for stricter applications and a leakage testing certificate are both available options.
- Experienced and knowledgeable staff provide highly responsive service and support.

#### Features

- Standard operating conditions for aluminum exchangers up to 190 °F and 7.2 inches water gauge (w.g.) air-stream pressure differential.
  - o Optional higher operating conditions up to 390 °F and 27" w.g. pressure differential.
- Standard operating conditions for stainless steel exchangers up to 190 °F and 16 inches w.g. pressure differential.
  - o Optional higher operating conditions up to 440 °F.

The following sections of this Product Guide describe the design and features of the XLT Heat Exchanger.

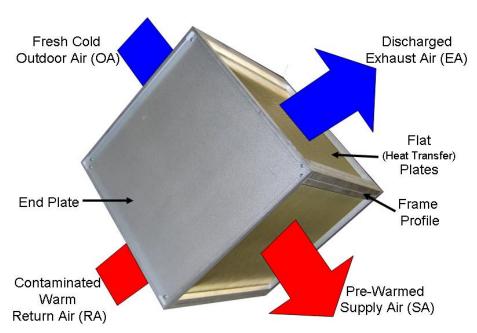
#### Overview

The XeteX XLT line of heat exchangers are constructed of aluminum or stainless steel flat plates. Additionally, the aluminium exchanger is available with epoxy-coated plates, protective-coated frame profiles and end plates.



The following provides a quick-glance summary of Model XLT Types:

Model	Description	Single Pass Ef- fectiveness	Sealing Material and Maximum Operating Temperature	Maximum Pressure Dif- ferential
XLT Type H	Highly effective corrugated aluminium plates (This is our standard, most widely used type)	65 to 75%	Standard Silicone Free	7.2 inches w.g
XLT Type F	Low pressure drop non- corrugated aluminium plates with no debris pinch points	55 to 65%	Sealant 190°F / 90°C  Optional Silicone with Acetum 390°F / 200°C	3.2 inches w.g
XLT Type P	High pressure resistant cor- rugated aluminium plates	65 to 75%		27 inches w.g
XLT Type S	Highly effective, high pressure, and corrosive resistant corrugated stainless steel plates	65 to 70%	Standard Silicone Free Sealant 190°F / 90°C Optional Silicone with Acetum 390°F / 200°C Optional High Temp Sili- cone 440°F / 230°C	16 inches w.g.



Air-to-Air Flat Plate Cross Flow Heat Exchanger Basics (Heating Mode Shown)



# **Summary Information**

# Tightness and Leakage

The standard Model XLT uses a siliconefree sealant and glue in the folded plate edges. This construction results in a heat exchanger with very low leakage (internally and externally)—approximately 0.1% of the nominal air flow at a pressure difference of 1.6 inches w.g.

For applications with a temperature range requiring silicone-based sealant (> 190 °F), the folded plate edges are not glued. This

provides a typical maximum leakage (internally and externally) of approximately 1% or less of the nominal air flow at a pressure difference of 1.6 inches w.g.

For applications requiring lowest possible leakage, the Model XLT can be custom ordered with a layer of lacquer coating over the folded plate edge joints.

As an option, the exchanger can be factory tested for leakage. A leakage test certificate for this procedure is then provided with the exchanger.

## Temperature Ratings

Aluminum Material (Types H, F, and P)									
Standard Sealing Material	Silicone Free	Up to 190°F / 90°C							
Special—High Temp	Silicone with Acetum	Up to 390°F / 200°C							
Stainless Steel Material (Type S)									
Standard Sealing Material	Silicone Free	Up to 190°F / 90°C							
Special—High Temp	Silicone with Acetum	Up to 390°F / 200°C							
Special—Very High Temp	High Temp Silicone	Up to 440°F / 230°C							

Please Note: Silicone is usually not allowed in applications involving paint spray booths or electronics cooling.

#### Allowed Pressure Differentials

The following are the maximum allowed pressure differences between airstreams:

XLT Type H	7.2 inches w.g.
XLT Type F	3.2 inches w.g.
XLT Type P	27 inches w.g.
XLT Type S	16 inches w.g.

These pressure differences are the maximum values the heat exchanger plates can withstand without permanent deformation.

The following sections provide greater detail about each Model XLT type.



# **XLT Type H Exchanger**

The XLT Type H ("High Effectiveness") is characterized by a specialized corrugated plate structure that improves heat transfer. Heat transfer is enhanced by creating turbulence that breaks down the surface boundary layer effect of the otherwise-laminar airstreams. This turbulence does not create any particulate stagnation points or air velocity changes and only causes a minor increase in pressure drop.

#### Standard exchanger includes:

- Raw aluminum flat plates.
- Extruded aluminum frame profiles.
- Aluminum-Zinc (aluzink) coated sheet metal end plates.
- Maximum allowable pressure differential to 7.2 inches w.g.
- Single pass effectiveness of up to 65–70%.
- Standard non-silicone sealant capable of withstanding up to 190°F. Silicone with acetum sealant capable of withstanding up to 390°F. (Refer to Appendix D: Sealant Specifications.)
- Aluminum thickness of 0.008". (For more information on the aluminum



material, refer to Appendix B: Aluminum Material Specification.)

#### Special order options include:

- Epoxy coated flat plates for corrosive applications. (For detailed information about this coating, refer to Appendix C: Epoxy Coating Material Specification. Contact XeteX for other coatings.)
- Powder coated epoxy frame profiles and end plates for added corrosion resistance.

#### Model Nomenclature

XLT 30G-36E

This is an **XLT** Type H (note no designation for Type H as this is our standard), It is nominal **30** inches by **30** inches (end plate height and width approximate measurement), **G** Plate spacing,

Nominal **36** inches long (end plate to end plate approximate measurement), and **E**—Optional Epoxy Coated Plates.

#### Horizontal Installation

With the very stable and light-weight corrugated surface design, the Type H can be mounted with the plates in a horizontal position. For such applications, a maximum module width (dim. A in the following table) of 30" is recommended. Wider exchangers may be constructed using two or more smaller exchanger blocks to avoid excessive stress on the plates that may result in settling or flattening.

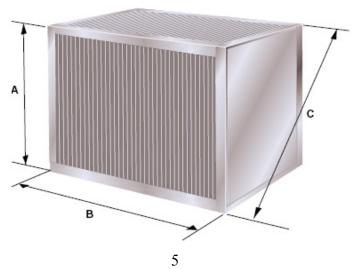


The XLT Type H has a corrugated surface that creates turbulence and thus a high heat transfer rate in the heat exchanger channels. The corrugation is designed in such a way that it is self cleaning, i.e. it creates no "dead zones" where dirt can accumulate. The high heat transfer rate of this plate design makes it possible to have a wider plate spacing (compared with other plate designs) while maintaining a target heat transfer effectiveness. This wider plate spacing lowers pressure drop and also makes it easier to inspect—and, if necessary, clean—the heat exchanger.

There are no unnecessary joints between plates where dirt and bacteria can collect, as in some heat exchanger designs where a corrugated plate is inserted between two flat plates to form the channels.

Туре Н	Α	В	С	Available Plate Spacings*										
Model	(Height and Width)	(Nominal Length)	(Diagonal)	B .12"	C .13"	F .17"	G .18"	H .20"	l .24"	J .26"	K .30"	M .35"	O .41"	P .47"
XLT 17	16.73"	8" to 40"	23.66"		Х	Х		Х		Х				
XLT 20	19.29"	10" to 48"	27.28"		Х	Х		Х						
XLT 24	23.62"	10 10 46	33.43"	Х			Х		Х		Х	Х	Х	Х
XLT 30	29.53"	12" to 48"	41.77"				Х		Х		Х	Х	Х	Х
XLT 40	39.37"		55.67"					Х	Х		Х	Х	Х	Х
XLT 50	47.24"		66.81"				Х		Х		Х	Х	Х	Х
XLT 60	59.05"		83.54"				Х		Х		Х	Х	Х	х
XLT 80	78.74"	14" to 48"	111.34"					Х	Х		Х	Х	Х	Х
XLT 90	88.58"		125.27"				Х		Х		Х	Х	Х	Х
XLT 100	94.49"		133.62"				Х		Х		Х	Х	Х	Х
XLT 120	118.11"		167.03"					Х	Х		Х	Х	Х	Х

\* See Appendix A: Plate Spacing Specification



Specifications and dimensions are subject to change without notice.



#### XLT Type F Exchanger

The XLT Type F ("Flat" Low Pressure Drop) is characterized by a smooth plate surface. The smooth plates provide a lower pressure drop and allow for heavier and larger particles to pass through without risk of clogging or fouling. The Type–F is ideal for applications that involve air containing fibrous debris. The smooth plates also provide easy access for inspection and cleaning, if needed.

#### Standard exchanger includes:

- Raw aluminum flat plates.
- Extruded aluminum frame profiles.
- Aluminum-Zinc (aluzink) coated sheet metal end plates.
- Maximum allowable pressure differential to 3.2 inches w.g.
- Single pass effectiveness of up to 55–60%.
- Standard non-silicone sealant capable of withstanding up to 190°F. Silicone with acetum sealant capable of withstanding up to 390°F. (Refer to Appendix D: Sealant Specifications.)
- Aluminum thickness is 0.008". (For more information on the



aluminum material, refer to Appendix B: Aluminum Material Specification.)

#### Special order options include:

- Epoxy coated flat plates for corrosive applications. (For detailed information about this coating, refer to Appendix C: Epoxy Coating Material Specification. Contact XeteX for other coatings.)
- Powder coated epoxy frame profiles and end plates for added corrosion resistance.

#### Model Nomenclature

XLT-F 30L-36E

This is an **XLT** Type **F**,

It is nominal **30** inches by **30** inches (end plate height and width approximate measurement), **L** Plate spacing,

Nominal **36** inches long (end plate to end plate approximate measurement), and **E**—Optional Epoxy Coated Plates.

#### Horizontal Installation

Horizontal installation is not recommended for the Type F.



The XLT Type F has flat plate surfaces that provide a lower pressure drop and allow for heavier and larger particles to pass through without risk of clogging or fouling. This is ideal for polluted environments.

There are no unnecessary joints between plates where dirt and bacteria can collect, as in some heat exchanger designs where a corrugated plate is inserted between two flat plates to form the channels.

	A	В	С	Available	e Plate Sp	acings*
Type F Model	(Height and Width)	(Nominal Length)	(Diagonal)	L .31"	N .37"	O .43"
XLT 24	23.62"	10" to 48"	33.43"	Х	х	х
XLT 30	29.53"	12" to 48"	41.77"	Х	х	х
XLT 40	39.37"		55.67"	Х	х	х
XLT 50	47.24"		66.81"	Х	х	х
XLT 60	59.05"	14" to 48"	83.54"	Х	х	х
XLT 80	78.74"		111.34"	Х	х	х
XLT 100	94.49"		133.62"	Х	х	х

<sup>\*</sup> See Appendix A: Plate Spacing Specification





# **XLT Type P Exchanger**

The XLT Type P ("Pressure Resistant") is characterized by both a corrugated plate structure for high effectiveness in heat transfer along with an ability to withstand high pressure differentials—up to 27 inches w.g.

#### Standard exchanger includes:

- Raw aluminum flat plates.
- Extruded aluminum frame profiles.
- Aluminum-Zinc (aluzink) coated sheet metal end plates.
- Maximum allowable pressure differential to 27 inches w.g.
- Single pass effectiveness of up to 65–70%.
- Standard non-silicone sealant capable of withstanding up to 190°F. Silicone with acetum sealant capable of withstanding up to 390°F. (Refer to Appendix D: Sealant Specifications.)
- Aluminum thickness is 0.012". (For more information on the aluminum material, refer to Appendix B: Aluminum Material Specification.)



#### Special order options include:

- Epoxy coated flat plates for corrosive applications. (For detailed information about this coating, refer to Appendix C: Epoxy Coating Material Specification. Contact XeteX for other coatings.)
- Powder coated epoxy frame profiles and end plates for added corrosion resistance.

#### Model Nomenclature

XLT-P 30M-36E

This is an **XLT** Type **P**,

It is nominal **30** inches by **30** inches (end plate height and width approximate measurement), **M** Plate spacing,

Nominal **36** inches long (end plate to end plate approximate measurement), and **E**—Optional Epoxy Coated Plates.

#### Horizontal Installation

With the very stable and light weight design of the corrugated surfaces, the Type P can be mounted with the plates in a horizontal position.



The XLT Type P has a corrugated surface that creates turbulence and thus a high heat transfer rate in the heat exchanger channels. The corrugation is designed in such a way that it is self cleaning, i.e. it creates no "dead zones" where dirt can accumulate. The high heat transfer rate of this plate design makes it possible to have a wider plate spacing (compared with other plate designs) while maintaining a target heat transfer effectiveness. This wider plate spacing lowers pressure drop and also makes it easier to inspect—and, if necessary, clean—the heat exchanger.

There are no unnecessary joints between plates where dirt and bacteria can collect, as in some heat exchanger designs where a corrugated plate is inserted between two flat plates to form the channels.

Type P	А	В	С	Available Plate Spacings*				ailable Plate Spacings*			
Model	(Height and Width)	(Nominal Length)	(Diagonal)	B .12"	G .18"	H .20	l .24"	K .30"	M .35"	0 .41"	P .47"
XLT 24	23.62"	10" to 48"	33.43"	Х	Х		Х	Х	Х	Х	Х
XLT 30	29.53"		41.77"		Х		Х	Х	Х	Х	Х
XLT 40	39.37"		55.67"			х	Х	Х	Х	Х	Х
XLT 50	47.24"		66.81"		Х		Х	Х	Х	Х	Х
XLT 60	59.05"	10" to 40"	83.54"		Х		Х	Х	Х	Х	Х
XLT 80	78.74"	12" to 48"	111.34"			х	Х	Х	Х	Х	Х
XLT 90	88.58"		125.27"		Х		Х	Х	Х	Х	Х
XLT 100	94.49"		133.62"		Х		Х	Х	Х	Х	Х
XLT 120	118.11"		167.03"			х	Х	Х	Х	Х	Х

<sup>\*</sup> See Appendix A: Plate Spacing Specification





# **XLT Type S Exchanger**

The XLT Type S ("Stainless Steel") is similar to the Type H, having a specialized corrugated plate structure. Heat transfer is enhanced by creating turbulence that breaks down the surface boundary layer effect of the otherwise-laminar airstream. The increased turbulence does not create any particulate stagnation points or air velocity changes and only causes a minor increase in pressure drop.

#### Standard exchanger includes:

- Acid resistant (ASTM 316) stainless steel flat plates.
- Acid resistant (ASTM 316) stainless steel frame profiles and end plates.
- Maximum allowable pressure differential 16 inches w.g.
- Single pass effectiveness of 65 to 70%.
- Standard non-silicone sealant capable of withstanding up to 190°F. (Refer to Appendix D: Sealant Specifications.)
- Stainless steel thickness is 0.0567".



#### Special order options include:

- Silicone with acetum sealant capable of withstanding up to 390°F.
- High temperature silicone sealant capable of withstanding up to 440°F.

#### Model Nomenclature

XLT-S 24K-48

This is an **XLT** Type **S**,

It is nominal **24** inches by **24** inches (end plate height and width approximate measurement),

**K** Plate spacing, and

Nominal **48** inches long (end plate to end plate approximate measurement).

#### Horizontal Installation

With the very stable and light weight design of the corrugated surfaces, the Type S can be mounted with the plates in a horizontal position.



The XLT Type S has a corrugated surface that creates turbulence and thus a high heat transfer rate in the heat exchanger channels. The corrugation is designed in such a way that it is self cleaning, i.e. it creates no "dead zones" where dirt can accumulate. The high heat transfer rate of this plate design makes it possible to have a wider plate spacing (compared with other plate designs) while maintaining a target heat transfer effectiveness. This wider plate spacing lowers pressure drop and also makes it easier to inspect—and, if necessary, clean—the heat exchanger.

There are no unnecessary joints between plates where dirt and bacteria can collect, as in some heat exchanger designs where a corrugated plate is inserted between two flat plates to form the channels.

Type S		R	_	Available	e Plate S	pacings*
Model	(Height and Width)	(Nominal Length)	(Diagonal)	l .24"	K .30"	M .35"
XLT 24	23.62"	10" to 48"	33.43"	х	Х	х
XLT 50	47.24"	14" to 48"	66.81"	Х	х	х

\* See Appendix A: Plate Spacing Specification



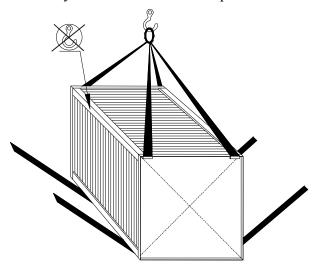


# Lifting and Handling Instructions

Due to the delicate nature of flat plate aluminum heat exchangers, care must be taken in lifting, transporting, and installing Model XLT exchangers.

# Lifting

Model XLT exchanger frames are designed for optimal performance and to keep material costs low. If a lifting device is required, it must lift the exchanger evenly by the end plates or corner profiles without touching the face of the flat plates (see picture below). Exchangers are constructed such that the end plates and corner profiles extend beyond the face of the flat plates.



# **Transportation**

The heat exchangers should preferably be transported with the plates oriented in a vertical position. The plates are to be protected by crating and plastic wrap during transport. Make sure not to top-load in a way that can damage the plates and/or deform the frame work.

As always, please inspect exchangers immediately upon receipt for damage during shipping.

#### **Deformation**

A framework that is not straight or has irregular channels, or any other deformation to the heat exchanger may seriously influence its performance. In most cases this type of damage requires replacement.

# Correcting Damage to Heat Exchanger Material

Assuming that the plate material is not torn or ripped—only flattened, the plates can easily be straightened and corrected with an 8R sheet metal folding/bending vice grip or a flat nosed tinner's pliers. Note: the fins are very fragile, much like coil fins, and are susceptible to rubs, bumps, and forks.

#### Installation

#### **Connections**

If ducts are directly connected to the heat exchanger, use of self-tapping screws or pop rivets is recommended. Make sure to choose a fastener with a length that will not penetrate the heat exchanger channels.

#### Filter Recommendation

In order to maximize energy transfer and exchanger life and to minimize maintenance, XeteX recommends installation of 30/30 or MERV 8 filters upstream of the exchanger in each airstream.

# Maintenance and Cleaning of Heat Exchangers

The XLT Types H, P, and S with corrugated surfaces and the Type F with flat surfaces are designed to prevent particles from coming into contact with the heat transfer surfaces. The air channels in these exchangers have been designed so that most particles contained in the air will pass straight through them. Viscous substances and those that may condense on plate



surfaces present the highest risk of fouling the exchanger.

Experience has shown that the build up of dirt in a heat exchanger usually occurs only in the first few inches inside the upstream face of the exchanger. In this case, cleaning can be accomplished with a brush or hot water and, if needed, a mild detergent or coil cleaner approved for use on aluminum. For dirtier applications, compressed air or a water hose with spray nozzle can be used. If using a water hose, keep maximum pressure below 60 PSI (typical municipal water line pressure) and direct the water stream parallel to the plates—do not use directly against the plate surfaces!

Although the plates in the aluminum heat exchangers are made of material that is up

to 0.008" thick, care must be taken when mechanical means are used to remove dirt so that the plates do not deform or tear.

#### **Sound Dampening**

A plate heat exchanger is often a good sound damper in a ventilation system. The dampening depends on heat exchanger size and plate spacing. Below is a guide to the dampening effect at different frequencies.

Exchanger Size	Plate								
(A - Dim)	Spacing	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
17"	C to J	1	2	2	3	4	4	4	4
20"	C to H	1	2	2	4	4	5	6	6
24"	B to I	2	4	4	6	7	8	9	9
24"	K to P	1	2	2	4	4	5	5	5
30"	B to I	2	5	5	7	8	10	11	11
30"	K to P	1	2	2	4	4	5	6	6
40"	H to I	3	5	5	8	9	11	12	13
40"	K to P	2	4	4	6	7	8	9	9
50"	G to I	3	5	5	8	9	11	12	13
50"	K to P	2	5	5	7	8	10	12	12
60"	G to I	3	6	6	9	10	11	13	13
60"	K to P	3	5	5	8	9	11	12	13
80"	H to I	3	7	7	10	11	14	15	15
80"	K to P	3	6	6	9	10	12	13	14
100"	G to I	4	9	9	12	14	16	19	19

## **Mechanical Specification**

Air-to-air heat exchanger shall be an XLT stationary **aluminum** flat plate type manufactured by XeteX. Heat transfer surface shall be formed aluminum plates [0.008" H and F, 0.012" P] thick [with enhanced surface corrugation for increased performance H and P]. Exchanger frame profiles shall be all aluminum with coated sheet metal end plates. Exchanger shall be capable of withstanding a pressure difference between airflows of up to [7.2" w.g. H, 3.2" w.g. F, and 27" w.g. P] without deforming air passages. Unit shall be capable of operating in temperatures up to [190°F standard construction and 390°F optional]. Standard cell construction shall have a maximum cross contamination between airflows of 0.1% of total airflow. The entire cell shall be capable of being visibly inspected and cleaned as required. [Options: corrosion resistant exchanger shall be a baked-on epoxy coating applied to both sides prior to assembly; additional tightness sealing lacquer shall be applied to the joints; additional corrosion resistance shall be provided by powder coated frame profiles and end plates; exchanger shall be leakage tested with testing certificate.]

Air-to-air heat exchanger shall be an XLT stationary **stainless steel** flat plate type manufactured by XeteX. Heat transfer surface shall be formed ASTM 316 stainless steel plates 0.0567" thick with enhanced surface corrugation for increased performance. Exchanger frame profiles and end plates shall all be ASTM 316 stainless steel. Exchanger shall be capable of withstanding a pressure difference between airflows of up to 16" w.g. without deforming air passages. Unit shall be capable of operating in temperatures up to [390°F standard construction and 440°F optional]. Standard cell construction shall have a maximum cross contamination between airflows of 0.1% of total airflow. The entire cell shall be capable of being visibly inspected and cleaned as required. [Options: additional tightness sealing of lacquer shall be applied to the joints; exchanger shall be leakage tested with testing certificate.]



# Appendix A: Plate Spacing Specification

	Inches	mm
Α	0.08	2.0
В	0.12	3.0
С	0.13	3.3
D	0.14	3.5
E	0.16	4.0
F	0.17	4.2
G	0.18	4.5
Н	0.20	5.0
I	0.24	6.0
J	0.26	6.5
K	0.30	7.5
L	0.31	8.0
M	0.35	9.0
N	0.37	9.5
0	0.41	10.5
Р	0.47	12.0

# **Appendix B: Aluminum Material Specification**

Alloy	8006
Temper	H00

Mechanical Property	Min	Max
Rm	90 Mpa	120 Mpa
Rp 0,2	40 Mpa	60 Mpa
Α%	30%	
Erichen	7.5 mm	

Composition	Min % Weight	Max % Weight
Si	0.100	0.200
Fe	1.300	1.500
Cu		0.030
Mn	0.300	0.400
Mg		0.030
Cr		0.020
Zn		0.020
Ti		0.030



# **Appendix C: Epoxy Coating Material Specification**

#### **Coating Characteristics**

Epoxy-Phenolic, Gold in Color

Non Toxic Organic Coating, as declared from Paint Producers "SUITABLE FOR FOOD CONTACT" from the Italian "Ministry Decree", "D.M. 220" of the 26.04.93 (issued in accordance with EEC Directives). Thickness of Application is 5 microns, plus or minus 1.

#### Corrosion-Resistance

Salt-Mist Environment (Salt Spray)

ASTM B117 (NaCl 5% at 95 °F) Acetic Salt Spray

ASTM B287-74 (NaCl 5% + Acetic acid PH 3.6)

Hot-Wet Environment

ASTM 2247 (100% RH at 100°F)

Coating Mechanical Characteristics

Pencil Hardness (KOH-I-NOOR)
M.E.K. Resistance

M.E.K. Resistance 50 double passing

Adhesion test in moist environment Amma 605.1 100%

Bending flexibility (ECCA T7)

OT without adhesion loss

Drawing "Erichsen" according to ECCA T6

No paint detachment before metal support breaking (Aluminum)

coating.

500 Hrs, no changes on the coating.

Tested for 500 Hrs, without any remarkable variation of

Tested for 1,500 Hrs, without any remarkable variation of

**Others Characteristics** 

1.1.1 Trichloroethane resistance No coating detachment

Resistance to Drawing lubricant Good
Resistance to Thermal Shock (according to AICC N 13) No alteration

#### **Appendix D: Sealant Specifications**

#### Standard Silicone Free

#### **Uncured Sealant**

Type:	MS-Hybrid Polymer, 1- Part
Color:	Grey
Contains Fungicide:	No
Consistency:	Paste, Tixotropic
Specific Gravity:	93.4 lb / ft <sup>3</sup> or 1.5kg / liter

#### **Cured Sealant**

Paintable:	Yes
Hardness:	35 Shore A
100% Modulus:	0.7 N / mm <sup>2</sup>
Maximum Movement Accommodation:	+/- 20%
Elastic Recovery:	60%
Temperature:	-40°F to 190°F or -40°C to +90°C
Climatic Aging:	Good
Good Resistance to:	Water, Saltwater, Aliphatic Solvents, Oil, Grease, Diluted Organic Acids and Bases.
Poor Resistance to:	Concentrated Acids and Chlorinated Organic Solvents,

#### High Temperature Silicone with Acetum

This is a strong elastic silicone sealant that has optimum strength, is suitable for water tight applications, and is resistant to UV-light, temperature variations, and sea water.

#### **Uncured Sealant**

Type:	Acetic Curing, 1- Part
Color:	Translucent
Contains Fungicide:	No
Consistency:	Paste, Tixotropic
Specific Gravity:	62.4 lb / ft <sup>3</sup> or 1.04kg / liter

#### **Cured Sealant**

Paintable:	No
Hardness:	23 Shore A
100% Modulus:	0.5 N / mm <sup>2</sup>
Maximum Movement Accommodation:	+/- 25%
Temperature:	-58°F to 390°F or -50°C to 200°C
Good Resistance to:	Constant water contact

# Model XLT

# Flat Plate Cross Flow Heat Exchanger



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