

Finned tubes

Ekströms offer a wide range of extended surface tubular products including cast iron sleeved tubes; high frequency welded spiral fin tubes; and single or double gilled tubes.

Finned tubes from Ekströms are used in heat exchangers such as Economisers, Flue gas coolers, Gas reheaters, Air preheaters etc.

The finned tubes can be delivered either as loose components, coils suitable for on-site assembly or as complete units inclusive of casings.



Ekströms can also supply return bends and other tube bends in a wide range of dimensions.

All production of fin tubes and bending are made in Sweden and fulfils the requirements of EU/PED 97/23/EC. All base materials used such as base tubes are exclusively from Western European mills. Material certificate EN 10240-3.1 is always supplied with our deliveries.

On request we can supply shop inspection certificate 3.2 from third part companies such as Lloyds register, DNV, Nippon Kaiji Kyokai, Bureau Veritas, ABS etc.



**Steel finned tube
Single or Double**

An economiser with resistance welded rectangular fin tubes from Ekströms Värmetekniska AB is often the natural choice for solid fuel or oil fired boilers. It combines the flexibility in shape, geometry and materials in relation to fuel type, dust load and temperatures. Ekströms offers single and a double tube design of steel finned tubes.



Double fin tube



Single fin tube

This kind of heat exchanger weight less and gives a more compact design compared with plain tubes, which also means reduced investment costs. In line arrangement of tubes gives easier maintenance and cleaning. Absolute parallel channels between the fins through the whole economiser are extremely important for keeping the surface clean.

Ekströms offers a wide range of dimensions. Below are the most common standard dimensions. Other dimensions can be supplied on request.

Double fin tubes		
Tube OD	Fin width	Fin height
Ø31,8	60	125
	70	145
Ø38	70	145
	74	153
	84	175
Ø44,5	85	175
	121	246
Ø48,3	95	195
Ø51	121	248

Single fin tubes		
Tube OD	Fin width	Fin height
Ø31,8	80	60
Ø38	70	70
	95	90
Ø48,3	95	90
Ø51	109	121
	121	121
Ø58	121	121

Fin material is S235JR as standard but can also be stainless steel material in both tube and fin. Fin thickness can be 2, 2,5 or 3mm.



Casted compound tube

Ekströms Värmetekniska AB has delivered Cast iron finned tubes since the 1940th. The finned casted sleeves are integrated with a plain steel tube of pressure vessel quality. This type is well adapted to tougher conditions such as lower temperatures and higher contents of sulphur. The rhombic form on the tube body gives a low pressure drop on the flue gas side and prevents dust build ups on the backside.

Helical fin tube
Solid or Serrated fins

This light and cost effective construction is the best alternative when choosing heat exchangers for clean gases as natural gas, propane and air. It provides a sturdy construction and can be varied in a wide range of dimensions.

Spiral fin tubes from Ekströms Värmetekniska AB are completely high frequency welded in the contact surface between the fin and the tube to give the best heat transfer.

The length of the tubes can be up to 14m and the range of tube dimension is from $\varnothing 20\text{mm}$ up to $\varnothing 140\text{mm}$. Fin pitch can be as close as approximate 4mm depending of the dimension of tube and fin.



Solid spiral
fin tube



Serrated spiral
fin tube

Ekströms offers both solid and serrated, (segmented), type of fin. Standard fin material is DC01, DC04, (carbon steel), or 1.4512, (Stainless steel).

Tube bends

Ekströms can supply tube bends for tubes dimensions $\varnothing 31,8\text{mm}$ up to $\varnothing 63,5\text{mm}$ which covers all of the dimensions of fin tubes we supply. The bending ratio can be down to $R/OD=1$ for some dimensions. Bending procedures fulfils the requirements of of EU/PED 97/23/EC and heat treated if necessary.





**CLEAN & EXTENDED
HEATING SURFACES**



Ekströms were founded in 1905 and are today one of market leaders in the design and supply of economisers, air preheaters, shot cleaning systems, and many forms of extended surface tubing for industrial steam raising and power generation boilers.

Ekströms have throughout their long history gained unrivalled experience of heat exchangers operating in flue gas environments generated by a wide range of fossil and non-fossil fuels.



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