

VT Core Type

Core Depth	Rows of Tubes	1/2" tubes on 9/16" (.550) centers; louvered serpentine	
1-1/4"	2	<ul style="list-style-type: none"> • Serpentine fin is designed primarily for automotive applications. • Multi-louvered fin is designed for maximum cooling. 	
2"	3		
2-5/8"	4		
FPI: 12,13,14,15,16		Available with: Fins: copper Tubes: 1/2" brass	Headers: brass Grooved and radius Bucket headers Ribbed headers Double fold headers

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA;

VT Fin
(serpentine and louvered)

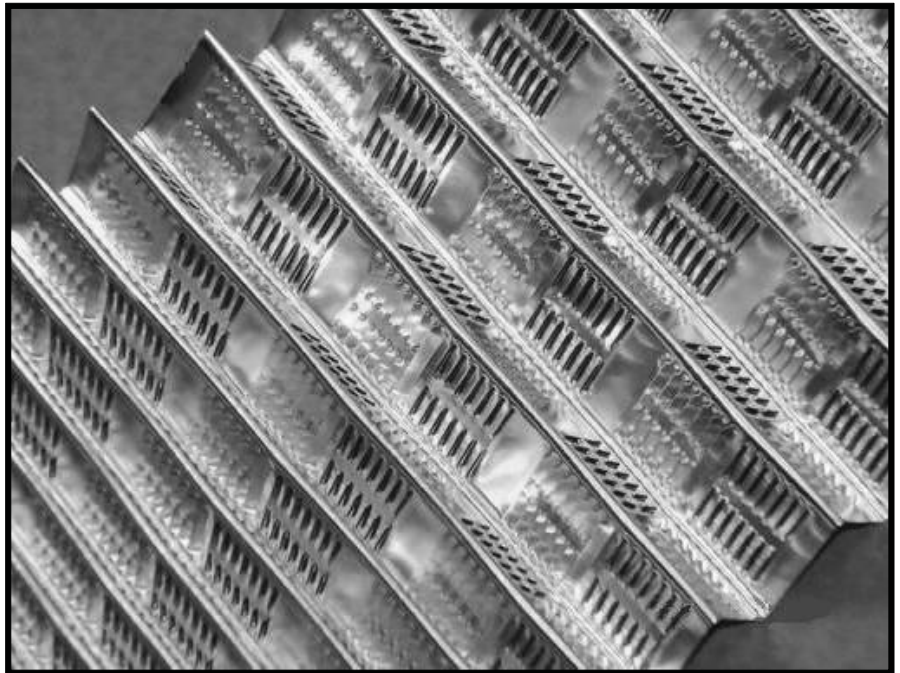


VE Core Type

Core Depth	Rows of Tubes	3/8" tubes on 3/8" (.413) centers; louvered serpentine	
1"	2	<ul style="list-style-type: none"> • Serpentine fin is designed primarily for automotive high-efficiency applications. • Excellent for high-performance applications. 	
1-9/16"	3		
2-1/4"	4		
2-3/4"	5		
FPI: 14,15,16, 17, 18		Available with: Fins: copper Tubes: 3/8" brass	Headers: brass Grooved and radius Bucket headers Ribbed headers Double fold headers

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA;

VE/HE Fin

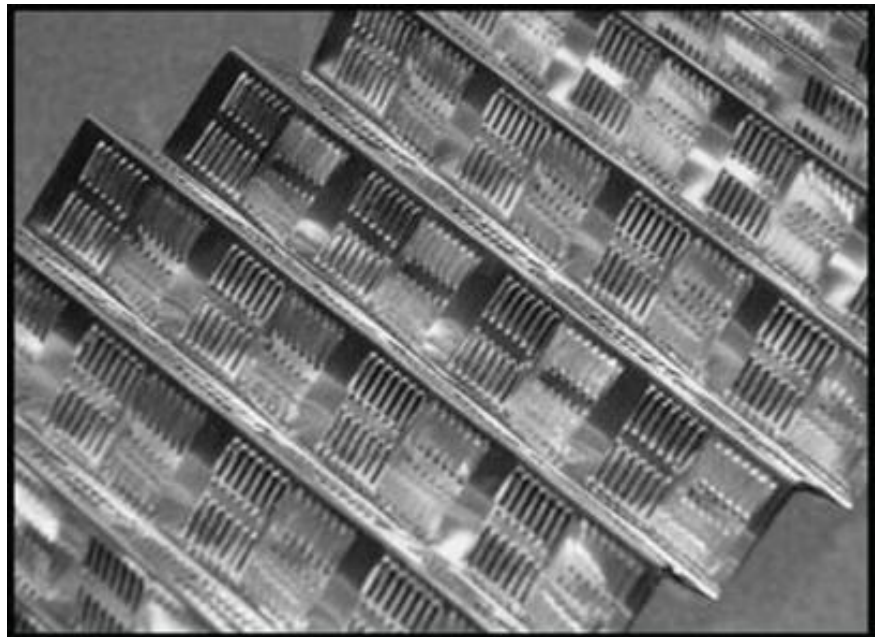


VTD (Ultra Fuse®) Core Type

Core Depth	Rows of Tubes	5/8" tubes on 9/16" (.570) centers; louvered serpentine	
1-1/2"	2	<ul style="list-style-type: none"> • Louvered and serpentine fin is designed for heavy duty truck applications using 5/8" tubes, either low-flow or high-flow tubes. • The VTD and VH fin types are OE truck type designed fins for maximum cooling. 	
2-1/4"	3		
3"	4		
3-3/4"	5		
FPI: 14,15,16		Available with: Fins: copper Tubes: 5/8" brass	Headers: brass Ultra-Fuse®: welded tube to header joints

Plant: Dallas, TX

VTD Fin

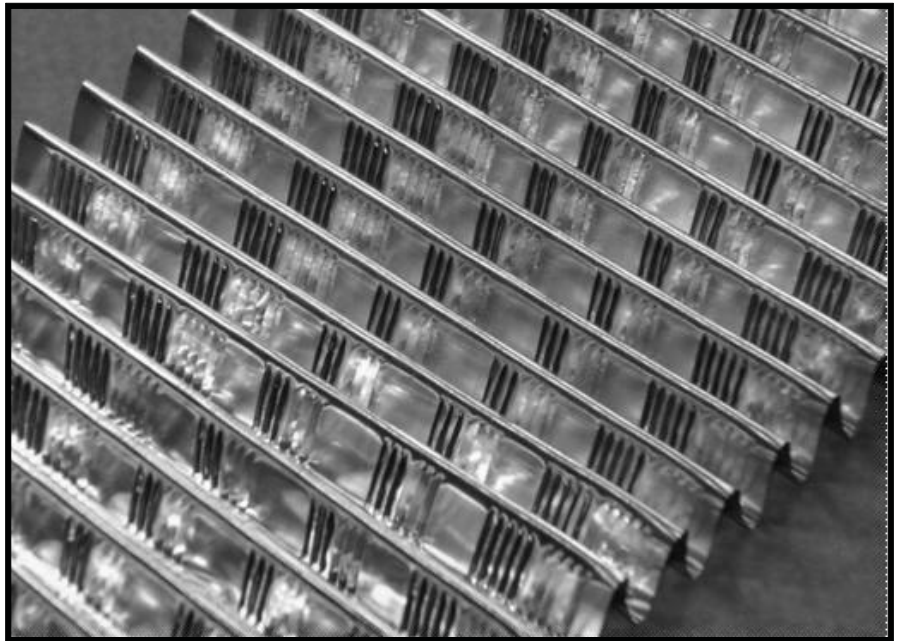


VH Core Type

Core Depth	Rows of Tubes	5/8" tubes on 1/2" (.500) centers; louvered serpentine
1-1/2"	2	
2-1/4"	3	
3"	4	
3-3/4"	5	
FPI: 14,15,16		<p>Available with: Fins: copper Tubes: 5/8" brass</p> <p>Headers: Brass</p>

Plants: Cleveland, OH; Dallas, TX; San Bernardino, CA

VH Fin



VTH Core Type

Core Depth	Rows of Tubes	5/8" tubes on 7/16" (.421) centers; louvered serpentine	
1-1/2"	2	<p>The VTH fin is a louvered serpentine core that incorporates a high-performance 5/8" tube with close tube centers. This is our best performing core (heat transfer) and most cost-effective core design. This core is designed to reduce core depth (number of tube rows) and maintain or increase thermal performance.</p>	
2-1/4"	3		
3"	4		
FPI: 14, 15, 16		<p>Available with: Fins: copper Tubes: 5/8" brass</p>	<p>Headers: brass Grooved and radius Bucket headers Ribbed headers Double fold headers</p>

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA;

VTH Fin

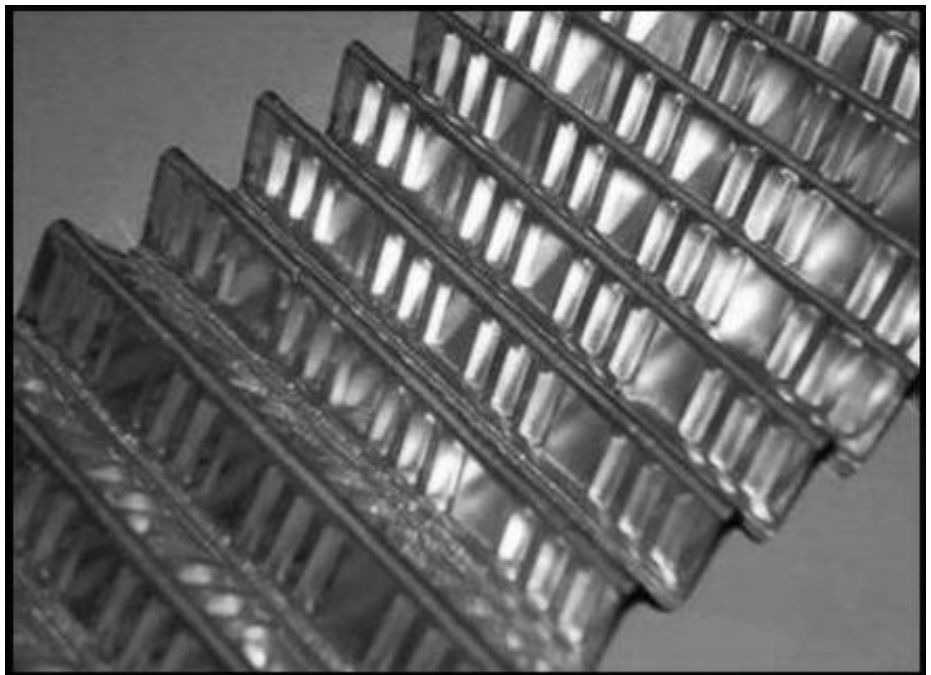


VTW Core Type

Core Depth	Rows of Tubes	1/2" tubes on 9/16" (.550) centers; non-louvered serpentine	
1-1/4"	2	<p>The VTW is a non-clogging heavy duty fin design. The leading and trailing edge of this fin is hemmed (folded over) to increase stiffness and ease of maintenance. This durable fin design is used in various heavy duty applications including refuse trucks, industrial applications, specialty vehicles, farm equipment, etc.</p> <p>The VTW fin has a significant performance increase compared to traditional flat-fin designs and is quite cost effective.</p>	
2"	3		
2-5/8"	4		
3-1/4"	5		
4"	6		
FPI: 8, 9, 10		<p>Available with: Fins: copper Tubes: 1/2" brass</p>	<p>Headers: brass Grooved and radius Bucket headers Ribbed headers Double fold headers</p>

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA

VTW Fin

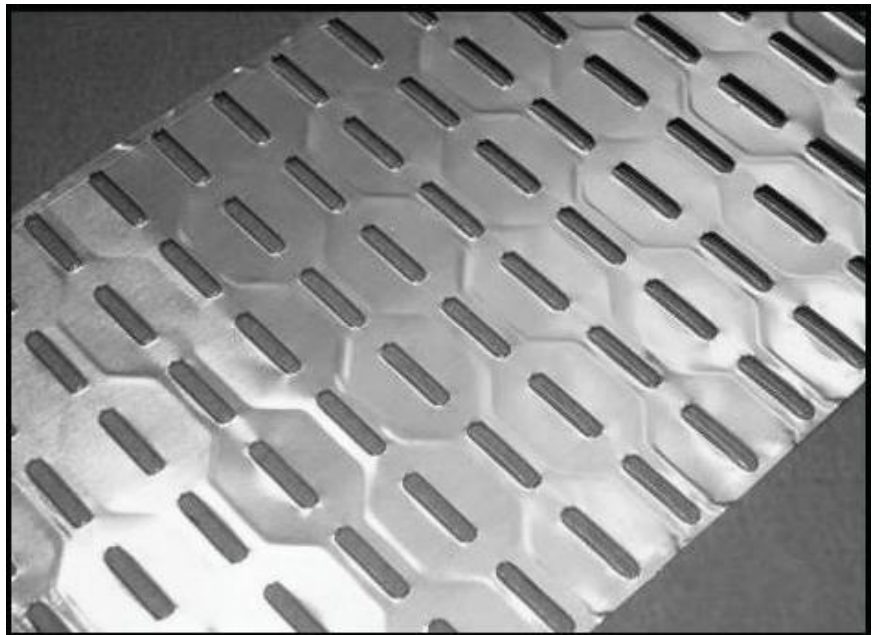


B Core Type

Core Depth	Rows of Tubes	1/2" tubes on 1/2" (.500) centers; inline construction, non-louvered
1-1/2"	2	
2-1/4"	3	Used in off-road applications where fin clogging is a problem (<i>i.e.</i> , cotton gins, some logging operations). Inline construction allows for ease of clean-out.
3"	4	
3-3/4"	5	
4-1/2"	6	
5-1/4"	7	Not recommended for use with turbocharged engines with high fan speeds. Especially popular around cotton gins/fields and paper mills and is available in very low fin count, down to 4 fins per inch. Excellent for feed lot applications.
6"	8	
FPI: 6, 7, 8, 9, 10, 11		Available with: Fins: steel, copper, brass; *No-lead face spray in some locations; *Solder coated fins; Tubes: 1/2" brass
		Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; Special construction: crank box; *Brazed construction; *Steel side; *Tube guards (on 7 and 8 FPI); Cat tie bars and steel center fins

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA

B Fin

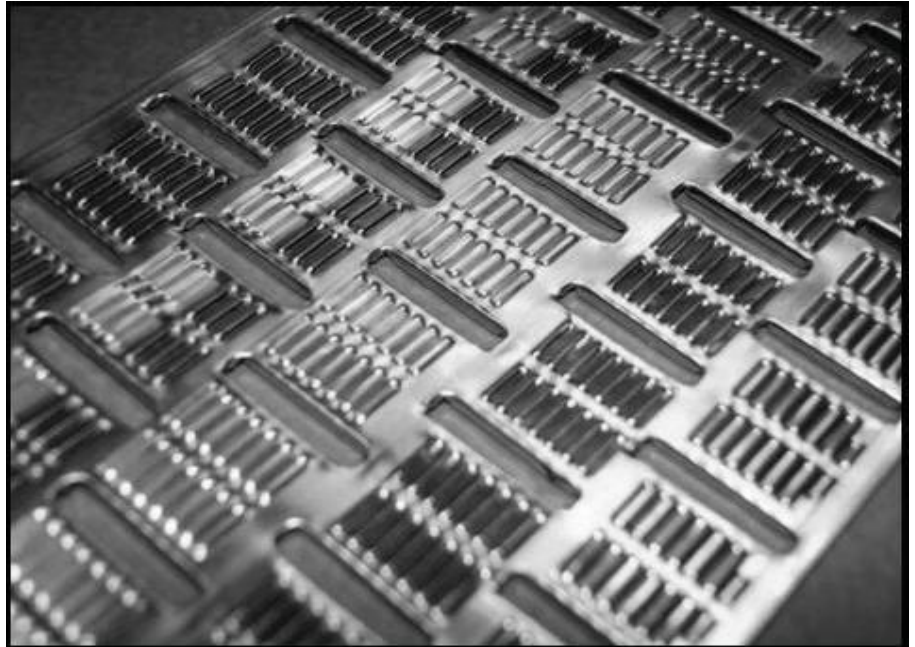


R Core Type

Core Depth	Rows of Tubes	1/2" tubes on 5/8" (.625) centers; staggered, louvered
1-1/4"	2	
1-3/4"	3	Excellent cooling capability primarily designed for highway truck applications. Also popular with stationary generator cooling units and other applications where maximum cooling is needed and clogging is not a problem. These louvers are designed for extra cooling.
2-3/8"	4	
2-7/8"	5	
3-7/16"	6	
3-15/16"	7	
4-1/2"	8	Available with: Fins: copper; Tubes: 1/2" brass
FPI: 6, 7, 8, 9, 10, 11		
		Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; Special construction: crank box; *Braze construction; *Steel side; *LeMaster Adapter Assembly

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA;

R Fin

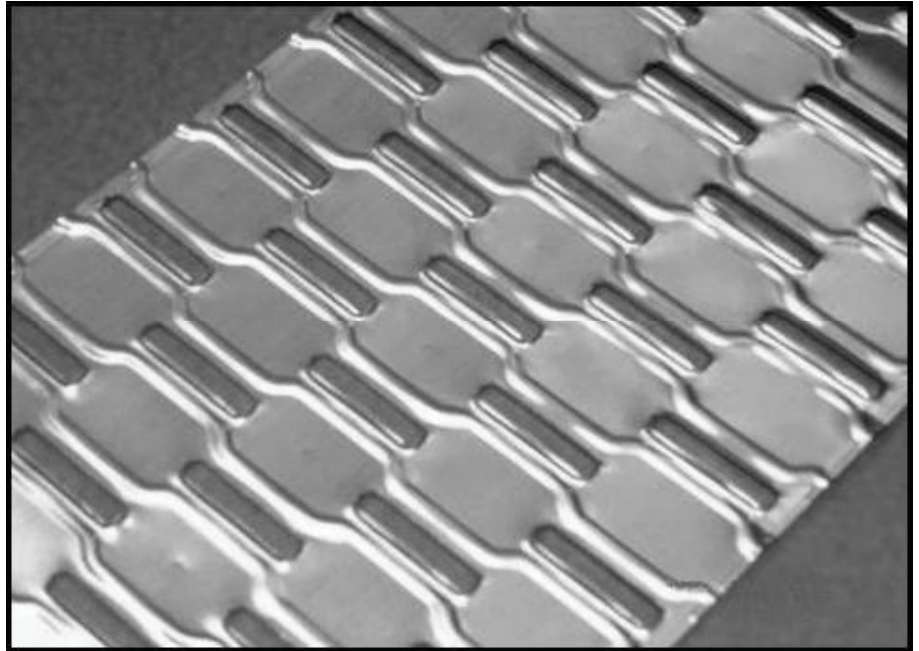


S Core Type

Core Depth	Rows of Tubes	1/2" tubes on 5/8" (.625) centers; staggered, non-louvered
1-1/4"	2	
1-3/4"	3	Excellent general purpose fin. Same design as R fin but without louvered fins. Used for tractors and when there is a need for a lot of tubes in a narrow width. Spacing is designed to allow more rows of tubes per core depth. Can be used in heavier applications than the R type due to the elimination of louvers.
2-3/8"	4	
2-7/8"	5	
3-7/16"	6	
3-15/16"	7	
4-7/16"	8	Available with: Fins: copper, brass; * Solder coated brass; Tubes: 1/2" brass
FPI: 6, 7, 8, 9, 10, 11		

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; Orlando, FL; San Bernardino, CA; Seattle, WA;

S Fin

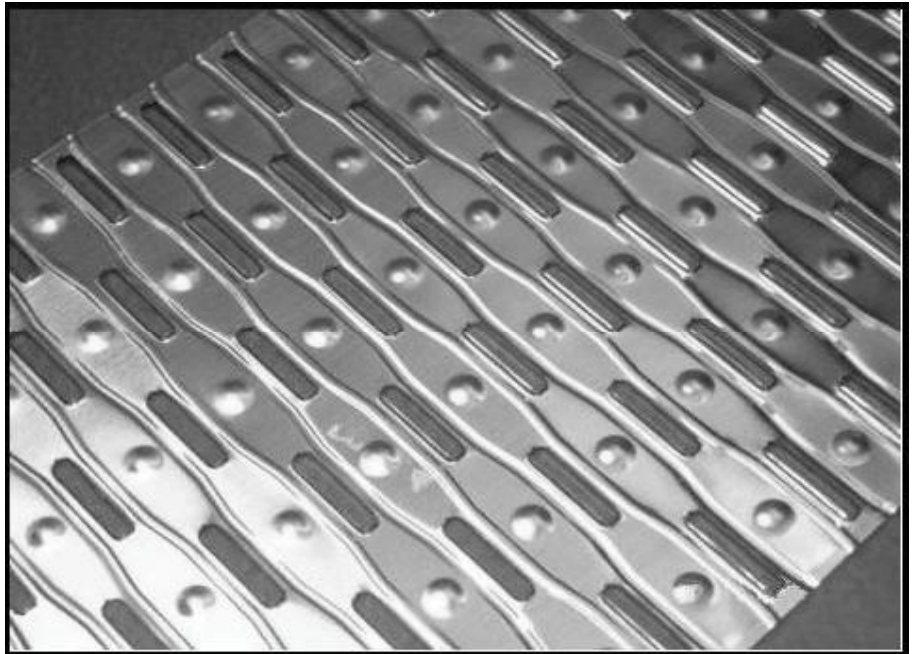


T Core Type

Core Depth	Rows of Tubes	1/2" tubes on 9/16" (.562) centers; staggered, non-louvered
1-1/2"	2	
2-1/4"	3	Excellent general purpose fin configuration used in off-road and on-road applications. Works well in agricultural/tractor applications, dozers, gen sets, dozers (Cat), loaders and many Detroit Diesel applications. Also used in fork lifts, loaders and stationary engine environments.
3"	4	
3-3/4"	5	
4-1/2"	6	
5-1/4"	7	
6"	8	Available with: Fins: copper, steel, brass; * Solder coated brass; Tubes: 1/2" brass
FPI: 6, 7, 8, 9, 10, 11		Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; Special construction: crank box; *Braze construction; *Steel side; *Tube guards (7 and 8 FPI only); *LeMaster Adapter Assembly; Cat tie bars and steel center fins

Plants: Burr Ridge, IL; Cleveland, OH; Dallas, TX; Denver, CO; San Bernardino, CA; Seattle, WA

T Fin

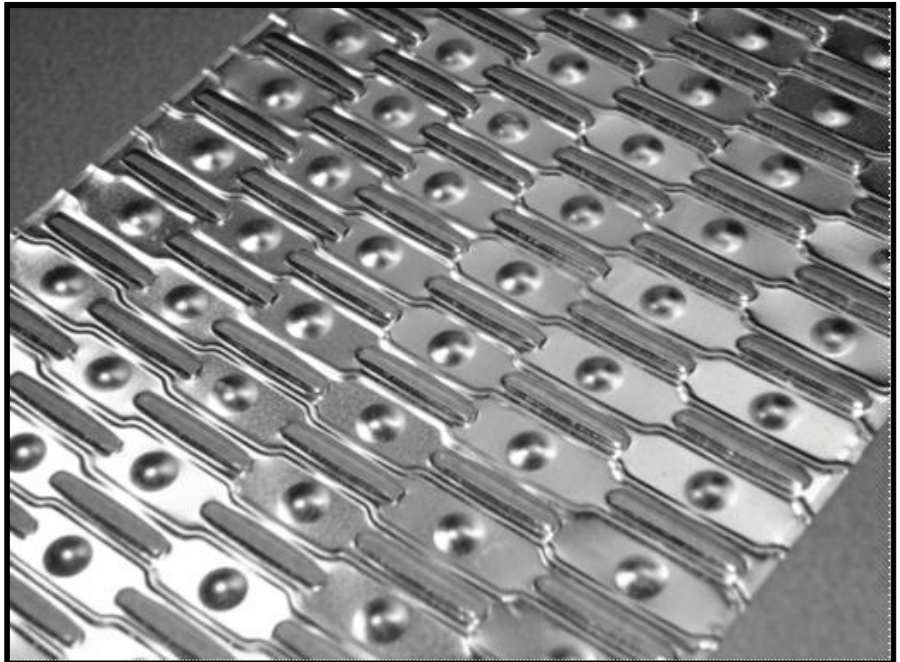


X Core Type

Core Depth	Rows of Tubes	3/4" tubes on 5/8" (.625) centers; staggered, non-louvered
1-7/8"	2	
2-1/4"	3	Excellent general purpose fin for applications requiring 3/4" tubes. Designed especially for farm, truck and industrial applications. Dimples and ribbing provide maximum cooling, yet promote free air flow to minimize clogging.
3"	4	
3-3/4"	5	
4-5/8"	6	
5-1/4"	7	A popular unit for offshore applications using regular brass or solder coated.
6-1/8"	8	
FPI: 6, 7, 8, 9, 10, 11		<p>Available with: Fins: copper, brass, solder coated brass; Tubes: 3/4" brass; Dimpled tubes N/A</p> <p>Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; No bucket headers; Special construction: crank box; *Steel side; *LeMaster Adapter Assembly; *Tube guards available with 7 and 8 FPI.</p>

Plants: Burr Ridge, IL; Dallas, TX; Denver, CO; San Bernardino, CA; Cleveland, OH;

X Fin

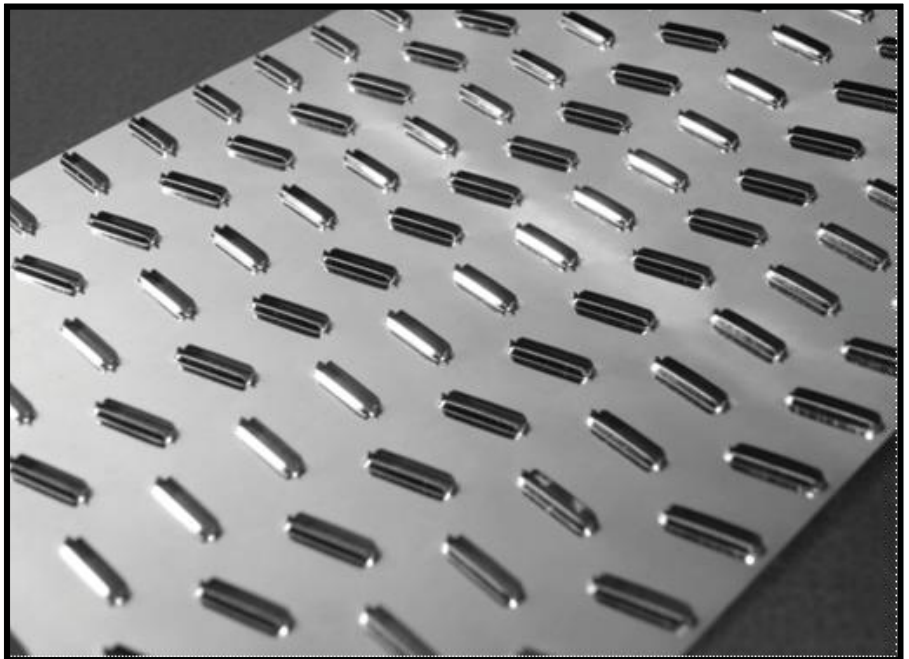


Z Core Type

Core Depth	Rows of Tubes	1/2" tubes on 5/8" (.625) centers; canted tubes (10 degree tube cant)
2-3/16"	3	
2-15/16"	4	General purpose fin for off-road and heavy duty use. Duplicates OEM appearance and quality. OEM design used on many popular dozer, loader and farm equipment applications. Excellent core for turbo-charged applications. Better cooling than inline or staggered fin design.
3-11/16"	5	
4-7/16"	6	
5-3/16"	7	
6	8	
FPI: 6, 7, 8, 9, 10, 11		Available with: Fins: copper, brass, solder coated brass, steel; Tubes: 1/2" brass
		Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; Special construction: crank box; *Brazed construction; *Steel side; *Tube guards (on 7 and 8 FPI); *LeMaster Adapter Assembly; Tie bars

Plants: Burr Ridge, IL; Dallas, TX; Orlando, FL; San Bernardino, CA; Cleveland, OH;

Z Fin



T-12 Core Type

Core Depth	Decimal to Fraction	Rows of Tubes	3/4" tubes on 7/16" (.437) centers; staggered, non-louvered
1.798"	1-3/4"	2	
2.668"	2-11/16"	3	Available in DALLAS ONLY. Specifically used when duplicating OE models with 3/4" tubes on 7/16 centers. Original locomotive design for high-capacity coolant flow. General design of core allows for an increased amount of water flow.
3.538"	3-9/16"	4	
4.408"	4-7/16"	5	
5.278"	5-1/4"	6	
6.148"	6-1/8"	7	Used when you're replacing a unit with a lot of tubes. Pricing quotes on request only.
7.018"	7"	8	Available with: Fins: copper; Tubes: 3/4" brass
FPI: 6, 7, 8, 9, 10, 11			Headers: brass, grooved and radius, bolted; Pan headers; *Corner: full braces; Special construction: crank box; *Steel sides; *Brazed construction and tube guards (on 7 and 8 FPI)

Plants: Available in Dallas, TX ONLY

T-12 Fin

