

**EXECUTIVE SUMMARY**

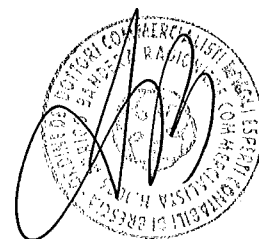
**Pursuant to “Trade for All: Towards a more responsible trade and investment policy”**

REQUEST for EXPIRY REVIEW of  
ANTI-DUMPING Measures on Imports of Aluminium Radiators originating in  
the People’s Republic of China  
Pursuant to Article 11.2 of  
Basic Anti-dumping Regulation (EC) No. 1036/2016

The request is lodged by  
AIRAL S.c.r.l., International Association of Aluminium Radiator Manufacturers  
Limited Liability Consortium

AIRAL S.c.r.l. is represented by

Arrigo Bandera  
Chartered Accountant  
Brescia, Italy



AIRAL is a limited liability consortium that was established in 2006 and has among its members Europe's leading business groups operating in the field of aluminium radiators and related radiant products.

The product concerned, an aluminium radiator, is a heating body made of aluminium and/or aluminium alloy, with an internal chamber allowing the circulation of a fluid. Aluminium must be the prevalent matter in terms of weight.

In general, the aluminium radiator is presented in an array of identical and assemblable elements.

The radiator has 2 pairs of holes on opposite sides (hubs) connected to the internal chamber. In the best known form, each element in the array presents 2 smooth plates (a front one and a rear one) and a variable number of side fins, but it may have different shapes, such as tubular.

The elements can be assembled vertically or horizontally to form a prevalently horizontal or prevalently vertical radiator.

The radiator can be made of various materials, the most common being aluminium and its alloys.

An aluminium radiator is commonly recognized to be one in which the metal used is aluminium or an aluminium alloy, or more in general when the metal used is mostly aluminium.

Some aluminium radiators contain an internal core made of another metal, typically steel or iron, or even brass, in which case they are called bimetal/multi-metal radiators. Their external appearance, however, is just the same as that of an aluminium radiator, but they lack the internal core made of a different metal.

The internal core is designed to avoid any contact between the water in the circuit and the aluminium because under certain operating conditions the direct contact can lead to the corrosion of aluminium, especially in old systems still using cast iron or steel radiators.

An aluminium radiator can be made using various methods, the most common being die-casting and extrusion.

The production technology adopted determines the type of aluminium alloy to use.

An aluminium radiator can be made in a single block, which is obtained by making and assembling a series of elements (also called sections). The assembled elements form a radiator of the desired dimensions, ranging from the smallest possible version with a single element to radiators comprising 2, 3 ... n elements.

Plates and fins extend from the main body of each element. In particular, the best known radiator elements usually present a front plate and a rear plate as well as a series of lateral fins. The number of fins varies with the model. The fins may also vary in length. On the same axis there may be several interrupted and shorter fins rather than a single entire fin. Some models of radiator have no fins at all.

The upper and lower parts of the element/radiator may form different aesthetic shapes that partly modify the final shape of the product, but not the technical substance.

The resulting element/radiator can have different dimensions in terms of height, width and depth. The height, also called centre distance, normally ranges from 20 to 200 cm, but smaller or larger dimensions are also possible.



Radiators with centre distance "500" are the most widely sold on the EU market.

The die-casting production process takes place in the following stages:

- Die-casting of the single elements using presses equipped with specific dies to give various models of radiator.
- Injection of the aluminium alloy into the die to form an element. The elements extracted from the press have to be machined to give the desired final appearance.
- Radiator machining processes:
  - sealing of the internal chamber;
  - surface grinding;
  - threading and spot-facing of connecting hubs;
  - assembly of elements to form arrays, when required;
  - tightness test.
- Preparation for painting: washing and cleaning by means of chemical treatment of the metal surfaces
- Painting
- Packaging

Aluminium radiator elements, instead of being die-cast, can be obtained by means of an extrusion press and assembled together. The extrusion process can be used to produce a tubular section made of aluminium or aluminium alloy. The shape of the section can be of any dimensions, with or without fins.

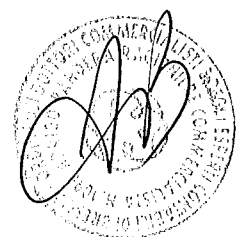
The extruded section is cut off to the right length and can be sealed at the top and bottom by two heads, which may have different shapes, to form a single body of the desired shape.

The heads are generally made of die-cast aluminium, but they may also be made of other metals and using other technologies.

Each head has two opposite holes, which are required for assembling elements together or for connecting to pipes. The heads are fitted with a shank or a system for inserting them in the extruded tubular body. An element/radiator obtained in this way is very similar or identical to one made using the extrusion method.

The die-cast process for bimetal radiator takes place in the following stages:

- Preparation and machining of an insert (core) made of metal (normally iron or steel) - refer to the figure at the bottom of the page.
- Insertion of the metal insert in the die mounted on the press.
- Injection of aluminium into the die to cover the insert entirely with metal, giving the desired shape of the element.
- Extraction of the element from the press, followed by machining and finishing.



- Bimetal radiator machining processes:
  - grinding and finishing of the surfaces;
  - assembly of elements to form arrays;
  - tightness test.
- Preparation for painting: washing and cleaning by means of chemical treatment of the metal surfaces
- Painting
- Packaging

Radiators can be installed anywhere, in houses, offices or shops, or in any other building used by people in their daily lives and for carrying out intellectual and manual work.

Radiators can therefore be used by anyone in the place where they live or work.

A radiator is a device for heating rooms that conveys to the air the heat of the liquid circulating inside. It is an integral part of a domestic heating system, the visible radiating part that transmits heat to the room.

A heating system comprises a boiler and a network of pipes and radiators through which the heated water circulates.

A radiator system is characterized by low thermal inertia, which allows rapid adaptation to requests for heat, thereby avoiding fuel wastage and extra costs.

When the room or building is not used on a continuous basis, it is not necessary to maintain a constant temperature over 24 hours, thereby avoiding an unnecessary increase in heating costs.

Since its establishment, AIRAL has conducted a policy aimed at promoting and upgrading aluminium radiators and ensuring the protection of the product and its approvals.

Unfortunately, since the very beginning, AIRAL had to face with the problem of unfair competition (dumping) from China with regard to export selling prices.

The problem of dumped exports has become increasingly worrying since 2008. Chinese radiator manufacturers have increased their export volumes to cover almost all of their goods, by offering the "radiator" product at a considerably low price, which was even lower than the European production cost.

In order to oppose such behaviour, AIRAL has, since 2008, taken steps to gather the evidence necessary to report the unfair pricing and dumping policy put in place by Chinese manufacturers.

The dumping prices of aluminium radiators for heating imported into the European Union from China have caused the Union industry considerable injury and are still threatening to cause further injury.

To defend the Union industry, AIRAL S.c.r.l. lodged in June 2011 an anti-dumping Complaint pursuant to Article 5 of Council Regulation (EC) No. 1225/2009, claiming the Chinese attack to the European market, with won of an increasingly large share of it, also due to their price undercutting policy.



On 12 August 2011 European Commission issued the notice of initiation of a proceeding in Office Journal of the European Union. The Commission Regulation (EU) No. 402/2012 of 10 May 2012, issued on 11 May 2012 in Office Journal of the European Union, imposed the provisional anti-dumping duty on imports. The Council, by implementing the Regulation (EU) No. 1039/2012 of 29 October 2012 issued on 9 November 2012 in Office Journal of the European Union, imposed the definitive anti-dumping duty and collected definitively the provisional duty imposed on imports of aluminium radiators originating in the People's Republic of China.

The introduction of anti-dumping measures by EU Regulation No. 1039/2012 has partially restored competition among operators.

Although EU28 consumption calculated as a number of elements was stable between 2013 and 2016, the volume of radiators imported from Chinese producers decreased considerably in the same reference period.

The main consequence of the introduction of the duty was the rebalancing of European prices and Chinese prices, most of which remained constant between 2013 and 2016.

If the duty was not maintained, this balance would certainly fail, with severe damage to European manufacturers.

For this reason, AIRAL, represented herein by Arrigo Bandera, propose this expiry review request, pursuant to Article 11.2 of basic Anti-dumping Regulation (EC) No. 1036/2016.

The People's Republic of China is not recognised as a market economy, for the purpose of the present expiry review request. The normal value of individual products must therefore be determined with reference to the prices or production costs in a country with a comparable market economy (an "analogue country"). The choice of analogue country was based on the criterion of reasonableness and, more specifically, by analysing the comparability of the product concerned, the representativeness of domestic sales, the level of competition in the domestic market, the comparability of production volumes and product processes, the comparability of energy costs.

AIRAL chose RUSSIA as the analogue country.

Moreover, Russian aluminium radiators are in direct competition with aluminium radiators produced in the Union and also have the same physical and technical characteristics and are used for the same purpose. Accordingly, Russian and Union aluminium radiators are "like" products.

In order to determine the potential damage that the elimination of the AD duty would cause to European manufacturers, the undercutting and underselling prices have been calculated, according to the formulas set out in the EU Regulation. In both cases, the result is significant.

These margins are an alarming sign for the EU industry; should the anti-dumping measures not be extended, the prices of EU producers could suffer an undercutting of over [between 30% and 55%], right from the day following the expiry.

The more significant issue remains Chinese overcapacity: Chinese producers could meet the demand of the entire EU28 market with their overcapacity alone.

Chinese aluminium radiators are in direct competition with aluminium radiators produced in the Union; Chinese producers submit offers in the same tender processes as Union producers. Chinese



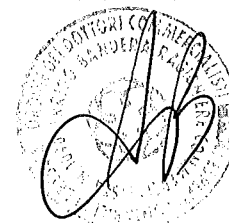
aluminium radiators also have the same physical and technical characteristics and are used for the same purpose.

On 15 February 2017, European Commission issued the notice of the impending expiry of anti-dumping measures and stating that unless a review is initiated, the anti-dumping measures will expire on 10 November 2017. The Commission also invited Union producers to lodge a written request for a review at any time but not later than three months before the expiry date.

A list of the Chinese companies – known to AIRAL – that produce and export radiators to the EU is the following:

<b>COMPANY</b>	<b>TOWN</b>
ZHEJIANG AISHUIBAO PIPING CO.,LTD	ZHUJI - ZHEJIANG
ANHUI SUNSHINE ALUMINIUM MOUDLING CO.,LTD	ANHUI
ZHEJIANG FLOURISH RADIATOR CO.,LTD	ZHUJI - ZHEJIANG
CIXI TIANRUN ELECTRIC APPARATUS INDUSTRIAL	CIXI - ZHEJIANG
FOSHAN SHUNDE JASON H.E.S&T CO.,LTD	SHUNDE - FOSHAN
HANGZHOU YOUCHUANG RADIATOR CO.,LTD	HANGZHOU
HENAN QIANFENG HVAC TECHNOLOGY CO.,LTD	ZHOUKOU - HENAN
JIANGSU UNBEATABLE RADIATOR CO.,LTD	QIDONG CITY
JIANGXI PESNO HVAC TECHNOLOGY CO.,LTD	YICHUN - JIANXI
NINGBO EPHRAIM RADIATOR EQUIPMENT CO.,LTD	CIXI - ZHEJIANG
NINGBO EVERFAMILY RADIATOR CO.,LTD	NINGBO - ZHEJIANG
NINGBO NINGSHING KINHIL INDUSTRIAL CO.,LTD	NINGBO - ZHEJIANG
NINGHAI SANMIN METAL PRODUCT	NINGBO - ZHEJIANG
QINGDAO FERT INDUSTRIAL	QINGDAO
SHANDONG BANGTAI RADIATOR CO.,LTD	WEIFAN - SHANDONG
SIRA TIANJIN RADIATOR CO.,LTD	JIXIAN - TIANJIN
YONGKANG HUANDI RADIATOR	YONGKANG - ZHEJIANG
YONGKANG SANGHE RADIATOR CO.,LTD	YONGKANG - ZHEJIANG
ZHEJIANG BOTAI TOOLS CO.,LTD	YONGKANG - ZHEJIANG
ZHEJIANG FLYHIGH METAL PRODUCT GROUP	ZHEJIANG
ZHEJIANG HENGTAI ALUMINIUM SMELTING	YONGKANG - ZHEJIANG
ZHEJIANG HONGYANG RADIATOR MANUFACTURING CO.,LTD	LANXI - ZHEJIANG
ZHEJIANG JUNHONG MECHANICS (GREENING)	JINYUN - ZHEJIANG
ZHEJIANG RONGRONG INDUSTRIAL	YONGKANG - ZHEJIANG
ZHEJIANG SINDA ALUMINIUM INDUSTRY	YONGKANG - ZHEJIANG
ZHEJIANG YOMAY INDUSTRY AND TRADE CO.,LTD	WUYI - ZHEJIANG
ZHEJIANG YUANDA MACHINERY & LECTRICAL MANUFACTURING	WUYI - ZHEJIANG

China has also an association of aluminium radiator manufacturers called CCMSA (China Construction Metal Structure Association).



European Consumers' Organisation gives a list of consumer associations based in the 28 countries in the European Union.

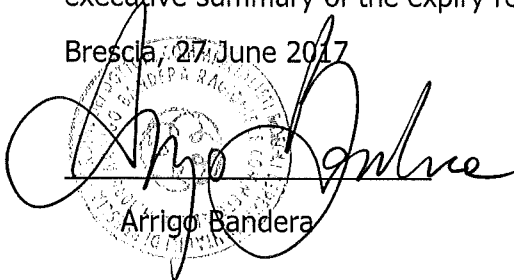
A list of the main European companies – known to AIRAL - that manufacture radiators in the EU is the following:

COMPANY	COUNTRY
AKLIMAT	Slovenia
ALUKAL RADIATORS	Croatia
CAMPO DI CALORE	Italy
F.I.R. FABBRICA ITALIANA RADIATORI SRL	Italy
FERROLI	Italy
FONDITAL SPA – <i>member of AIRAL</i>	Italy
GLOBAL DI FARDELLI OTTORINO & C. SRL– <i>member of AIRAL</i>	Italy
GRUPPO RAGAINI SPA	Italy
INCALTEC INDUSTRIAL SA	Spain
INDUSTRIAS RAYCO SA	Spain
KFA/GRUPA ARMATURA	Poland
LIPOVICA	Croatia
OLYMP WERK GMBH	Austria
PIERREPI	ROMANIA
RADIATORI 2000 SPA– <i>member of AIRAL</i>	Italy
SIRA GROUP SPA	Italy

AIRAL and its members require the extension of anti-dumping measures according to the percentages set out by EU Regulation no. 1039/2012, dated 29/10/2012 and published in the Official Journal of the European Union on 9 November 2012, proposing the present expiry review request of anti-dumping measures on 27 June 2017.

I, the undersigned, hereby certify that, to the best of my knowledge, the information in this executive summary of the expiry review request is accurate and complete.

Brescia, 27 June 2017



Arrigo Bandera