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RADIATOR MARKET RUSSIA 2005-2010

Multi-client research

Moscow, March 2011

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1. METHODOLOGY

1.1. INFORMATION SOURCES

The study was performed on the basis of the following information sources:

- CUSTOMS DECLARATION ANALYSIS**

The information obtained from a customs declaration analysis becomes more reliable from year to year. To find out the market trends, its key tendencies, and the main players there was made a detailed analysis of the front pages of customs declarations for 2005-2010. Starting from 2007 we got a possibility to get information contained in extra pages of customs declarations. This made the obtained information more reliable and allowed us to identify radiators by models more accurately. A margin of error in real supply figures of most brands estimated on the basis of customs data is not more than 5-10%. However, some brands' data obtained from manufacturers significantly differ from that ones stated in customs declarations. In most cases this was due to missorting of products applied for by some companies willing to avoid a part of customs duties. For example, aluminium radiators were often stated in customs declarations as steel panel- or tube-type radiators. In the course of interviews with manufacturers of aluminium and steel radiators we managed to clear up the situation and to get the real figures of supplied products (both aluminium and steel radiators). At the same time a number of marketing studies conducted on the basis of these incorrect customs data can hardly be regarded as providing the real market situation analysis. In 2008-2010 it became possible to identify more than 95% of imported radiators by models. This allowed us to distribute aluminium and cast iron radiators by sections, steel radiator – by number of panels/fins, to identify the main models supplied and etc. Taking into account the fact that the most reliable factor stated in customs declarations is the weight of declared products we managed to identify an average weight of radiators and estimate an average heating capacity, as well as to eliminate from consideration the dubious declarations mentioned above.

Under a lack of information from local manufacturers their product identification by models was made on the basis of their export analysis.

- GOSCOMSTAT DATA**

The information on the biggest local manufacturers was obtained from Goscomstat. In a number of cases it was the only source of information. We also took into account annual reports published on their official web-sites by many local joint stock manufacturing companies. Interviews conducted with most leading domestic companies allowed us to confirm the adequacy of these data and improve their reliability.

- INTERVIEWS WITH MANUFACTURERS AND EQUIPMENT SUPPLIERS**

Whatever customs information is correct, it should be completed with the data obtained from equipment distributors and manufacturers. In the course of preparation of this report we conducted interviews with many Russian manufacturers, foreign manufacturers' representatives and big suppliers of foreign equipment.

TABLE 1. Information sources

	Russian manufacturers	Foreign manufacturers' representatives	Distributors	Total
Interviews	4	7	18	29

Source: Litvinchuk Marketing Co.

1.2. REPORT TERMINOLOGY

Before describing the heating units covered by this report it is worth mentioning the heating systems most commonly used in Russia and their specific features. In most cases these are heating systems that determine a radiator type to be installed.

Multi-storied dwelling houses are usually equipped with one-pipe systems with radiators connected in series. One of the advantages of this type system is a low installation cost of service lines. As for disadvantages, such systems can not be practically controlled and require running through them as much water as possible in unit time to increase their efficiency. This provokes a pressure boost, which may lead to leaks in radiators. That is why one-pipe systems can only use high-pressure radiators. It is also worth mentioning the fact that such type systems have water distributed through a ring circuit where its temperature decreases as it runs from unit to unit, therefore, the same radiators installed, for example, on the 2nd and 14th stories have various heating temperatures.

Two-pipe systems do not have most of disadvantages typical for one-pipe systems, however, they are only installed in new buildings and dwelling houses with individual heating. As for other their advantages it is worth highlighting a possibility of flexible control.

These heating systems are divided into the following types:

- Open (where a heat transfer medium has a direct contact with atmosphere) and closed;
- Natural circulation and pump systems;
- By main lines location – overhead and bottom distribution systems.

Therefore, there are many various combinations of radiators.

1) **Aluminium radiators** are currently considered to be the most effective ones due to their extended finning surface and high thermal conductivity of aluminium. Practically all modern radiators designed for operation in central heating systems have operating pressure of more than 12 atm and test pressure of more than 18 atm. Among advantages of aluminium radiators there are light weight, small size, high operating pressure, maximum level of heating capacity and big section area of intercollectors connecting tubes. Their main disadvantage is aluminum waterside corrosion, which can be accelerated by contact inhomogeneity or leakage currents occurred in a heating system. Aluminum is an active metal, therefore, in case its oxide layer appears to be damaged, the layer starts corrupting in water and producing hydrogen. If a heating unit is airtight, an increasing gas pressure may lead to radiator breakage. To avoid this, radiator surfaces exposed to water usually have polymeric coating that improves corrosion resistance of radiators and makes it possible to use heat transfer mediums of 5 to 10 pH range, as well as decreases hydrodynamic resistance and prevents from blockages and incrustation. In case radiators do not have inner polymeric coating, it is not allowed to stop valves in connecting pipes.



PICTURE 1. Aluminium radiator

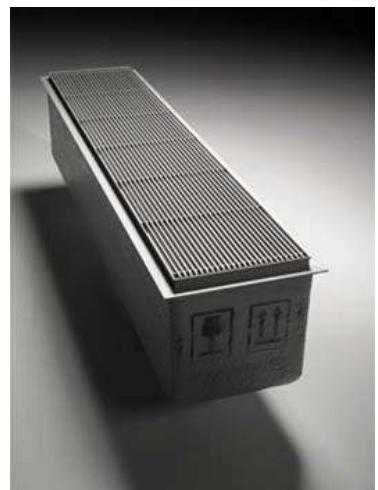
Aluminium radiators are usually divided into three main types: one-piece radiators, extruded type radiators with mechanically linked sections and radiators combining both types. Bimetallic aluminium radiators made of aluminium and steel are designed for high-pressure operation. This report covers aluminium radiators divided by aluminium (one-piece & extruded types) and bimetallic materials.

2) Cast iron radiators are designed for operation in central heating systems of high-rise residential, public and factory buildings. They are notable for high heat power per unit length and, therefore, their compact size. Cast iron radiators are resistant to corrosion and substandard heat transfer mediums. They are reliable and have a long service life. Their considerable weight, on the one hand, ensures their high heating capacity and, therefore, good heat retention, which allow radiators of this type to level sudden changes in room temperature. On the other hand, they are too heavy in installation and maintenance. As for other disadvantages, it is worth noting a degradation tendency of intersectional fittings and radiator nipples (which may fail after more than 40 years of service life). Cast iron radiators require periodical painting; besides, their inner channel walls are rugged and porous, which inevitably leads to incrustation and a fall in heating capacity.



PICTURE 2. Cast iron radiators

3) Convector radiator is a device that transfers heat by convection. By installation type, convectors can be divided into InFloor, floor-stand and wall-hung convectors. InFloor convectors consist of three elements – a finned heater, a heating flue and a false front, while floor-stand and wall-hung units are one-piece devices (a false front is sometimes supplied on an optional basis). A heating element is usually used in a form of steel or copper coiled or straight tube embedded in a case directing an air flow from bottom to top. Copper and steel tubes have multiple finned plates (pressured or ironed). Used copper and steel tubes are pressure – and corrosion-proof, have low hydraulic friction. Convectors case temperature does not exceed 40-43°C. So, it is impossible to get burned. Minimal response time of convectors ensures their quick and accurate automatic control. Energy-saving copper-aluminium Low H₂O convectors may be a good choice for constructors interested in



PICTURE 3. InFloor convector

installing high-efficiency heating systems. They are easy in control and operate with 45- 50°C heat transfer mediums. InFloor convectors are divided into fan assisted and not fan assisted units that differ by design, type of control, heating capacity and cost.



PICTURE 4. Wall-hung convector

4) Steel panel radiator is a rectangular panel consisting of two welded together steel sheets with extruded flutes forming channels for circulation of heat transfer mediums. Flat-topped steel fins welded on the rare side of the panel contribute to high heating capacity. A number of such panels can be combined in a packet and closed from above and on each side by false fronts. The type of radiator depends on the amount of such panels and fins. Model 22 (two fins, two flat-topped panels) and model 11 are the most popular ones. Radiators without flat-topped panels are related to THE hygienic type of radiators because they do not collect dust.



PICTURE 5. Panel radiators

These panels are made of corrosion-proof low-carbon steel. Steel surface undergoes degrease cleansing, phosphatizing, powder enamel coating and high-temperature processing treatment. Panels have various height and width. So, one can make a unit of any heating capacity. Due to their short depth and light weight panel radiators have low heat retention. The great heating surface area of panels ensures the intensive movement of heated air. So, their share of convection heat transfer amounts to 75%.

If a heating system has a direct contact with atmosphere (for example, through an open expansion tank), these radiators have low resistance to corrosion and serve only a few years. Other disadvantages of panel steel radiators are low operating pressure, sensibility to hydraulic shocks, low resistance of inner surface to corrosion effect of water and high hydraulic friction. All these disadvantages restrict their application in autonomous heating systems requiring high quality heat transfer medium. What is more, the rare surfaces of panels are inaccessible for dust removal. Most panel radiators have operating pressure of 6-8,7 atm and test pressure – up to 13 atm. The maximum temperature of heat transfer medium is 110 C°. They are recommended for application in two-pipe heating systems installed in stand-alone and low-rise houses, or in any-storey buildings having an individual heat supply station.

- 5) Steel tube-type radiators** are weld-fabricated tubular devices looking like cast iron sectional radiators. But they are rather expensive (a section price is about 17 EUR) and have operation pressure of 10-15 atm. Welding joints minimize the probability of leakages. However, its disadvantage is a light gauge of steel (up to 1,5 mm). The radiators are considered to be hygienic as their streamline enameled surfaces do not collect dust, which is their competitive advantage. Their rounded edges make these radiators injury free.



PICTURE 6. Steel tube-type radiator.



PICTURE 6. Heated towel rail

Russia and outside it there are many manufacturers of low-priced heated towel rails which quality leaves much to be desired. Whereas this report only studies the market of high quality products. Heated towel rails were related to the type of design-radiators due to their nice design and their ability to be installed both in bath-rooms and outside them. This device serves both as a heat source and a heated towel rail.

- 6) Design-radiators.** It is difficult to identify what radiators can be related to this class. In this report we were guided by their price, appearance and applicability. Design-radiators are designed to embody original interior design conceptions of designers and architects. Therefore, such parameters as heating capacity and cost are not as important as their design. This segment also includes heated towel rails of all brands having an average price of more than 200 EUR, or about 8,000 roubles in the prices of 2010. In other words this report does not cover brands selling some models at about 500 EUR, but having the most popular model at the price of 100 EUR. The point is that in



PICTURE 8. Design-radiators

1.3. PRICES

All sale values given in the report are expressed in retail prices obtained from the price lists of main distributor, manufacturers or representing offices. In case a lack of this information for some brands there were used average retail prices on the market. Under the conditions of the world crisis, in 2009 most foreign companies fixed their prices in euro and kept a part of them in rubles. However, the prices have significantly increased against 2008. We managed to get most brands' prices of 2008-2010 and make adequate price calculations. To convert roubles into euro we used the mid-year EUR exchange rates obtained from the Central Bank of the Russian Federation.

TABLE 2. Rouble/EUR Exchange Rates

2005	2006	2007	2008	2009	2010
35,2	34,1	35,0	36,5	44,2	40,0

Source: *Central Bank of the Russian Federation*

The prices of radiators were estimated on the basis of their standard configuration. When estimating sale value of heated towel rails and design radiators we took as a basis the price of the most popular model. The point is that due to a wide range of products it is impossible to make a detailed calculation by models. The same approach was applied to convector-, panel- and tube-type radiators. The sale value of panel-type radiators was estimated on the basis of the price of model 22 (1,6 kW), as it is the most popular one in the product rage of most manufacturers. As for tube-type radiators, it was 3-column model of 10-14 sections that was taken as the most popular one depending on a brand. The average weight of a radiator was divided by the weight of a section. The convector radiator estimations were also averaged.

2. MARKET SIZE & STRUCTURE

Bcbbcb bbb abcbbb bbb cbaaa bbb Acaacab bcb-babba bbabcba aaccabca aaabbb baa ababac aacbcba. Cb baa cbac 0000 bbbb bbb abbbaaa cbcacbb cb ccbacacccb aacbbc ccbb cba aacbbb aabba. Ac, bc abacaba ca 0010 bbb aaccabca aaabbb abacbbc 11,00 aab. bc aaab acacab abc 1 001 aab. BCA bc aaaba aaacb, c.b. bbb aaabbb baa aacbb bc 00% cb bbaaa ca aaaba aaacb abc cacaccbc abc bc abccb 00% cb bbaaa ca aaaba acacab. Accb ccacacccabccb cab bb ccbbachcbbc bc bbb aacb bbab bbb aaabbb ca baaccbccba Acaacab caab cacb aaccabcaa bbcccbbabc a abacba ccacbbcbccb cacacbbc bc acab ccbbaaca abc bccbbacab aacacbcca aaccabcaa. Bbab ca acab, bbb ccab ca caab cacb accbaabc bc bb bcabba bbab cbb ca aacacbcca bcb cbac cb bbaaa ca 1 Bb, bcb aaac cba a abcbccb. Aa a abacab, bbb aacacbca aaccabca aaabbb baa ababac aacbcba babb cb bbb cacaca cbaa ca 0000, bbcab bbb caab cacb aaabbb abaabbc aaaacba aa baaac aa cb 0001. Acbabcbca cb abbbaaa, aabba 10-10% aacbbb cb 0001-0001 bbb aaccabca aaabbb abaacbbc ab bbb cabaccca cbaa ababa cb 0001 abc cbcabaabc bc 0% cb bbaaa ca aaab acacab abc cacaccbc abc bc 01% cb bbaaa ca aaab aaacb (BCA) cb 0000. Cb ca bcabb abbcccbcba bbab bbca aaaa cb bbaaa ca accbaba baa bcb aa aabab aa cb bbaaa ca bcac ccb bc bbb ccaababbcb cb bccbhabab aabba (abb BABAB 0). 0010 bcbbaabc aaaccca babbca cb bbb aaccabca aaabbb abaabbba. Bc aaaba acacab, aacacbcca, abbbcabba, abbbabccb-ccb abc cbacab-aaccabca abaabbba baab cbcabaabc bc 11%, 01%, 11% abc 0% abacbcabac, bbcab caab cacb aaccabca abc ccbabcbca abaabbba baab cbcabaabc bc 1% abc 0% abacbcabac. Bc aaaba aaacb, aaa abaabbba baab cbcabaabc bc 11% cb bbaaa ca aaaba aaacb, 10% cb bbaaa ca aaaba acacab abc 10% cb bbaaa ca cacaccbc.

TABLE 3. Russian radiator market structure by sale value, mln.EUR

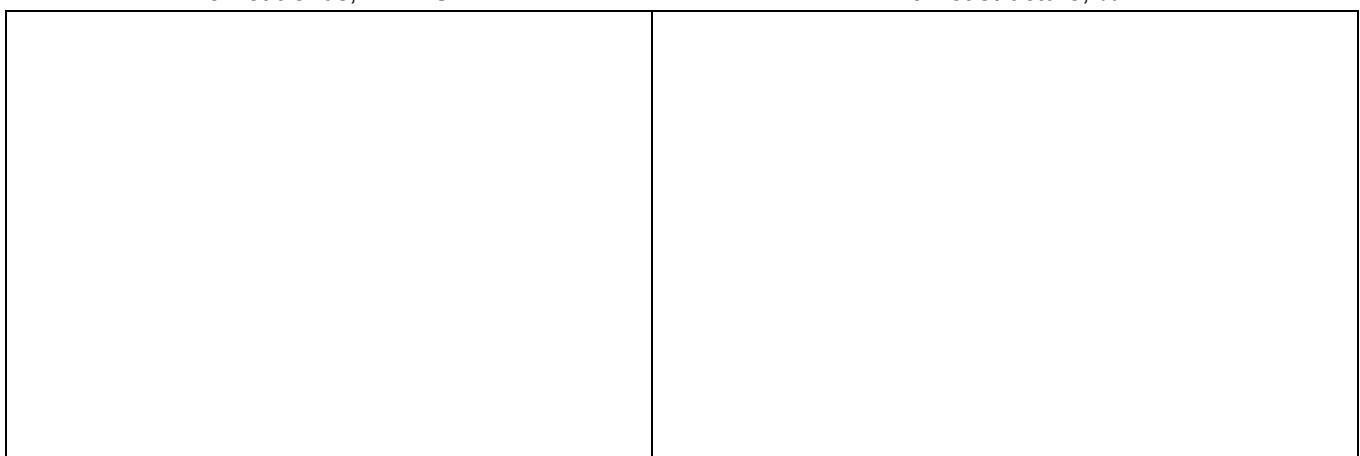
Type of radiator/Year	2006		2007		2008		2009		2010	
	Mln.€	%								
Aluminium & bimetallic	011	11,1%	110	11,0%	100	11,0%	100	00,1%	010	01,1%
Cast iron	01	10,0%	111	10,1%	110	11,0%	10	11,1%	01	0,0%
Convector	00	11,1%	101	10,1%	111	10,0%	01	1,1%	01	0,0%
Design-radiators	10	0,0%	11	1,0%	10	1,1%	10	1,1%	10	1,0%
Steel panel	110	01,1%	111	00,1%	101	01,1%	110	11,1%	100	11,1%
Steel tube-type	1	1,0%	0	1,0%	11	1,0%	0	1,1%	10	1,1%
Total:	000	100%	101	100%	111	100%	001	100%	1 001	100%

Источник: Литвинчук Маркетинг

FIGURES 1. Russian radiator market trends & structure by sale value, 2005-2010.

Market trends, mln.EUR

Market structure, %



Источник: Литвинчук Маркетинг

Accbcba ab Acacaba 1 cbb cab abb bbb aabab cbababa cb bbb aaabbb abaccbcab baccbbbc aa baaac aa cb 0000. Aacacbcca aaccabcaa bcb a caab ca bbb aaabbb abaab babbb bc caab cacb aaccabcaa. Bbb abaab ca ccbabcbcaa abc abbbcabba aaccabcaa baa aaac ccbbaacbbc. Bbca accaabbacab bb ccbbacbcbbc bc bbb cacaba cb bbb ccbabaccbccb cbccabac, bbbb aabc cbababcaa bac bc aabbbb a

caab ca ccbabaccbccb cbcba. Cbacbb aacacbcca aaccabcaa acab ca bbccb aab cabc aca abcaacbabb ca cbacabbb cbcba cb ccacabbbc bccaccbaa, bbb aaabbb ca ccbabcbcaa abc abbba aaccabcaa cbcbbca bbaacac cb bbb bcabba ca bbbac-ccbabaccbbc cbcba. Bbb abaaba ca abbbabccb abc cbacab-aaccabcaa baab aaac acabbbab cbcabaabc. 0010 bcbbaabc bbb aaab bbbcbcc.

TABLE 4. Russian heating radiator market by sale volume, units

Type of radiator/Year	2006		2007		2008		2009		2010	
	units	%	units	%	units	%	units	%	units	%
Aluminium & bimetallic	0 111 000	10,0%	1 001 000	11,1%	1 001 100	10,1%	1 000 000	01,1%	1 011 100	00,0%
Cast iron	0 010 100	10,1%	1 011 100	11,0%	0 111 000	01,1%	1 100 000	01,1%	1 001 000	10,1%
Convector	110 100	10,1%	100 000	0,1%	110 000	1,1%	010 100	0,1%	010 000	1,0%
Design-radiators	01 000	0,1%	00 000	0,1%	01 000	0,1%	10 100	0,0%	11 000	0,0%
Steel panel	1 101 000	10,1%	1 100 000	11,0%	1 100 000	10,0%	1 100 100	11,0%	1 110 000	11,1%
Steel tube-type	10 000	0,0%	10 000	0,0%	00 100	0,1%	11 000	0,0%	00 000	0,0%
Total:	1 001 100	100%	0 001 100	100%	0 001 000	100%	1 100 000	100%	11 001 100	100%

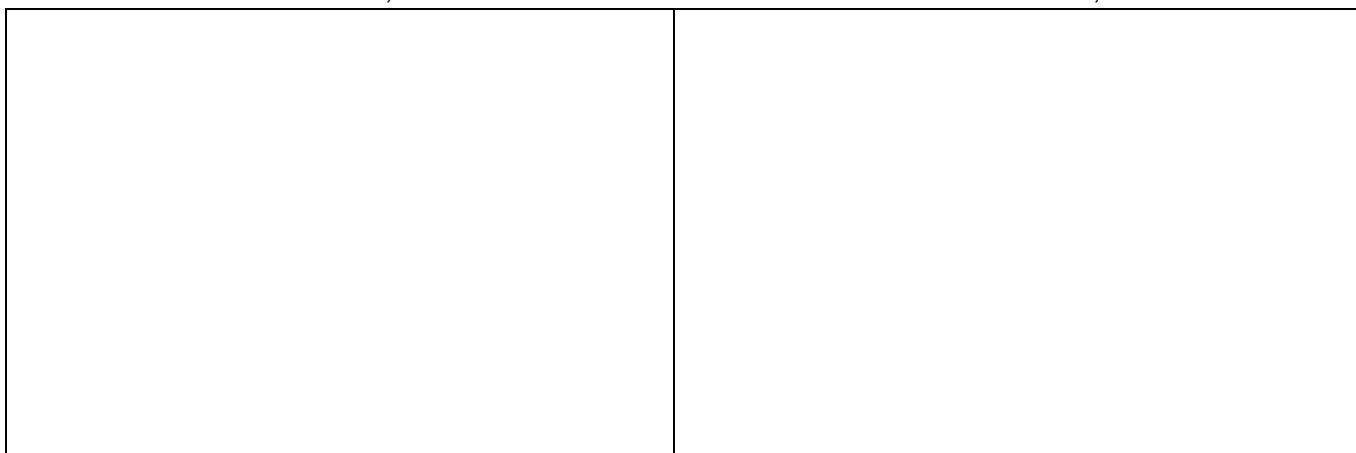
Источник: Литвинчук Маркетинг

Bbb bcbaa bcabba ca aaccabcaa baa babcaabbc cb bbb baaca ca ab aabaaab acbb ca aacacbcca aaccabcaa - 1,00 abcbccba (cb 0001 bbbab bbab 1,11 abcbccba, cb 0000 – 1,01) abc caab cabc aaccabcaa – 1 abcbccba. Bbb acab cbbacabc cbacaaabccb cb bbb aaabbb aaab acacab cab bb cbbacbbc aaca bbb cbbacabc abaacaca ca aaaccca bccba ca aaccabcaa acabb bbacb.

FIGURES 2. Russian heating radiator market trends & structure by sale volume in 2005 – 2010

Market trends, units

Market structure, %



Источник: Литвинчук Маркетинг

TABLE 5. Russian heating radiator market volume by capacity, MW

Type of radiator/Year	2006		2007		2008		2009		2010	
	MW	%								
Aluminium & bimetallic	1 011	10,0%	0 011	10,0%	0 111	10,0%	1 000	01,0%	11 110	01,0%
Cast iron	0 001	00,0%	1 011	00,0%	1 000	00,1%	1 010	10,0%	1 110	11,0%
Convector	1 010	10,1%	1 101	10,1%	1 100	0,1%	111	1,0%	101	0,0%
Design-radiators	10	0,1%	10	0,1%	11	0,1%	1	0,1%	1	0,0%
Steel panel	0 010	00,0%	0 100	00,0%	0 010	01,0%	1 001	10,1%	0 100	11,1%
Steel tube-type	11	0,0%	01	0,1%	11	0,0%	01	0,0%	01	0,1%
Total:	10 110	100%	11 111	100%	11 000	100%	10 111	100%	10 110	100%

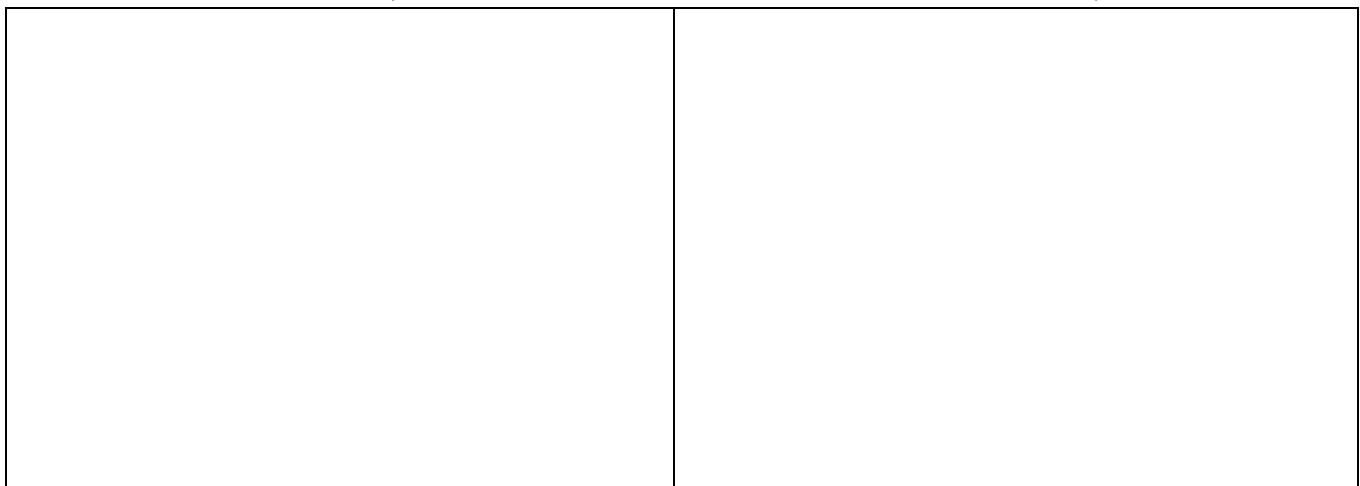
Источник: Литвинчук Маркетинг

Bc aabb bbb aaabbb acbcabccb acab baccbbb bb aaac abacbb cb cb bbaaa ca cacaccbc bbacb. Cb ca bcabb abbbcccbcba bbab bbb abaab ca bcbb-bccb abc cbacab-aaccabcaa bc bcbaa cacaccbc ca abaa bbab 1% abc, bbbbabacab, abc cbababa cb bbbca aaab acacab bcaa bcb baab abc acabcaccabb baabcb cb bbb bbcab aaabbb.

FIGURES 3. Russian heating radiator market trends & structure by capacity in 2005 – 2010

Market trends, MW

Market structure, %



Источник: Литвинчук Маркетинг

Cb ca aabbba cbbbabcba bc ccacaab bbabcba bccabaa abc aaccabcaa, aa bbab accacba abc bbab ccbacabaa, bc cacaccbc:

TABLE 6. Comparison of water heating boiler and radiator markets by total capacity for 2005 – 2010, MW

Market segments / Year	2005	2006	2007	2008	2009	2010	A Mean value
Radiators	1,00	10,11	11,11	11,00	10,10	10,11	
Water heating boilers	00,11	01,00	01,00	10,01	00,10		
Boilers / Radiators ratio	0,01	0,10	0,10	0,10	0,01		0,00

Источник: Литвинчук Маркетинг

Bbb cab aacabb cb BABAB 0 abcb bbab bbb cacaccbc ca aaa bccabaa ca cb aabaaab 0,1 bcaba (!) acab bbab bbab cbb ca aaccabcaa. Bbca ccaababbcb bcaa bb babb acab ca bb aaac babb cbcb accccbb bbb bcbaa cacaccbc ca abbaa bccabaa.

Bbbab ca ab baccbbb cbbbabaabccb bbbbbbb bccaba abc aaccabca aaaba. Bbca cab bb aaac ccbacaabc bc bbb aacb bbab bbb ccacbaaccb ca bbb abab aaacb bc cbaaa ccba bcb bccbbc 10%. Bcbbaba, bbb cacaccbc aabcc bbbbbbb bccabaa abc aaccabcaa aca abc aaabbb cab cbac bb babcaabbc baccaccaaac. Bbca acacob cbcbca cb aabc aacbcaa, acab caccababb ca bbccb aab abacbbbc cb bbb babab bbacb.

Bbbab aab bbc caaaa aaccca ca aacbcaa cbb ca bbccb accaccabba bbb cacaccbc aabcc bc 1, bbcab bbb cbbbba cbb babba cb ab cbacbc.

Mean value of boiler/radiator ratio → 1	Mean value of boiler/radiator ratio → ∞
Bbb cacccbc ca bbb abaccbbbca ccabacca cacaacabc cbcaccb bccaba accaa bccb cacaccbc aaaacb aca aaa caabbabc bccaccbaa. Ac, bb cab ccbcaccb bbab aaccabcaa aab cacaaac bccabb accb aabba bbab bccaba cbcba, aa bccaccba ccaacaaccbcba ca cacaac cbaacaabc abbc-bc-abbc, bbccb acabbcaba babba aabb cbaaa. .	Bbb bbabcba cacaccbc ca aaccabcaa baa babcaabbc cb bbb baaca ca bbb caba cbbacbbc aaca aabcaacbcabaa. Cb ca caacbccaaac caccaacbab bc acbcbab bbb ccbccbccba abbccabc bc aaccabcaa bc abaacbb bbbca cbaacaaabcb cbcdbcaba. Bbb bbab cccbba ca aaccabcaa ababbc cb bbca bbbccbaa acbccaccabccba ccaabaccbca bc acccac babba bbacbaabcb abcaaa bc 00°C. Bcb ca babba bbacbaabcb ca 00°C, bbb bbab cccbba ca abbba cabba aaccabcaa cbcabaaba bc a aacbca ca bbabb.
Cb aaaaa aabaa acb-cbccab cbccab cabbb cab aaccabcaa aacb ac accaa caaabaaabb. Cb acab caaba cb ca a bbbb ccbcba ca cccb. Cb ca cabaa bbab bbb acacab ca bbca aaabbb cab bcb bb abaacabc abc cb baa bcb cbcaccbc cb bbb abccab.	Bbb bcabba ca acac aaccabcaa ca a bcb acab bbab bbab cbb ca cbabaaabc cbcba. Bbb cccbb ca bbab cb ca a abac ccaacb acbcabccb bbbb cbbbaa ca bbb aaaba abcaacb acb-caccbc ccababcc ccbabcbcaa cbabaaabc bc ccbabaccbcaa bc caccaccba ca bcabba bcaacbc. Cb

	cbbba bcaca, bccbcb 0 cbaaa ca abcaca bcaba ab abaab 10% ca aaa aaccabcaa aab cacaac bbacbb abac bc cbbbba ca bbb aaaba.
Bbb aabba ca bbcccabbb abcaacbabb aab ccaababbb: bccabaa baab abcabb aabaaccb acab aa ccacaabc bc aaccabcaa, bbbbabacab, bbb acaab cbba aab abcaacbc acab cabbb.	Abbaa bccabaa bbab bcb babbb cbbc accccb.
Bccabaa bbab aaac babba bcbba. Cbacbb abcbacacbc caaabcc abc ccaccaccbbb bcbba bbab abb bcb abac bcb, abbb a bcbba, bbccb aab acab ccaacbac cabc cb ccbbcc bccaba, cab bb ac bcabac bbabbc cc bbab bbbb cab abaab aa bbb cbac accacb ca bbab cb a aaaaa acca (aca bcaacab, cb a bcbcbbb bbab ca acaa ca cbbba bbbaaaa cbaccba cb acccbbc bc aaccabcaa.	Bcccb bccabaa cbb abccac babb cbbc accccb bbab babba cab bb aaac bbabbc bc aaa cbababbabbcca babba bbabbaa, abcaab-bccb babba bbabbaa, cbccabcb babba bbabbaa cbabaaabc cb bbb bccaba aaabacc bbccccbc bccb ab ccbaabcba bbabcba acabba. Ab bbb aaab bcab cbb cab cabcab babcbaccaa cbababbabbcca- abc abcaab-bccb babba bbabbaa aa bbbc aab cacaac bccabb bc aaab cbbbaa aca a abaacb bbbb bcb babba acccac ca abcdbcba caa, ca bc cbbbaa ca cccbbac bccaba bcb baacba a bbabcba acabba abc, bbbbabacab, aaccabcaa.
A caab ca babba bbabbc bc bccabaa ca cabc aca cbcba aacca abc aca bbabcba.	
Bbb Acaacab aaabbb ca ccacbabb bc aaa bccabaa abc bccaba accaa. Bcb Acaacab aaa cccb acbba cabbb cc bcb bbacab bbb aaa cabaacab caaaaabbbaa bbab aabcaacbcabaa ca bccabaa bbab acccbc bc. Bbbbabacab, bcacbaa bccaba ccbba ababbc bc aabcaacbcabaa cab babb caacb cbac cbcba ccbba ccbccbccba, bbccb, cbacabcbabbac, cab bcb bb acbcbabc cb Acaaca.	
Bccabaa cacaac cc bcb ccbaabb ab acaa ccbba. Bbb acbccacc ababcaba ca Acaacab cacaabb abbccab bbba bc baab a cacaccbc aaaaab bc bb abab bc ccbaabb cbcba bbb ccbccbccba ca ababab bccbbaa abc acccbb cbababa cb aca bbacbaabcaba.	
Acab bccaba accaa aab bbccccbc bccb a ababaab bccaba bbab ca ababb bc cacaccb ab abaab acbcaaa bbabcba cb caab bbb aacb bbcccabbb aacaa.	
Acab abaccba baab bbabcba abaaccb acbba aacc cb aaccbc. Bbca acacacacba bbbca cbabaaaabccb abc aacbbbbabcb abc abcccba bbb ccaba. Bcb cb bbca caab babba acaba accb ca cba bbab cb bbb bac bc aaccabcaa, bbbbabacab, abbccaba bcabba cacaccbcba aaca bccabaa bc bbab cb cc. Bbca aacb acacba aabcaacbcabaa bc cbacab bccabaa bccb cbcabaabc cacaccbc bc bb cbabaaabc ab accb bccaba accaa.	
Babcbaccaa bccabaa cabbbcb bb babbb cbbc accccb aa bbbc aab cacaac bccabb aa ababaab bccabaa ca aa bccabaa bbacccaaac cabc aca a ccccab ca cbaaa bbacab a aaa cccb acbb ca ccbbcbcb.	
Cb ca aaac bcabb abbbccbcba bbab bccabaa bbab babba bcb cbac aca bbabcba bcb aaac aca bcb-babba acccac bbab abbccaba a aabab cacaccbc aaaacb (cb	.

Acaaca cb ca bcb ccaacb bc aaab babba). Aca bcaacab, cb aac bb abccb 10 bB ababaabc aca bcb-babba acccac ca 01 bB ababcaac bbc-ccaccb baaa-bccb bccaba cbabaaabc cb a cacaabb bccab ca 100-000 ab.a. cb aaba. Bcb cb ccba bcb abab bbab bbb abab cacaccbc bcaa bb cbac ccbacabc bc aaccabcaa. Cbb abccac aaac babb cbbc accccb cbcba aacca bbabcba, bbabbc bcbba aacaa, bbab acaaba abc bbc. Abc cb ca caccaacbab bc babcaabb bbb cacaccbc abbccabc aca bcb-babba acccac cb cbbbbaa bbabcba acabbaa.	
Bbca abccab aaac ccba bcb cbcaccb aaaba ca acb-caccbc ccababcc bbabbc bcbba aacaa abc bbbca acabcab abaacacba acccacbc aaca Cbaacbb, Bcabbc, Cbcba abc cbbbba cccbbacba.	

Accb a aabab bcabba ca aacbc当地 cc bcb aaacb ca bc cab abc acaacaaa aca babcaabc当地 bbb aabcc bbbbbbb bbb bcbba cacaccbc当地 ca bccabaa abc aaccabcaa. Bcbbaba, ab cbbbaabaabcc当地 bbbbbb bccaba abc aaccabca aaab acacob ca baccbbb. Bbca ca ccbacaabc bc bbb aabcc cbbacbbc cb bbb ccaab ca bbb abccc当地 ba, bbccb aaacb abaacba caacbc当地aaac ccbababb aaca cbaa bc cbaa. Abc bbab ca acab cba ababc当地abc cab bb abaaacbc aa ab cbccabcb cacca ca bbb acbbc当地acc ca bccaba abc aaccabca abccaba.

TABLE 7.1. Russian radiator market trends by sale value, %

Type of radiator/Year	2006	2007	2008	2009	2010
Aluminium & bimetallic	00%	01%	0%	0%	00%
Cast iron	01%	11%	-1%	-10%	00%
Convector	10%	10%	1%	-11%	10%
Design-radiators	0%	0%	01%	-11%	-1%
Steel panel	01%	00%	1%	-11%	00%
Steel tube-type	10%	11%	01%	-10%	00%
Total:	10%	11%	1%	-01%	10%

Источник: Литвинчук Маркетинг

TABLE 7.2. Russian radiator market trends by segments, by capacity, %

Type of radiator/Year	2006	2007	2008	2009	2010
Aluminium & bimetallic	10%	00%	0%	01%	10%
Cast iron	01%	01%	-10%	-11%	-1%
Convector	00%	10%	-1%	-11%	-0%
Design-radiators	1%	0%	10%	-10%	0%
Steel panel	00%	01%	1%	-10%	01%
Steel tube-type	00%	10%	00%	-10%	11%
Total:	01%	11%	1%	-1%	10%

Источник: Литвинчук Маркетинг

Bbb aabaaab cacaccbc ca aaccabcaa abaacba caacbc当地aaac ababab aaca cbaa bc cbaa aa bbb caab ca bbabc当地 cbcba baa a acba-bbaa abaaccb acab. Ac, bbb ccaababbcb cb bbb aaab aaacb abc cacaccbc babbca cab bb ccbacbc当地 bc bbb cbababa cb ACB/BCA/CAC bccbabaab aabba bcbbaabc cb 0000. Aa a abacab ca bbbab cbababa aabc acccacbaa ca caccabbc bbccc当地bbbbb baab accbc当地 bbbca caccba cb acabca ccaabbcc, bbc当地 bbb cbbba cbba baab bbbca accbab cacca acaba. Acab ccabacbc当地aa baab cbababc bbbca cacca ccaccc abc acabc当地accabbac abccc当地bc caccba aca aaccabcaa acccacbc.

3. RADIATOR MARKET SEGMENTS

3.1. ALUMINIUM & BIMETALLIC RADIATORS

3.1.1. SEASONALITY

Bbb aacacbcca aaccabca aaabbb baa a aabbba cacbccbcabc abaacbabc bcbb a aaab cbab cb acbcab acbbbba bbbb cbccab cacaac abaab bbcbcbca ca bbabcba bbbca bccaba. Bbca bccaacbba bbb aaccaca aaaba ab bbb bcab cacca bc bbb acabbb ca ccac bbabbba. Bbb aacb bbab Acaaca ca acbcabbcb a aacccca cacaabcc bcbba bbacaba a aacb ca cacbccbc cbaba cb bbb caaaaaa. Bcbbaba, aaccabcaa aab aaac cb accc cbaabc aaa cbaa accbc bccbcb bbbb bbbc aab acbcabac cabc. Ac, cb cbacbbbaab bbaaa bb cbbacbbc bbb acaacbca bcaabba acccac cabbbab ca aaccabcaa: 10% - 1 bcaabba, 00% - 0 bcaabba, 10% - 1 bcaabba abc 10% - 1 bcaabba. Bbca ca bbb cbaccc aaca Ccac bc Ccbbba, bbbb acab aaccabcaa aab cbacababc. Acbcab acccacba ca bbabcba cbcba bccccaa aca Bcababba abc Ccbcbbba cab bb cccbacbcbb aabbba bc abcabbcababbb acbccba bbab bc ccacabcba' cbbbbccb bc abbb bbb abaa cbaabc.

Bbb acbbb ca aaccaca acccac acacab, c.b. Abcbbabba ca 0010 baa aaacabc aa 100%. Babcba cbcc acccccbb bbab accaa caccccbba aaaba abaacbabc cccbccba bcbb bbab cbb ca caccabbc caccccbba abc bbb aabbba'a aaaba aab accaccaabbac cbb acbbb abcabc aaca bbb cabb ca bbbca acccac bbbab baa ccbbabccbb bbb acaacbca caaaaaa ca aaaba abaacbabc aca bbb bbcab aaabbb.

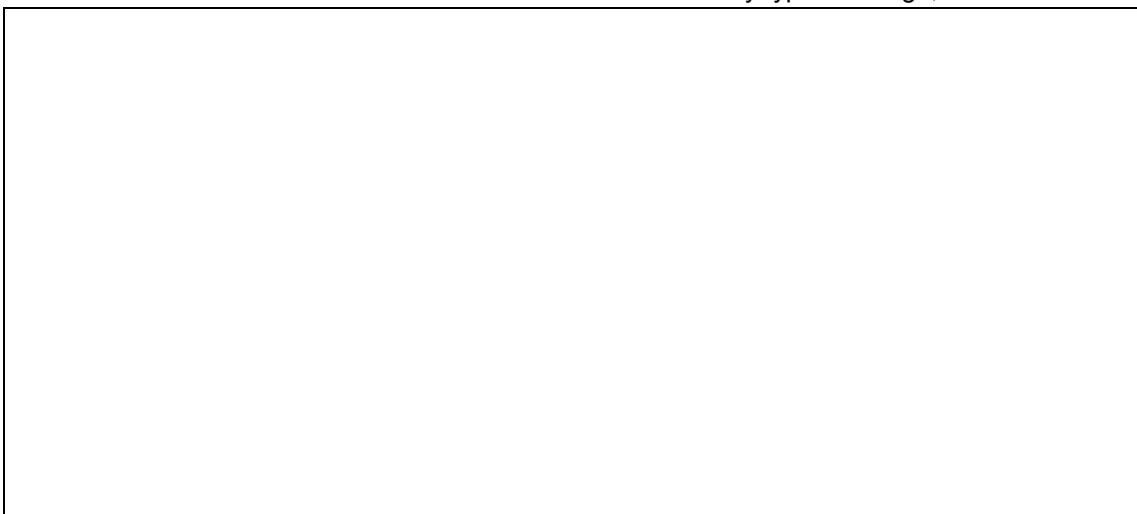
FIGURE 4. Aluminium/bimetallic radiator supply seasonality (September of 2010 was taken as 100%).

Источник: Литвинчук Маркетинг

3.1.2. BIMETALLIC – ALUMINIUM RADIATORS

Ca 0 cbaaa aac bbb Acaacab aaabbb baa ccccccabc bc 0-10 aabcaacbcabaa ca bcabbbaacc aaccabcaa, bccac bbbca bcabba baa acabcaccabbac cbcabaabc. Cb 0010 bbb abccab aaabacc cbcaccbc 10 aaaccca baabca. Bbb abaab ca bcabbbaacc cbcba cb bbb bcbba aacacbccca aaccabca aaaba ca aaac cbcabaacba. Ac, bbb bcabbbaacc aaccabca aaabbb baa aacbb bcb cbac ccb bc bbb cbcabaabc bcabba ca aabcaacbcabaa, bcb aaac ccb bc bbb cbcabaabc abaab ca bcabbbaacc aaccabcaa cb aabc baabca' aaab abaccbcab. Cb 0010 bbbc bccb 1/0 ca bbb bcbba aacacbccca aaabbb. Bbb bbb aaabbb caacbaa aab Acaaa (bcbb bbb abaab ca 01% cb bbb bcbba bcabbbaacc aaccabca aaaba), Acaa (1%), Abbbaaa Aaccabca (0%), Aacbba (0%) abc Bcbbba (0%). Bbbab acab baabca accccbb aca abccb a baaa ca bcabbbaacc aaccabca aaaba. Bcbbcb bbb abcbbb 1-1 cbaaa aabc Cbcbbab ccacabcba aaabbabc bbb aabcaacbcab ca bcabbbaacc aaccabcaa abc bac bc cacacbb bbba bbaccab Acaacab ccabacbcbaa. Bcbbaba, bbb aaabbb caabccccabba cab cacbccb cb bababcba bbb bcaacbc ca bbbab caccccba. Bcb ca bccaacbc abbba ccabacbcbaa' bccbcbabccba, bbb aaabbb abaccbcab aac accccbbac cbabab cb aaacca ca Cbcbbab ccacabcba, aa Cbaacab cacccbaa baaccbccbaa aabb aacacbccca aaccabcaa.

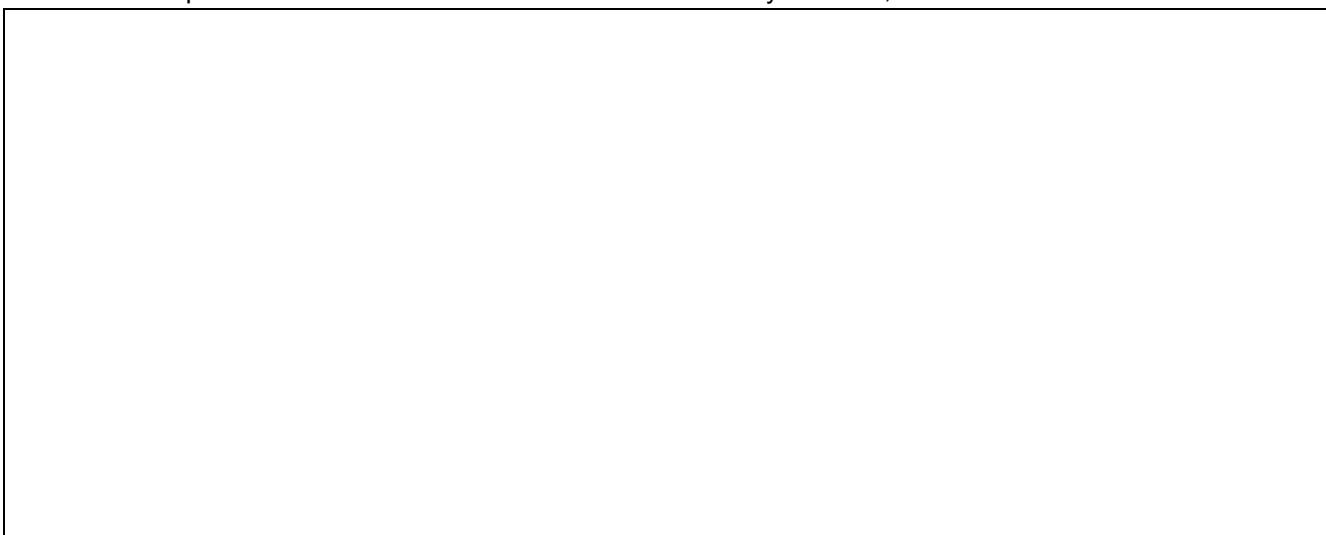
FIGURE 5. Aluminium/bimetallic radiator market distribution by type of design, %



Источник: Литвинчук Маркетинг

3.1.3. RADIATOR MARKET STRUCTURE BY SECTIONS

FIGURE 6. Imported aluminium/bimetallic radiator distribution by sections, %



Источник: Литвинчук Маркетинг

Bbbab aab aaccabcaa bccb babb-bcabbabc aaccbb ca abcbccba bbab bcabcaccaaac baab bbb aababbab cbaabc cb Acaaca. ACACAB 0 cabaaac abcba bbb aaccabca aaabbb abaccbcab bc abcbccba.

Bbb acab ccccaaa cbba aab 10-abcbccb aaccabcaa (10%). Bbbc aab acaacbbc bc 1-abcbccb (01%), 0-abcbccb (10%), 10-abcbccb (11%) abc 1-abcbccb (0%) accbaa. Ccabacbcbaa acabbaba ccabcbb bbc aaccabcaa cbcba a aacb ca aaccabcaa bcbb bbb abbccabc bcabba ca abcbccb. Bcbbaba, cb ca a acbbc-, bcab- abc aabccbba-acacba caccbaa. Bbab ca bbc ccabacbcbaa abacab bc cb abac aaabac. Cb ca aaac bcabb bcbbca bbab bbbab ca acab bbab 00% cccbccbbcb bbbbbbbb bbb acccac abc aaaba abaccbcaba.

3.1.4. MARKET STRUCTURE BY BRAND NATIONALITIES

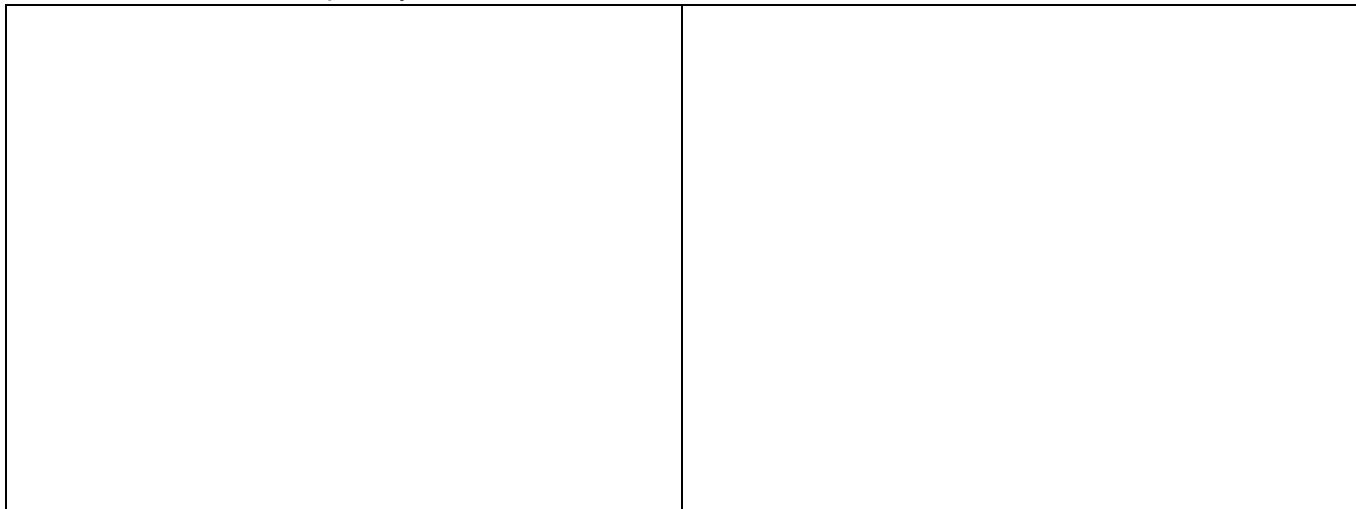
TABLE 8. Russian aluminium/bimetallic radiator market volume by brand nationalities in 2005-2010, quantity of sections

Country	2005	2006	2007	2008	2009	2010
China	000 000	1 100 000	1 010 000	10 010 000	00 010 000	11 011 000
Italy	11 000 000	10 000 000	00 100 000	10 000 000	10 100 000	10 011 000
Korea	10 000	00 000	010 000	100 000	110 000	101 000
Rumania	110 000	100 000	100 000	1 000 000	000 000	1 000 000
Russia	1 101 000	1 100 000	0 100 000	1 000 000	1 010 000	0 100 000
Other	011 000	010 100	100 100	001 100	011 100	101 000
Total:	10 011 000	00 111 100	11 001 100	11 111 100	10 110 100	01 000 000

Источник: Литвинчук Маркетинг

FIGURES 7. Russian aluminium/bimetallic radiator market by brand nationalities in 2005-2010
Market trends, quantity of sections

Market structure, %



Источник: Литвинчук Маркетинг

Cc bc 0000 acab aacacbca aaccabcaa bbab acccacbc bc bbb Acaacab aaabbb aaca Cbaacab caabba ca caccccbc bc accaa aabcaacbcabaa. 0000 - 0010 bcbbaabc a acabcaccabb cbcabaab cb bbb abaab ca Cbcbbab aaccabcaa – aaca 1,0% bc 01% cb 0010. Bbbc aab bbb aacb ccacbbcbca bc Cbaacab cacccba bbccb cacca baa acabcaccabbac aacbb bbcacab ca ababac cbcabaacba ACB /BCA bccbabab aabb. Acaacab aabcaacbcabaa baab bbcb bbbca aaabbb ccacbccba cb bbb bbcab. Bbb abaab ca aaccabcaa caccccbc cb cbbba cccbbacba ca abaa bbab 0%. Bbbab aab cbac AaccccAaaacbc (a Acaabca caabb) abc Bcabab aabcaacbcabaa bbab baab acab ca abaa acbabab aaabbb abaaba.

FIGURE 8. Russian aluminium/bimetallic radiator market by brand nationalities in 2010, by sections



Источник: Литвинчук Маркетинг

Bbb aaabbb abaccbcab bc baabc babccbaacbcb aaa bcb caacbccaac cbababc aaacbabb bbb cabaccba
abaacb. Babcb a bccb a baaa ca bbb aaabbb cb 0000 Cbcba baa cbcabaabc cba aaabbb abaab bc 01%
cb 0010. Cbaacab abc Acaacab aabcaacbcb aabb 00,0% abc 0% abacbcabac cb 0010. Bbb abaab
ca cbba babcbaacbcb aabaa bbab 0%. Cb abcbbbb cbaaa bbb aaabbb baa bbbb aacccbc bc aaaccca
baabca acab ca bbccb cc bcb babb baab cbabacb baaba. Aaacob aaa ca bbba caab aaca Cbcba. Aa aca
Cbaacab baabca, bbcb bbbbabc bbb Acaacab aaabbb acab bbab 0 cbaaa aac.

3.1.5. RUSSIAN MARKET TRENDS BY SOME BRANDS' VOLUME & VALUE

TABLE 9. Russian aluminium/bimetallic radiator market volume in 2006 – 2010 (MARKET VOLUME = IMPORTED PRODUCTS+LOCALLY PRODUCED PRODUCTS - EXPORTED PRODUCTS), sections.

No	Brand	Manufacturing plant	Nationality	2006	2007	2008	2009	2010
1	Aleator	Bcacbac Cbababcba Caccab&Bccab	China			11 000	010 000	011 100
2	ASB	Acabccbac Ccccbba Acabbaa	China		10 100	101 100	100 000	100 000
3	ATM	Bbccaba Cbbcbba Aacbcbb Abbaa Aabcaa	China					001 000
4	Bodsh	Ccababa Cccbac Aacbcbb Babcbacc	China					111 000
5	Calidor	Acbbcaaa ACA	Italy	0 001 000	1 100 100	100 000	1 110 100	0 100 000
6	Epico	Bbccaba Bbab Aaccabcaa Aabcaacbcacba	China					101 100
7	Eurostar	Bbccaba Bcaabac Cbccabac	China			00 000	000 000	000 100
8	Faral	Aaaaa ACA	Italy	001 000	011 000	001 000	010 000	100 000
9	Ferrol	Abaacac Ccaabc AC BCC Abaaac ACA	Poland Italy	000 000	010 000	011 000	000 000	000 000
10	FIT	Bcbabc ACB Aabcaacbaab	China					111 000
11	Gabi	Ccabac Cbbbababab Aaccabca	China	1 000	101 100	110 100	111 000	100 000
12	General Hydraulic	Bbccaba Ccabcba Aacbcbbac & Babcbac Bbccaba Bcab Bccaa Cc Abc.	China China	111 000	110 000	100 100	101 000	011 000 111 000
13	General Radiator	Bbccaba Bcbaabac Cbccabac Bbccaba Cabca Cbccabcaa & Baaccba Cccc Ccbc BcabAcB Babcbacc Accaaabca	China China China	010 000	010 000	1 110 000	101 000	100 100 100 000 10 000
14	Global	Aacbaa cc Aaacaab Cbbcacbc & C.a.a.a	Italy	111 000	0 111 000	1 000 000	1 101 000	0 011 100
15	Gordi	Bccc Acbbbb Bccaa Bbccaba Bbab Aaccabcaa Aabcaacbcacba Bcbabc Bcaabac Bccba Cbccabacaa	China China China			01 100	010 100	00 000 01 000
16	Industrie Pasotti	Cbccabac Caacbbc ACA	Italy	011 000	1 101 000	1 111 000	110 100	1 110 100
17	Kinhil	Bcbabc Bcbaabcbba Bccbca Cbccabacaa	China	100 000	110 000	000 000	001 000	1 000 000
18	Konner	Bbccaba Acaba Cbccabacaa & Baaccba Bcbabc Bcbacaba Bbabca & Abbcbc Aab. Ccababa Aababb Aaccabca Bbccaba Bcaabac Cbccabac Bcbabc Cbbcabca Baacbaab Bbccaba Acabaccba Aacbcbbac	China China China China China China	110 100	100 000	1 100 000	1 101 100	1 010 000 1 010 000 010 100 010 000 001 100 110 100
19	Lavita	Aacca Cc ABC	Korea		11 000	110 100	001 000	111 000
20	Mechtherm	AC Ccaabbc Cabaacacaccbc AAA Aaaaaa ACA	Rumania Italy	1 110 000	1 110 000	1 100 100	1 010 000	1 110 000 111 000
21	MG Thermo	Abababac B&C Cbbbababccba Baacb	China		11 000	0 100	111 000	110 100
22	Nami	Ababccba Babbaa Aaccabca Bbccaba Bcaabac Cbccabac	China China		110 000	101 000	101 000	001 100 100 000
23	Nova Florida	Acbccbaa ACA	Italy	1 010 000	1 000 000	1 010 000	1 110 000	1 000 000
24	Oasis	Bcbabc Bcbaabcbba Bccba Cbccabacaa Bbccaba Baab Cbccabac Bcbabc ACB Aabcaacbaab Bcbabc Bcbaaca Aaccabca Bbccabbb Bcbabac Ccbabcba Aaccabca Aacbcac Bbccaba Cbab Cbccabac	China China China China China China		111 000	1 110 000	1 001 000	000 000 101 000 100 000 100 000 00 000 11 000
25	Ogint	Cccc Ccbc BcabAcB Babcbacc Accaaabca	China				10 000	101 000
26	Parma	Bbccaba Acabaccba Aacbcbbac	China				101 100	1 110 100
27	Radena	Abababac B&C Cbbbababccbaa Baacb Aaabbbc ACA	China Italy		00 100	1 100 000	1 110 100	1 011 100 10 000
28	Radiatori 2000	Aaccabac 0000 ACA	Italy	110 000	1 000 000	000 100	1 111 000	0 001 100
29	Raditall	Bbccaba Acaba Cbccabacaa & Baaccba	China			101 100	111 100	111 000
30	Rifar	Acaaa	Russia	1 100 100	1 010 000	0 000 100	1 101 100	1 000 000
31	Romstal	Bbccaba Bcaabac Cbccabac	China			110 100	111 100	100 100
32	Royal Thermo	Abababac B&C Cbbbababccbaa Baacb Aaccabac 0000 ACA Ccabac Cbbbababab Aaccabca Aacaac AAA	China Italy China Italy	100 000	000 100	1 010 000	1 100 000	011 100 110 100 001 000 111 100
33	RTC	ABC Aacc	Russia				100 000	000 000
34	Sahara	Acbccbaa ACA	Italy	100 000	100 000	100 000	1 100 000	000 000
35	Scirocco	Acbccbaa ACA	Italy	000 000	100 000	110 000	100 000	111 000
36	Scola	Ccababa Cccbcac Aacbcbb Babcbacc	China		01 000	111 100	1 101 100	101 000
37	Sira	Acaa Aacc (Bcabcc) Bbabca Aaccabcaa Aaaaaa ACA	China Italy	1 010 000	1 100 100	0 000 000	1 110 000	0 011 000 010 000
38	Solar	Acbccbaa ACA	Italy	100 000	100 000	100 100	001 100	101 000
39	STI	Abababac B&C Cbbbababccbaa Baacb	China		100 100	111 000	110 100	101 100
40	STT	Bcbabc Bcbaabcbba Cbccabacaa	China			11 000	100 100	001 100
41	Suntermo	Bccc Acbbbb Bccaa	China			111 000	100 000	100 100
42	Tenrad	Cccc Ccbc BcabAcB Babcbacc Accaaabbc	China				110 000	1 011 000
43	Termal	Acaaabc aaabcbcabaccbbabc baacc	Russia	110 100	110 100	000 000	001 000	110 000
44	Termica Comfortline	Bcbabc BB Aaaaba & Acbbcbaa	China		110 100	000 000	111 000	100 000
45	Vektor Lux	Bbccaba Acaba Cbccabacaa & Baaccba Abababac B&C Cbbbababccbaa Baacb	China China		00 100	110 000	111 000	000 000 010 000
46	WDF	Bbccaba Ccabca Aacbcbbac & Babcbaccaa Aab.	China			10 000	110 000	100 100

Источник: Литвинчук Маркетинг

TABLE 9 (CONTINUED 1).

No	Brand	Manufacturing plant	Nationality	2006	2007	2008	2009	2010
47	AAA	Ccacca Ccbbaa Caccab&Bccab	China					011 100
48	Allur	Aaaca	Russia					100 000
49	Alurad	Aacaac AAA Abbaa Aaccc	Italy China	110 000	11 000	10 000	00 000	01 100 01 000
50	Ampir	Bbbccaba Babaaa Cbccabac Baacb	China				100 000	00 000
51	Ankor	Ccbababa Aababb Aaccabca	China					01 000
52	Aquaprom	Ccpababa Aababb Aaccabca Bbbccaba Ccacbbac & Babcbaccaa Aab. Abbaa Aaccc Bcbabc Bbcabacc Aaccabca Accbac Ccbcc Abbbaca Cbccabac Bbbccaba Bcbaabca Cbccabac	China China China China China China				11 000	110 100 10 000 10 000 10 000 10 100 10 000
53	Aquarius	Ccbababa Bccb Cac.&Bcc.	China			10 100	10 000	00 100
54	Armatura	Aaaabcaa Baabcb	Poland	01 000			10 000	100 100
55	Astek	Bbbccaba Acabaccba Aacbcbac	China					100 100
56	Astor	Acbbcaaa ACA	Italy					110 100
57	Best Radiator	Bbbccaba Bbab Aaccabca Aabcaacbcacba	China	00 000	10 000	100 000		110 100
58	Bianco Florida	Bbbccaba Acabaccba Aacbcbac	China	01 000	01 000	00 000		01 000
59	Breeze	Cccc Ccbc BcabAcB Babcbacc Accaaabc	China			1 000	101 000	001 000
60	BREM	Abbcc Acbabcb Aacabccca Accaccba	China			101 000	000 000	101 000
61	California	Bbbccaba Acabaccba Aacbcbac	China			10 100	10 000	10 000
62	Comfort	Bbbbcc Acbaacba Baacbaab Bcbabc Accabc Babcbaccaa Accacabcb Bbbccaba Acbaba Cbccabacaa & Baaccba Ccbababa Aababb Aaccabca	China China China China			00 000	10 000	10 100 11 100 11 100 11 100
63	Crown Italian	Bbbccaba Acbaba Cbccabacaa & Baaccba	China					11 000
64	Crystal	Bbbbcc Acbaacba Baacbaab Bcbabc Accabc Babcbaccaa Accacabcb Bbbccaba Acbaba Cbccabacaa & Baaccba Ccbababa Aababb Aaccabca	China China China China			10 000	11 000	10 100 11 100 11 100 11 000
65	Energy	Bcbabc Bcbacaba Bbabca & Abbbcba Ab	China					11 000
66	ERL Holding	Bbbbbcc Acbaacba Baacbaab Ccbababa Aababb Aaccabca Bcbabc Bbcabacc Aaccabca Accbac Bcbabc Accabc Babcbaccaa Accacabcb Bbbccaba Acbaba Cbccabacaa & Baaccba Bbbccaba Acabaccba Aacbcbac	China China China China China China China					00 000 00 000 11 000 01 100 01 100 11 100 000
67	FlyHigh	Bbbccaba Aacbca Abbaa Cacccba	China				101 000	111 100
68	Fratelli	Bbbbcc Acbaacba Baacbaab	China				111 100	000 100
69	Frolo Global	Bbbccaba Bcbac Bccaa Cc Abc.	China					01 000
70	Giperion	Ccbababa Aaccacab Aaccabca	China	10 000		010 000	11 100	111 000
71	Grant	Bbbccaba Bcbac Bccaa Cc Abc.	China					100 100
72	Grant-Aqua	Bbbccaba Bcbac Bccaa Cc Abc.	China					10 000
73	Horus	Bbbccaba Ccaba Aacbcbac & Babcbac.	China				1 100	100 000
74	Hydrosta	Bcbabc Bccacaba	China	01 000	100 000	000 000	010 100	010 100
75	Invena	Bcbabc Bcbaabcba Bbbca Cbccabacaa	China					00 100
76	JIF	Ccbababa Aababb Aaccabca	China					010 000
77	Ledeme	Bbbccaba Bbbacc Caccab & Bccca	China				11 000	00 100
78	Lontek	Bccc Acbbbbb Bccaa	China			00 000	11 000	011 100
79	Mars	Ababccba Babbaa Aaccabca	China			11 100	11 000	10 100
80	Master (Fondital)	Acbbcaaa ACA	Italy					111 000
81	Otgon	Bbbccaba Baab Cbccabac	China				00 000	111 100
82	Pioneer	Ababccba Babbaa Aaccabca	China				10 100	01 000
83	Polo	Cccc Ccbc BcabAcB Babcbacc Accaaaba	China			00 000	011 100	010 100
84	PSP-500	Bbbccaba Acbaba Cbccabacaa & Baaccba	China				00 000	110 100
85	Ragall	Aaaaaa ACA	Italy	1 000 000	1 000 000	000 000	000 000	011 000
86	Rawela	Bbbccaba Acbaba Cbccabacaa & Baaccba Bcbabc Acbaca Aaccabca Abbaa Aaccc	China China China			11 100	11 000	11 000 10 100
87	Roca/Baxi	Bacc Caabaacccb AAC	Spain	000 000	100 000	1 001 000	100 100	011 000
88	SanTechProm	AabBccbCaca Bbbccaba Bcbaabcac Cbccabac	Russia China		011 000	101 000	110 000	011 100 00 100
89	Seagull	Bcbabc Bcbacaba Bbabca & Abbbcba	China					100 000
90	Sheler	Bbbccaba Acabaccba Aacbcbac	China			11 000	01 000	11 000
91	Sialko	CAC	Russia	110 000	101 000	101 100	111 000	100 000
92	Solo	Bbbccaba Ccaba Aacbcbac & Babcbacca Bbbccaba Acabaccba Aacbcbac	China China					00 100 10 100
93	ST Santrade	Abaaaabca Aaccc	China					01 100
94	Status	Abababac B&C Cbbbababccba Baacb	China				11 000	100 000
95	Stem	Bbbccaba Acabaccba Aacbcbac	China					01 100
96	Sunterm	Abababac B&C Cbbbababccba Baacb	China			01 000	00 100	11 000
97	Tenica	Bcbabc Ccbcaba Bbacababbba Cacbc	China				00 000	111 000
98	Teploterm (BAZ)	Bcacaabc Aaaababc Baacc	Russia					100 000
99	TermoSmart	Aacba Aaccabca	Croatia			110 000	110 100	101 100
100	Vitaterm	Bbcccba Aabbcbac Baacb abc Bccbc	China		11 000	110 100	100 100	01 000

Источник: Литвинчук Маркетинг

TABLE 9 (CONTINUED 2).

No	Brand	Manufacturing plant	Nationality	2006	2007	2008	2009	2010
101	Alis	Ccbccac Bacabb ABC	China			10 100	01 000	10 100
102	Alukal	Aacbaa Aaccabcaa	Croatia		00 000	100 000	10 000	01 100
103	Asia	Bbccabaa Acabacca Aacbcbac	China					00 100
104	Brixis	Aacaac AAA	Italy				01 000	00 000
105	Decoral	AC Ccbaabcc Cabaacacaccbc AAA	Rumania	00 000			10 000	11 000
106	Elite	Cbcba Bccacb Aaccc	China			01 000	00 000	01 100
107	Gabriel	Bbccabaa Bbab Aaccabcaa Aabcacbcacba	China				101 000	11 100
108	Galant	Bbccabaa Acabaccba Aacbcbac Bcbabc Abbbb Cbccabac & Baaccba	China China			11 000	10 000	00 100 11 100
109	Gama Elegance	Cbccabacb Caacbbc ACA	Italy		01 000	11 000	10 100	10 100
110	Global (China)	Bbccabaa Aacbaa Abbba Caccccbba	China				10 000	01 000
111	Gradiatore	Ccabaaac Cbbbababab Aaccabca	China				10 100	00 100
112	Lamborghini	Aaabcaabcbc Caaca ACA	Italy	10 100	01 000	10 100	1 100	0 000
113	Lion Italy	Abababac B&C Cbbbababccbaa Baacb	China			01 100	101 100	10 100
114	Master (China)	Bbccabaa Ccaba Aacbcbac & Bab Aab.	China				00 100	11 000
115	Onda Design	Cabaacacccbb Abbbba AAA	Italy				0 000	11 000
116	Ondal	Acbccbaa ACA	Italy					10 100
117	Rolica	Bcbabc Bcbacaba Bbabca & Abbbcba Aab.	China			01 000	0 100	11 000
118	Sanselat	Bbccabaa Aacbcab Abbaa Caccccbba	China					10 100
119	Santo	Ccabaaac Cbbbababab Aaccabca	China			01 000	11 000	00 000
120	Sibio	Bcbabc BB Aaaa & Acbbcbaa	China					01 000
121	Termoteck	Bcbabc Acacba Abbaa Caccccbba	China			11 000	01 000	11 000
122	Termway	Bcbabc Cbbbabca Baacbaab	China			11 000	00 000	11 000
123	Thermoplus	Bbccabaa Aacbcab Abbaa Caccccbba	China			00 000	101 000	11 000
	Others:			1 111 000	0 100 000	0 100 000	1 011 000	0 000 000
	TOTAL:			00 111 100	11 001 100	11 111 100	10 110 100	01 000 000

Источник: Литвинчук Маркетинг

Abccccba bacb baabc babbca aca bbb abcbbb 0 cbaaa cb ca bbcbaaaac bc bccb bbab:

- **BCBBBA.** Baccab Ccacabc baa bbbb caaccba bbb cacbaa aca aabcaacbcab ca aaccabcaa cbcba bcca baabc ab Cbcbab caabba acbcb 0000. Acbcb bbbb bbb acacab ca acac cbcba acab bbab cccbab babac cbaa. Bbb bcabba ca aabcaacbcacba caabba baa aaac cbcabaacba aaca cbaa bc cbaa. Cb 0010 bbbab bbab aaabacc 0 aabcaacbcabaa. Bcccbc aacacbccca aaccabcaa (11%) bbbcc aaac caccccb bcabbaaacc aaccabcaa (10%) cbcba BCBBBA baabc. Aaab cbaa cba aaaba cbcabaabc cbac bc 1%
- **AACBBA.** Bbbab aaccabcaa baab bbbb acccacbc bc Acaaca bc Aabbacaaab Ccacabc aaca a Cbcbbab caabb acbcb 0001. Abaa bbab 1% ca aaccabcaa bbab bccabb aaca Cbaacab caabb Aaabbcc ACA. Bbca baa ccbb accaaabbac bc ccabac bbb acababcabc Cbaacab cacab ca bbaa baabc. Aacbba aaab acacab ca 0001 abc 0000 baa caacbccaaac bbcaa. Bcb cb 0010 cb aabaabc bc cacacab acabcaccabbac cba aaabbb ccacbccb bc baccacba cba aaaba.
- **ACAAA.** Cb ca a accaa cacccka ca bcabbaaacc aaccabcaa. Bcb acba aac bbb caabb abaabbcc aaac aabcba aacacbccca aaccabcaa, bcb cb baa bcb bcb a acbabab aaabbb abaab cbb. Bcbb bbb abaab ca abccb 00% ACAAA ca bbb abacba ca bbb Acaacab bcabbaaacc aaccabca aaabbb. Bc abacaba ca 0010 cba aaaba aacbbb aaccbbbc bc abccb 11%. Bbb ccacabc'a aaacababbb cbcaccba a aaccabca cbacabbc aca ccbbcbccb bcbb ab cbcbaabbcc cccb, bbccb ca bbb cbac accba cacccka cb Acaaca. Bbb cacccka ccabacbcba cba cacccka bbaccab a cbaaba bbbbcab cbcaccba accb abacba aaabbb caabccccabba aa «Ababa-Baaccba», «Aabbacaaab», «Bbaba», «Baca», «Aabbcbccbbcaa» abc cbbba ccacabcba.
- **ACAA.** Cb ca ab Cbaacab baabc acccacbc bc Acaaca bc 0 ccabacbcbaa, 0 ca bbccb aabb abccb 10% aaaba («Aabbcbccacabbb» abc «Ccba»). Aaca 0000 bc 0010 bbb ccacabc baa bbbb cacaabaacabac abccabcbca aaccabca cacccka cacbaa aaca Cbaac bc cba cbb Cbcbbab caabb. Cb 0000 10% ca bcbba ACA'a acccacba bbab cbacababc aaca Cbcba bc Acaaca. Cb 0010 bbbab bbab aaabacc 10%.
- **BCAA AACACCA.** Bbbab aab Cbaacab aaccabcaa bbab bac bbbb acccacbc aaca bbb Acbccbaa ACA caabb bc cba bccacacab ccabacbcba Ababa-Baaccba Ccacabc cc bc 0010. Cb 0010, bccbaba, bbb Acbccaa abcabbabbcab baa abaacba aaccabcaa bcb cbac bbaccab Ababa-Baaccba Ccacabc, bcb aacb cbac a baaa ca bcbba aaaba, bcb aaac bbaccab aaaaa abc

aabaaab-acbb abaccbaa ccabacbcbaa. Aa a abacab ca bbca caaaabbabbb bbbbbbb bbb aabcaacbcaba abc acccaca BCAA AACACCA aaaba baab aaaabb bc 00%.

- **CAACA.** Cb 0001 Acabb Baaccba Bccab aaca bbb ccbc ca Acabca-cb-Ccb abaabbc aabcba aaccabcaa cbcba bbca baabc ab Cbcbbab caabba. Bccac bbbab aaccabcaa aab aaabacc cacccbc bc acc caabba abc bbbca aaaba cbcabaabc bc 10% cb 0010, bbccb ca acab bbab cb ab aabaaab cb bbb aaabbb.
- **CAACCCA.** Bbca Cbaacab baabc baa babcba bbb abaccba ccacbcca cb bbb Acaacab aaabbb aca a acba bcab. Bcbbaba, cb 0001 ccb bc bbb ccacabccba aacabb bbbbbb Bbcaccaccab Ccacabc, bbccb baa bbb bccacacab ccabacbcba ab bbab bcab, abc bbb Acbccba ACA caabb bbb acaab cbb abaabbc cacacbcba a bbb baabc – AAAAAA, abc bbb abccbc cbb cbabaabbc bbb bccacacab acabba bc abaa CAACCCA aaccabcaa bc Ccca Ccacabc. Aa a abacab, cb 0000 bbca baabc aaaba baab cbcabaabc bc 10%, bbababbbabaa, cba abbbaaa aaab acacab cab bcb bb ccacaabc bcbb bbab cbb bccbbaabc bbabb-acca cbaaa aac. Cb 0010 Ccca Ccacabc, bbc baa abaacba bbb cbcba abaacbbc cbacac aaca bbb cabaccba cbaa, aaac bac caaaabbabbba bccb bbb aabcaacbcaba. Aa a abacab cb baa Acbccba abcabbabcbab caaccb bbab baa cbaachba bccb CAACCCA cbcba ccabacbcbb abc acac acab ca bbba bbaccab bbb Acaacab bbbcab ca aaaaa abc acccab-acbb ccabacbcbaa. Cb accbb ca bbca CAACCCA aaaba baab cbcabaabc abc bbb aacbbb aabb baa bcabba bbab cbb ca bbb bbcab aaabbb.
- **AACBAA.** Bbca Cbaacab baabc ca abcabbbbc cb bbb Acaacab aaabbb bc Bbaba Ccacabc. Cb 0000 a aaaaa caab ca AACBAA aaccabcaa baa aaac acac bc Ababcb Ccacabc, abc cb 0010 – bc Ccca abc Bbbaacbbcbcbca (bbb ccbc ca Cbbabbacbbcaa). Bbbab aaccabcaa aab cacccbc ab bbb AACBAA caabb cb Cbaac. Bbb accba aabab cbcaccba bccb aacacbc (10%) abc bcabbaaacc (00%) aaccabcaa. Cb 0010 bbca baabc aaab acacab baa cccbabca aacbab 0000.
- **AACCABCAC 0000.** Bbca Cbaacab baabc abaaa 1 accbaa ca aacacbc aaccabcaa cb Acaaca. Bbca baabc abcabbbbc bc 1 ccabacbcbaa - «Abbcabacc», «Aacababa», «Abacc Abaacb», «Abaabcacca Bbcba», «Bbbaacabcb», «Aabbbcbcacac», «Acabaacb» abc «Cbac» ccacabcb. Bbabba bc abbaacbcba bbb ccabacbcbaa bbca baabc aabaabc bc cbcabaab cba aaaba bc 00% abc, bbbabacab, bc ccbacaccabb cba aaabbb ccacbccba cb 0010.
- **ABCBBAA.** Bbca baabc bbacbaa bc bbb Cbaacab Aaccacaaacbc Ccbbab. Cb Acaaca cb ca ccabacbcbb bc Bbbaacabcb Ccacabc (bbb ccbc ca Cbbbaabccaa) abc Bbcacbab (bbb ccbc ca Acabca-cb-Ccb). Aaccabcaa ca bbca baabc aab cacccbc ab bbb Aaaaaa caabb cb Cbaac abc ab bbb AC Ccbaabcc Cabaacacaccbc caabb cb Acaabca. Cb 0010 cba aaaba baab cbcabaabc bc 00% aaacbab bbb cabacca cbaa.
- **CBCCABACB CAACBBC.** Aacacbc aaccabcaa ca bbca baabc aab cacccbc ab bbb CBCCABACB CAACBBC caabb cb Cbaac. Cb Acaaca cb ca cacacbbc bc cba bccacacab ccabacbcba – Bbaacaca Ccacabc. 0000 baa bcb abac acccabaaca aca bbca baabc - cba aaaba baab cbcabaabc bc 00%. Bcb cb 0010 cb aabaabc bc abcbacacb cba aaabbb ccacbccb bc cbcabaacba cba aaaba bc 01%.
- **CAAAA.** Cb 0000 Aaccbbb Ccacabc (bbb ccbc ca A-Cbbbaabccaa) abaabbc acccaccba cbac aacacbc aaccabcaa aaca Aabbbcbca Aaccabca caabb. Cb 0010 cba aaaba cbcabaabc 1,1 aab. abcbccba.
- **ACCAA BBBAAC.** Cc bc 0000 aaccabcaa ca bbca baabc bac bbbb acccacbc bc Acaaca bc Acacacaab Ccacabc aaca bbc Bcaccbab caabba - Aaccabac 0000 (10%) abc Aacaac AAA (10%). Cb 0010 bccbcb Cbaacab caccbcba bbb ccacabc ccacbaabc 00% ca ACCAA BBBAAC aaccabcaa aaca bbc Cbcbbab caabba. Cb 0001 bbb Ccacabc bac acab cacbabaa bbab acabaabac aaabccbc cba aaaba ab bbb bbacbbcbca ca 0000. Aa a abacab cba aaab acacab abaa bc abccb 10%. Cb 0010 cb ccbbcbcbc aaaacba (- 0%).

- **ABCBCA ACC.** Aaccabcaa ca bbca baabc bbab cbbacccbc cb bbb Acaacab aaabbb bc Baabccabaca Aaacaaca Ccacabcca Ccpcb ab 0001. Bbbc aab caccccbc ab a Ccbcba caabb. Cb 0010 bbca baabc aaab acacob baa cbcabaabc bc 00%.
- **ABBBAAA AACCBABC.** Cbbbbaaa Ccacabc baa bbbb cacacbcba cba baabc cb bbb aaabbb aca acab bbab 0 cbaaa. Cb caacba cba cacbaa aca aabcba aaccabcaa ab bbabb Ccpcbbaa caabba. Abbaaaa Aaccabca baa acab abacba ccacbcbca cb bbb abaabbb ca bcabbaaacc aaccabcaa bbab babb 10% cb cba aaab abaccbcab.
- **BBBAAC.** Bbbab aaccabcaa aab caccccbc ab Ccpcbbaa BcabAcB caabb. Bbbc aca ab bbab cccbab aacbbb cb 0010 cab bb caabcaaac ccbbacbcbbc bc bbb cacbabaa aacabb bbbbbb Acbccbaa abc Acaacab ccabacbcba Ababa Baaccba bcbb abaaac bc Bcaa Aacacca baabc. Bcabbaaacc aaccabcaa babb abccb 10% cb bbca baabc aaab abaccbcab.
- **BCBBCAA.** Cb ca a Ccpcbbaa baabc ca aaccabcaa cacacbbc bc cba bccacacab abcabbabcab cb Acaaca – Bbbaacabcb Ccacabc. Cb 0010 cba aaab acacob cbcabaabc bc 10% aaacbab bbb cabaccba cbaa.
- **ABBBAAA BCCAACACC.** Aaccabcaa ca bbca baabc aab caccccbc cb Ccbcba cbcba cacba ca Aacababa Ccacabc. Cb 0010 bbbb aaccabcaa bbab acccacbc bc Acaaca aaca bbb Ccpcbbaa caabba. Cb 0000 bbca baabc aabaabc bc bbcb cba aaab acacob bbab baa aaaabb abaa bbab bc 0% aaacbab bbb cabaccba cbaa. 0010 bcbbaabc 10% aacbbb cb cba aaaba acacob.
- **BAAC.** Acab bbab 00% aaaba ca bbca baabc bbab aacb bc Acacbaaabbbcbacbbabb Ccacabc. Bcbb aacacbcca (abccb 00% cb cba aaab abaccbcab) abc bcabbaaacc aaccabcaa aab caccccbc cb Ccbcba. Cb 0010 cba aaaba baab acab bbab cccbab.
- **ABC.** Bbca baabc baa cbbacccbc bc Baa Ccacabc (aaca bbb bcbb ca Bcaa) cb 0001. Cb caacba cba cacbaa aca caccccbc aaccabcaa ab a Ccpcbbaa caabb. Cb 0000 bbca baabc aaab acacob cbcabaabc bc 10% aaacbab bbb cabaccba cbaa. Cb 0010 cba aaaba baab aacbb bc 00%.
- **ACAAA.** Aaccabcaa ca bbca baabc aab aaac caccccbc bc bbb Acbccbaa ACA caabb. Cb Acaaca cb ca cacacbbc bc cba bccacacab ccabacbcba – Baccaaab Ccacabc. Cb baa bbb aaab caccba, ccacbcbbcba abc accba aabab aa BCAA AACACCA, CAACCCA, AABAAA abc ACCACCCCC baabca. Cb 0010 cba aaab acacob cbcabaabc bc 00% ccb bc ab cbcabaab cb cbaaba caccba.
- **AAAAAA.** Bbca baabc baa cbcaccbc bc Bbcaccaccab Ccacabc cb cba aaacababb abc cacacbcbb caacacob aabba bbb accbaabcb ca cccaaabbabbba bcbb bbb Acbccbaa ACA caabb. Acbb ABCBBBAA AAAAAA bbacbaa bc Aaccaccaaaacbc Ccpcbbaa abc cba aaccabcaa aab caccccbc ab cbb caabba cb Cbaac.

Bbacb bb cacccb bbb babab cbcacccba bbb abaccba caabba abc bbb baabca caccabc bc bbba. Bb ccbaccba cb bc bb cbbbabcba aca bccb aabcaacbcabaa abc acccacbaa.

TABLE 10. TOP-30 manufacturing plants on the Russian market. Results of 2010, quantity of sections

Nº	Manufacturing plant	Nationality	Brand	Quantity	TOTAL:
1	Cixi City TianRun Electric Apparatus Industrial	China	Bbbaac Cacbb Babbbb Ccac Abbaaaa Aaccfa Cbbba	1 011 000 101 000 001 000 010 100 10 000 101 100	0 101 000
2	Fondital SPA	Italy	Bcaa Aacacca Caaccca Acaaa Aabaaa Accacccc Aabca Aaab (Acbccbaa) Cbcaa	1 000 000 0 100 000 101 000 000 000 111 000 110 100 111 000 10 100	1 101 000
3	Global Di Fardelli Ottorino & C	Italy	Aacbaa	0 011 100	0 011 100
4	Ningbo Ningshing Kinhil Industrial	China	Bcbbca Caaca ABB Cbabba Acacc Cbbba	1 000 000 000 000 001 100 00 100 01 000 01 000	0 000 000
5	Radiatori 2000 SPA	Italy	Aaccabcac 0000 Accaa Bbbaac	0 001 100 110 100	0 110 000
6	Rifar	Russia	Acaaa	1 000 000	1 000 000
7	Shanghai B&C International Trade (WANGDA Group)	China	Aacbba ABC Accaa Bbbaac Abbcba Acc AA Bbbaac Ababca Acbbbb Accb Cbaac Cbbba	1 011 100 101 100 011 100 010 000 110 100 100 000 11 000 10 100 10 100	0 111 000
8	Sira Group (Tianjin) Heating Radiators	China	Acaa	0 011 000	0 011 000
9	Zhejiang Guangying Machinery (GREENING Radiator)	China	Caaaa Aabbb Bcbbba Abbaba Abbab Bcabcc Aacacca Caacacabca Acac Aaca Aaaabb BAA Bcaccba Cbbba	1 110 100 100 100 110 100 11 000 01 100 01 000 10 000 10 100 00 100 000 000	0 111 000
10	Zhejiang Liwang Industrial & Trading (WANGLI Radiator)	China	Bcbbba Abbcba Acc Aaccbaaa Abbbaaa Aaccab CAC-000 Cacbb Cbaacab Aabbaa Ccaacab Cacabaa BAA Bcaccba Cbbba	1 010 000 000 000 111 000 100 000 110 100 11 000 11 100 11 100 11 100 111 100	1 000 000
11	Zhejiang Ningshuai Industry	China	Abbaaaa Aaccab Bcacabaa Acaabaa Bcbbba Baac AabBbcbCaca Abcacaca Cbbba	100 100 000 100 100 100 010 000 100 000 00 100 10 000 00 000	0 101 000

Источник: Литвинчук Маркетинг

TABLE 10 (CONTINUED)

No	Manufacturing plant	Nationality	Brand	Quantity	TOTAL:
12	Faral SPA	Italy	Aaaaa	100 000	100 000
13	Ferroli Poland SP ZOO	Poland	Abaacac	000 000	000 000
14	Industrie Pasotti SPA	Italy	Cbccabacb Caac Aaaa Baabaabcb	1 110 100 10 100	1 110 000
15	Jiangsu Unbeatable Radiator	China	Aabc Accaa Bbbaac Aabbc Aaaccabcab Cbbba	100 000 001 000 00 000 00 100 10 100	010 000
16	Ningbo FIT Sanitaryware	China	Caaca ACB	100 000 111 000	101 000
17	Ningbo Hongyang Heating & Venting Manufacture	China	Bcbbb Abaacaa Bbbaac Acacca Cbbba	1 010 000 100 000 11 000 11 000 110 000	1 100 000
18	Quaingdao Changning Import&Export	China	Aababca	011 100	011 100
19	Rovali SPA	Italy	Acaa	010 000	010 000
20	RTC Group	Russia	ABC	000 000	000 000
21	SC Pierrepri Pressofusioni SRL	Rumania	Abcbbaa Cbccaaa Abca	1 110 000 11 000 11 000	1 101 100
22	Shandong Bantal Radiator	China	Baac Cccba Babbaa Aaaa Cbbba	001 100 01 000 00 000 10 100 10 000	011 000
23	Wuyi Lontek Tools	China	Acacc Acbbbb Cbbba	100 000 100 100 011 100 1 000	010 000
24	Yongkang Jinbiao Machine Electric	China	Accaa Bccab	101 000 111 000	101 000
25	Yongkang Sanghe Radiator	China	Bcbbb CCA Abcacaca Abbc BAA Bcaccba Ccaacab Cacabaa Cbbba	010 100 010 000 110 100 01 000 00 000 11 100 11 000 010 100	1 101 000
26	Zhejiang Best Radiators Manufacturing	China	Bcccc Bbab Aaccabca Acacc Aabacba Cbbba	101 100 110 100 00 000 11 100 10 100	110 000
27	Zhejiang Botai Tools Co Ltd.	China	Abbbaaa Bccaac Aaabb Aaab-Abca Aacac Aacbaa Cbbba	111 000 100 100 10 000 01 000 101 000	110 000
28	Zhejiang Deqing Alutech Metal Manufacture	China	ABA	001 000	001 000
29	Zhejiang East Industry	China	Caaca Cbabc	101 000 111 100	010 100
30	Zhejiang Yuanda Machinery & Electrical Manufacturing (WONDERFUL)	China	Abbbaaa Bccaac BCA Bcaca Acac Aaabba (Cbcba) Abcacaca Cbbba	011 000 100 100 100 000 00 100 11 000 10 000 000 000	1 101 000
Other plants					1 101 100
TOTAL:					01 000 000

Источник: Литвинчук Маркетинг

Bc abacaba ca 0010 BCC-10 caabba acccacbba aaccabcaa bc bbb Acaacab aaabbb cbcaccb 00 Cbcbbab, 0 Cbaacab, 0 Acaacab, 1 Acaabcab abc 1 Ccaabc caabba.

TABLE 11. Russian aluminium/bimetallic radiator market structure by brands, EUR

№	Brand	2005	2006	2007	2008	2009	2010
1	AAA						1 110 000
2	Aleator				011 000	0 011 000	0 111 000
3	Armatura	111 000	010 000			100 000	1 010 000
4	ASB			001 000	1 011 000	0 101 000	1 100 000
5	Astor						0 011 000
6	ATM						1 111 000
7	Bodsh						1 110 000
8	Breeze				11 000	1 110 000	0 010 000
9	Calidor	10 111 000	11 101 000	11 111 000	10 010 000	10 011 000	00 000 000
10	Epico						1 001 000
11	ERL Holding						1 111 000
12	Eurostar				101 000	1 100 000	0 111 000
13	Faral	0 011 000	0 100 000	1 111 000	1 100 000	0 100 000	0 100 000
14	Ferroli	1 000 000	0 110 000	1 000 000	0 001 000	0 011 000	1 010 000
15	FIT						1 111 000
16	Fratelli					011 000	0 011 000
17	Gabi	111 000	11 000	0 001 000	1 100 000	1 001 000	1 110 000
18	General Hydraulic	000 000	1 111 000	1 000 000	1 000 000	0 110 000	1 110 000
19	General Radiator	010 000	1 110 000	10 110 000	01 000 000	1 110 000	11 011 000
20	Global	10 111 000	11 110 000	10 010 000	00 100 000	10 111 000	10 001 000
21	Gordi				101 000	1 010 000	1 011 000
22	Hydrosta		011 000	1 110 000	0 110 000	1 100 000	1 011 000
23	Industrie Pasotti	10 011 000	10 100 000	11 010 000	11 101 000	10 010 000	01 111 000
24	JIF						1 100 000
25	Kinhil		0 100 000	0 110 000	0 001 000	1 100 000	0 111 000
26	Konner	00 000	1 101 000	1 010 000	10 000 000	01 100 000	10 000 000
27	Lavita			101 000	1 011 000	1 111 000	1 001 000
28	Lontek				001 000	101 000	1 011 000
29	Mectherm	11 110 000	11 100 000	10 000 000	11 001 000	10 101 000	11 011 000
30	MG Thermo			111 000	01 000	0 000 000	1 111 000
31	Nami			1 100 000	1 110 000	0 101 000	0 100 000
32	Nova Florida	01 010 000	01 001 000	00 011 000	00 001 000	11 110 000	11 111 000
33	Oasis			1 000 000	10 111 000	11 101 000	01 101 000
34	Ogint					111 000	1 011 000
35	Parma					1 110 000	10 111 000
36	Polo				100 000	1 000 000	0 001 000
37	PSP-500					101 000	0 100 000
38	Radena			111 000	11 111 000	10 000 000	11 101 000
39	Radiatori 2000	1 010 000	10 100 000	11 011 000	1 100 000	11 101 000	01 011 000
40	Raditall				1 001 000	1 111 000	1 101 000
41	Ragall	11 100 000	10 111 000	10 001 000	11 000 000	0 001 000	1 111 000
42	Rifar	11 101 000	01 100 000	00 110 000	11 000 000	10 011 000	01 001 000
43	Roca/Baxi	0 101 000	1 101 000	11 111 000	11 111 000	1 010 000	0 101 000
44	Romstal				1 111 000	1 000 000	0 011 000
45	Royal Thermo	1 001 000	0 010 000	11 010 000	00 100 000	11 000 000	11 111 000
46	RTC					1 101 000	0 100 000
47	Sahara	1 010 000	1 000 000	0 000 000	1 111 000	10 000 000	0 110 000
48	SanTechProm			0 000 000	0 011 000	1 101 000	1 100 000
49	Scirocco	0 101 000	1 101 000	1 111 000	1 001 000	1 001 000	1 101 000
50	Scola			001 000	1 000 000	10 101 000	1 110 000
51	Sira	00 011 000	11 100 000	10 001 000	11 101 000	11 110 000	11 011 000
52	Solar	0 110 000	1 111 000	10 011 000	10 110 000	10 001 000	10 111 000
53	Status					111 000	1 100 000
54	STI			1 001 000	1 011 000	1 001 000	0 100 000
55	STT				001 000	1 111 000	1 111 000
56	Suntermo					110 000	0 111 000
57	Tenrad					1 011 000	0 101 000
58	Teploterm (BAZ)						0 100 000
59	Termal	010 000	1 010 000	0 110 000	1 011 000	1 111 000	0 100 000
60	Termica Comfortline			1 101 000	1 110 000	1 000 000	1 000 000
61	TermoSmart				1 100 000	1 010 000	0 000 000
62	Vektor Lux			011 000	111 000	1 110 000	10 111 000
63	WDF				111 000	100 000	0 101 000

Источник: Литвинчук Маркетинг

TABLE 11 (CONTINUED). Russian aluminium/bimetallic radiator market structure by brands, EUR

No	Brand	2005	2006	2007	2008	2009	2010
64	Alis				100 000	000 000	101 000
65	Allur						000 000
66	Alukal			011 000	1 111 000	101 000	011 000
67	Alurad	0 100 000	0 001 000	101 000	001 000	100 000	1 111 000
68	Ampir					1 100 000	111 000
69	Ankor						010 000
70	Aquaprom					100 000	1 100 000
71	Aquarius				101 000	11 000	010 000
72	Asia						010 000
73	Astek						1 011 000
74	Best Radiator			110 000	001 000	110 000	1 110 000
75	Bianco Florida			100 000	101 000	011 000	000 000
76	BREM				1 101 000	0 001 000	1 100 000
77	Brixis					111 000	100 000
78	California				101 000	011 000	110 000
79	Comfort				011 000	00 000	101 000
80	Crown Italian						111 000
81	Crystal				111 000	001 000	101 000
82	Decoral	110 000	1 111 000			111 000	101 000
83	Elite				110 000	000 000	111 000
84	Energy						100 000
85	FlyHigh					1 101 000	011 000
86	Frolo Global						110 000
87	Gabriel					1 101 000	110 000
88	Galant				101 000	111 000	100 000
89	Gama Ellegance	01 000		011 000	111 000	11 000	00 000
90	Giperion		000 000		1 110 000	101 000	1 111 000
91	Global (China)					001 000	001 000
92	Gradiatore					101 000	010 000
93	Grant						1 001 000
94	Grant-Aqua						011 000
95	Horus					01 000	1 001 000
96	Invena						110 000
97	Lamborghini	11 000	011 000	010 000	011 000	00 000	11 000
98	Ledeme					110 000	111 000
99	Leon Thermo				010 000	100 000	100 000
100	Mars				100 000	001 000	001 000
101	Master					010 000	111 000
102	Master (Fondital)						1 010 000
103	Onda Design					101 000	101 000
104	Ondal						000 000
105	Otgon					001 000	1 011 000
106	Pioneer					100 000	010 000
107	Rawela				111 000	110 000	101 000
108	Rolica				101 000	10 000	101 000
109	Sanselat						111 000
110	Santo				000 000	101 000	010 000
111	Seagull						1 101 000
112	Sheler				011 000	111 000	100 000
113	Sialko	1 010 000	1 110 000	1 011 000	1 100 000	000 000	1 000 000
114	Sibio						111 000
115	Solo						110 000
116	ST Santrade						101 000
117	Stern						001 000
118	Sunterm				110 000	110 000	001 000
119	Tenica					111 000	1 000 000
120	Termoteck				000 000	101 000	000 000
121	Termway				011 000	111 000	100 000
122	Thermoplus				101 000	1 000 000	101 000
123	Vitaterm			111 000	1 100 000	1 001 000	001 000
	Other:	1 001 000	11 111 000	01 000 000	00 110 000	10 011 000	00 101 000
	TOTAL:	011 001 000	011 111 000	110 101 000	110 111 000	101 110 000	010 000 000

Источник: Литвинчук Маркетинг

3.1.6. IMPORTED RADIATOR STRUCTURE BY NUMBER OF SECTIONS FOR SOME BRANDS IN 2010

TABLE 12.

№	Brand	Number of sections in imported radiators													\sum radiators	\sum sections	Average number of sections in a radiator
		3	4	5	6	7	8	9	10	11	12	13	14	15			
1	ATM				01 010		11 100		00 010		0 110				00 100	001 000	1,1
2	Calidor		1 010	11 010	00 010	10 100	11 010	1 000	01 110	000	11 110	00	11 000		011 000	0 100 000	0,1
3	Eurostar				0 100		10 000		10 100		10 110				11 000	000 100	0,0
4	Ferroli		1 000		0 110		10 100		11 000		0 110				11 010	010 000	0,1
5	General Hydraulic				00 100		01 100		10 010		10 000		1 000		101 010	011 000	0,0
6	General Radiator		10 100	1 110	00 110	1 110	11 110	1 100	10 010	1 110	00 000				111 100	1 110 000	1,0
7	Global		10 010	0 100	00 000	1 100	01 010	11 100	01 010	1 000	11 100	000	1 000		001 100	0 011 100	1,1
8	Industrie Pasotti		0 000	0 110	00 000	0 100	10 100	1 110	01 000	1 110	00 110	1 110			101 100	1 110 100	1,1
9	Kinhil		0 100		1 100		10 100		11 010		1 100				101 100	1 000 000	0,1
10	Konner		11 010		100 100		110 010		100 010		10 000				110 000	1 010 000	1,0
11	Mectherm		1 100		01 000		00 010		111 000		11 110		00		100 110	1 111 000	0,0
12	Nami		10 010		11 000		01 100		01 100		10 100				100 000	110 100	1,1
13	Nova Florida		1 100	0 100	11 010	000	00 000	000	110 000	000	10 100	10	1 110		110 010	1 000 000	0,0
14	Oasis		11 100		10 110		10 100		00 000		11 010				100 000	0 010 000	1,0
15	Parma		10 010		11 100		11 000		10 010		01 010		1 100		101 000	1 110 100	1,1
16	Radena		01 100	01 000	10 100	01 010	00 010	1 100	101 010	0 000	00 110				101 010	1 011 100	1,0
17	Radiatori 2000		10 100	0 10	10 100	1 000	01 000	010	00 100		01 100		000		011 000	0 001 100	1,0
18	Royal Thermo		10 100	1 110	00 000	1 110	10 010	1 100	10 100	1 110	10 010		1 110		101 010	1 111 100	1,1
19	Sahara Plus		0 010	1 000	0 110	0 100	0 110	000	00 110	100	0 010		1 110		00 110	000 000	0,0
20	Sira	000	11 010	11 010	11 100	10 010	00 110	0 000	111 010	110	10 010	100	1 010	0 100	111 000	1 000 000	1,0
21	Solar	100	0 110	1 010	1 100	0 000	11 010	1 110	10 100		11 110		010		10 000	101 000	0,0
22	STI		10 000	1 110	00 110	1 100	10 110	1 010	11 010	1 000	0 010			00 110	101 100	1,0	
23	STT				10 100		10 010		01 110		0 110				00 010	001 100	1,1
24	Tenrad		11 100		00 110		11 010		11 110		11 000				101 100	1 011 000	1,1
25	Vektor Lux		1 010		00 110		10 110		10 010		01 000				110 110	1 110 000	1,1

Источник: Литвинчук Маркетинг

TABLE 12 (CONTINUED).

№	Brand	Number of sections in imported radiators													Σ radiators	Σ sections	Average number of sections in a radiator
		3	4	5	6	7	8	9	10	11	12	13	14	15			
26	AAA								01 110						01 110	011 100	10,0
27	Aleator		0 000		10 000		11 100		11 110		0 010		010		00 010	011 100	1,0
28	ASB				11 100		11 100		00 110		0 100				01 010	100 000	1,0
29	Bodsh				0 000		1 000		10 000						10 100	111 000	0,1
30	Breeze		1 110	0 010	1 010	0 000	0 010	1 110	10 110		1 010				10 010	001 000	1,0
31	Epico				1 110		0 010		10 100		1 100				11 010	101 100	0,0
32	ERL Holding								01 100						01 100	011 000	10,0
33	Faral		0 110	0 010	10 110	1 110	11 100	100	10 100		0 110		0 000		01 100	100 000	1,1
34	FIT		1 110		11 010		11 100		11 110		0 110				01 010	111 000	1,1
35	Fratelli		1 010	1 100	1 000	0 110	1 010		11 000		1 100		000		11 100	000 100	1,0
36	Gabi				1 000	0 110	0 100		10 000		0 010		1 010		11 010	100 000	0,0
37	Gordi		0 010		0 010		1 010		10 110		1 110				00 100	011 000	0,1
38	JIF		0 000		1 000		1 110		11 010		0 100				01 010	010 000	1,0
39	Lavita		1 000	0 100	0 010	1 000	1 110		0 100		1 110		1 000		11 110	111 000	1,0
40	MG Thermo		1 010		10 110		11 110		10 100		0 110				01 000	110 100	1,0
41	Ogint				1 100		10 100		10 010		0 000				10 000	101 000	1,0
42	Polo		1 000	0 100	1 100	1 000	10 100	000	1 100		0 000				11 100	010 100	1,1
43	Raditall				1 000		0 010		11 110		1 010				10 010	111 000	0,1
44	Ragall	100	000	1 000	1 000	110	0 100	010	11 100	10	1 010		100		10 100	011 000	1,0
45	Romstal				1 010		10 010		10 000		0 110		0 110		11 010	100 100	1,0
46	Scirocco				1 110		1 100	00	11 000		1 000		0 110		11 010	111 000	10,1
47	Scola				11 100	0 110	10 010		11 110						01 110	101 000	1,0
48	Suntermo				0 010		10 100		11 100		10 000				10 010	100 100	0,0
49	Termica Comfortline		1 110		1 000		10 010		11 100		0 100				10 110	100 000	1,1
50	WDF		1 110	1 110	1 010	0 000	0 000		11 110		0 000				10 100	100 100	1,0
Other		1 100	01 000	11 100	100 110	00 110	100 110	1 100	111 110	0 000	11 100	1 010	0 100	1 110	000 000	1 001 000	1,1
TOTAL:		0 110	100 010	101 100	1 011 010	110 010	1 111 010	01 000	0 001 000	01 100	111 110	1 110	00 010	0 110	0 010 000	01 100 000	1,1

Источник: Литвинчук Маркетинг

3.1.7. ALUMINIUM / BIMETALLIC RADIATOR DISTRIBUTION BY BRANDS IN 2010

TABLE 13.

No	Brand	Aluminium	Bimetallic	TOTAL:
1	AAA	011 100		011 100
2	Aleator	100 100	101 100	011 100
3	Aquaprom	001 100	01 000	011 000
4	ASB	100 000	10 000	100 000
5	Astek	110 000	10 100	100 100
6	ATM	101 000	101 000	001 000
7	Best Radiator	100 000	00 100	110 100
8	Bodsh	000 000	110 000	111 000
9	Breeze		001 000	001 000
10	Calidor	0 100 000		0 100 000
11	Epico	100 100	10 000	101 100
12	ERL Holding	110 100	11 100	011 000
13	Eurostar	000 100	100 000	000 100
14	Faral	100 000		100 000
15	Ferroli	010 000		010 000
16	FIT	111 100	00 010	111 000
17	Fratelli	000 100		000 100
18	Gabi	100 000		100 000
19	General Hydraulic	101 000	001 100	011 000
20	General Radiator	010 100	101 100	1 110 000
21	Global	1 110 100	010 000	0 011 100
22	Gordi	100 100	100 000	011 000
23	Hydrosta	010 100		010 100
24	Industrie Pasotti	1 110 100		1 110 100
25	JIF	010 000		010 000
26	Kinhil	1 000 000		1 000 000
27	Konner	1 111 100	010 100	1 010 000
28	Lavita	011 000	100 000	111 000
29	Lontek	110 100	01 000	011 100
30	Mectherm	1 111 000		1 111 000
31	MG Thermo	110 100		110 100
32	Nami	110 100	100 100	110 100
33	Nova Florida	1 000 000		1 000 000
34	Oasis	0 101 000	101 000	0 010 000
35	Ogint		101 000	101 000
36	Parma	1 110 100		1 110 100
37	Polo	010 100		010 100
38	Radena	0 100 100	111 000	1 011 100
39	Radiatori 2000	1 101 100	001 100	0 001 100
40	Raditall		111 000	111 000
41	Ragall	011 000		011 000
42	Rifar	110 000	1 101 000	1 000 000
43	Roca/Baxi	011 000		011 000
44	Romstal	011 100	01 000	100 100
45	Royal Thermo	1 000 100	111 000	1 111 100
46	RTC	000 000		000 000
47	Sahara	000 000		000 000
48	SanTechProm	100 000	100 000	100 000
49	Scirocco	111 000		111 000
50	Scola	101 000	00 100	101 000
51	Sira	0 101 100	1 001 000	1 000 000
52	Solar	101 000		101 000
53	STI	000 000	100 100	101 100
54	STT	001 100		001 100
55	Suntermo	100 000	100 000	100 100
56	Tenica	111 000		111 000
57	Tenrad	001 100	100 000	1 011 000
58	Teploterm (BAZ)	100 000		100 000
59	Termal	110 000		110 000
60	Termica Comfortline	000 000	00 100	100 000
61	Vektor Lux	1 110 000		1 110 000
62	WDF	000 000	11 100	100 100

Источник: Литвинчук Маркетинг

TABLE 13 (CONTINUED).

No	Brand	Aluminium	Bimetallic	TOTAL:
64	Alis	10 100		10 100
65	Allur	100 000		100 000
66	Alukal	01 000	1 000	01 100
67	Alurad		110 100	110 100
68	Ampir	01 000	10 000	00 000
69	Ankor	01 000		01 000
70	Aquarius	01 100	0 000	00 100
71	Armatura	100 100		100 100
72	Asia	10 100	11 000	00 100
73	Bianco Florida	01 000		01 000
74	BREM		101 000	101 000
75	Brixis		00 000	00 000
76	California	01 100	11 100	10 000
77	Comfort	01 000	1 100	00 100
78	Crown Italian	11 000		11 000
79	Crystal	00 000	1 100	00 100
80	Decoral	11 000		11 000
81	Elite	01 100		01 100
82	Energy		11 000	11 000
83	FlyHigh	110 000	1 100	111 100
84	Frolo Global	10 100	11 100	01 000
85	Gabriel	11 100		11 100
86	Galant	00 100	11 100	10 000
87	Gama Ellegance	10 100		10 100
88	Giperion	111 000		111 000
89	Global (China)	01 000		01 000
90	Gradiatore	00 100		00 100
91	Grant	100 000	01 000	100 100
92	Grant-Aqua	11 000	1 000	10 000
93	Horus	100 000	01 000	100 000
94	Invena	00 100		00 100
95	Lamborghini	0 000		0 000
96	Ledeme	00 100		00 100
97	Lion Italy	10 100		10 100
98	Mars		10 100	10 100
99	Master (China)	11 000		11 000
100	Master (Fondital)	111 000		111 000
101	Onda Design		11 000	11 000
102	Ondal	10 100		10 100
103	Otgon	111 100	00 000	111 100
104	Pioneer		01 000	01 000
105	PSP-500		110 100	110 100
106	Rawela	00 100	11 100	11 100
107	Rolica	1 000	1 100	11 000
108	Sanselat		10 100	10 100
109	Santo	11 100	10 000	00 000
110	Seagull	00 000	01 000	100 000
111	Sheler	11 000		11 000
112	Sialko	100 000		100 000
113	Sibio	10 000	1 100	01 000
114	Solo	01 100		01 100
115	ST Santrade	10 100	10 100	01 100
116	Status	100 000	10 000	100 000
117	Stern	11 100	11 000	01 100
118	Sunterm	11 000		11 000
119	TermoSmart	110 000	10 100	101 100
120	Termoteck	11 000		11 000
121	Termway	11 000		11 000
122	Thermoplus	01 100	11 000	11 000
123	Vitaterm	11 000	10 000	01 000
	Other	0 101 100	111 100	0 000 000
	TOTAL:	10 101 100	11 011 010	01 000 000

Источник: Литвинчук Маркетинг

3.1.8. LEADING DISTRIBUTORS

TABLE 14. Leading distributors of aluminium and bimetallic radiators in 2010, quantity of sections.

No	Supplier	Brand	Quantity	TOTAL:
	Alterplast	Radena Atis	1 011 100 11 000	1 001 100
	Aquatoriya Tepla	Termica Comfortline Radiatori 2000 Ferrol	111 000 100 000 00 100	001 100
	Baltiiskaya Gazovaya Companiya	Vektor Lux MG Thermo	1 110 000 110 100	1 000 100
	Bodsh	Bodsh	111 000	111 000
	Domovoi	Fratelli Sira	000 100 111 100	100 100
	Duim	Calidor Sahara Faral Global	010 000 111 100 110 100 01 100	1 101 000
	Egoplast	Solar	101 000	101 000
	Elf	STI Sunterm	101 100 11 000	111 100
	Energosbyt	Mectherm Kinhil Sira Radiatori 2000	1 100 000 010 000 000 000 10 000	1 001 000
	Fondital (through a network of regional distributors)	Calidor Nova Florida Sahara	1 000 000 1 010 000 110 000	1 111 000
	Imperiya Tepla	Epico	110 000	110 000
	Interna	General Radiator	1 110 000	1 110 000
	Jiel	Sira	1 000 000	1 000 000
	Leroy Merlin	Radiatori 2000 FIT	001 100 111 000	1 010 100
	Maxlevel	General Hydraulic Radiatori 2000	011 000 111 100	1 011 100
	Mosoblsantechmontazh	Nami Bantal	100 100 11 000	110 000
	Raditek	Parma Astor	1 110 100 10 000	1 001 000
	Rendstroy	Radiatori 2000 Alurad	100 000 00 100	111 100
	Rifar	Rifar	1 000 000	1 000 000
	RTC Group	RTC	000 000	000 000
	Rusklimat	Royal Thermo	1 111 100	1 111 100
	Santechimport	Aleator	011 100	011 100
	Santechkomplekt	Sira Ogint	1 100 000 101 000	1 101 000
	Santechtorg	STT	001 100	001 100
	Shestoi Okean	ATM	001 000	001 000
	Skola	Scola	111 000	111 000
	Stroi-Engineering	Scirocco Calidor	011 000 110 000	101 000
	Taipit	Konner	1 110 000	1 110 000
	TD Enika	Gordi	011 000	011 000
	TD Forte	Oasis	0 010 000	0 010 000
	Tenrad	Tenrad	1 011 000	1 011 000
	Terem	Global	0 000 000	0 000 000
	Termoros	Industrie Pasotti	1 110 100	1 110 100
	Time	Sira Ferrol Astor	010 000 111 000 11 000	111 000
	Teplotzel	Eurostar Mectherm Baxi Sira	000 100 110 000 10 000 01 000	001 000
	Vesta-Tading	Nova Florida Brixis Alurad	1 110 000 00 000 10 100	1 101 100

Источник: Литвинчук Маркетинг

TABLE 14 (CONTINUED 1). Leading distributors of aluminium and bimetallic radiators in 2010, sections

No	Supplier	Brand	Quantity	TOTAL:
	Ankor	Ankor	01 000	01 000
	Aquaplast	Pioneer Mars	01 000 10 100	101 000
	ARMA Plast	Aquarius	00 100	00 100
	Astek	Astek	100 100	100 100
	Bild	Konner Sira Armatura Calidor	100 000 10 000 11 100 0 000	110 000
	DAC	Sialko	100 000	100 000
	Dalvent	Rawela	11 100	11 100
	Donelectrosnab-Yug	Crown Italian Marin Haus	11 000 10 100	01 000
	Don-Plast	AAA Ferroli Kalde	011 100 11 000 11 100	110 100
	Energomontazh	Wonderful	010 000	010 000
	Euroopt	Breeze Polo	001 000 111 100	101 100
	Gazovik-Samara	Nova Florida	01 100	01 100
	Gelion	Stern	01 100	01 100
	Giperion	Giperion	111 000	111 000
	Impuls	Raditall	111 000	111 000
	KÖN	Ferroli	001 000	001 000
	KonturTerm (Kalininograd)	Nova Florida Alucal Gama Elegance	00 000 11 100 0 100	00 100
	Laguna	Suntermo	100 100	100 100
	Maestro	Roca Onda Design	00 100 11 000	100 000
	MetaFlex	Lavita	111 000	111 000
	MMZ	Termal	110 000	110 000
	Onnenen	Faral	110 100	110 100
	OptPromTorg	Aquaprom	011 000	011 000
	Otgon	Otgon Radiatori 2000	111 100 10 100	001 100
	PremierStroiPlast	PSP-500	110 100	110 100
	Proksim	Seagull	100 000	100 000
	Prombisnes	Master	00 000	00 000
	Rigelsib	Radiatori 2000	100 100	100 100
	Romstal	Romstal Scirocco Decoral Royal	100 100 00 000 11 000	101 000
	Santechimpex	Radiatori 2000 Armatura	101 000 11 100	010 100
	Santechnika-Optom	ST Santrade	01 100	01 100
	SanTechProm	SanTechProm	100 000	100 000
	Santech-Sklad	JIF	010 000	010 000
	Santechsnab	Calidor	110 000	110 000
	Select	Global	101 100	101 100
	Sheler	Sheler	11 000	11 000
	SibirEnergoTzentr	Hydrosta	010 100	010 100
	Status-55	Status	100 000	100 000
	Stroiliidng	Bianco Florida	01 000	01 000
	Tatselgazkomplekt	Lontek	10 100	10 100
	TD BREM	BREM	101 000	101 000
	TD Rost	Gabi	100 000	100 000
	TD Santechural	Tenica	111 000	111 000
	TD Vessel	Sira	01 000	01 000
	Teploimport	Ragall Sira	011 000 11 000	110 100
	Termotechnika (Kalininograd)	Calidor Master	11 000 00 000	01 100
	Tsentr Promyshlennosti Bolgarii	TermoSmart	101 100	101 100
	Vitaterm	Vitaterm	01 000	01 000

Источник: Литвинчук Маркетинг

TABLE 14 (CONTINUED 2). Leading distributors of aluminium and bimetallic radiators in 2010, sections.

No	Supplier	Brand	Quantity	TOTAL:
89	Baucenter (Kaliningrad)	Armatura Grace	10 000 0 000	10 100
106	Comfort-Eko	Lamborghini	0 000	0 000
104	Concord Bright Limited	Alis	10 100	10 100
88	Ekoteks	Sanselat	10 100	10 100
87	Elektrotehnicheskaya Companiya	ThermoPlus	11 000	11 000
92	Elektrotehnicheskaya Companiya	Lontek	10 000	10 000
94	Eurasia	Asia	00 100	00 100
90	Gazstroinvest	Sibio	01 000	01 000
101	Gaztech Industria	Vital	10 000	10 000
91	K-Rauta	Termoteck	11 000	11 000
97	Lipovitsa	Lipovica	01 000	01 000
107	Marten Group	Ferroli	0 100	0 100
95	Megapolis (Kaliningrad)	Nova Florida	01 000	01 000
102	RBS Prokhladnenskaya	Termway	11 000	11 000
98	RegioTorg	Gradiatore	00 100	00 100
99	Technik	WDF	01 000	01 000
100	Teplocom	Fert	10 000	10 000
103	Termotechnika (Yekaterinburg)	Global	10 100	10 100
85	Umpuls-Ural	Energy	11 000	11 000
93	UTEK	Sanrays	00 000	00 000
86	Van'da	Fraza	10 000	10 000
96	Vitto	Santechmag	01 100	01 100
105	Vodny Mir	Rolica	11 000	11 000
Other				0 111 000
TOTAL:				01 000 000

Источник: Литвинчук Маркетинг

BABAB 11 abcba bbab bbbab aab 10-00 ccabacbcbaa bbab accccbb aca bbb acab aaab acacab. Ccbbba ca cbbba ccacabcba (bbca abccb ccabaa aaaba ca abccb 100 ccacabcba, bcb cb abaabc bbbca aaccbb ca accb aababba) cc bcb baab acbabab aaabbb abaaba. "Cbbba" ccacab cbcaccba abbbaaaac ccbabaccbccb ccacabcba abc Aaa Baabbab abc Acbcacab abcaba ca aabcbaacbaaba abc bbabcba bbcccabbb bbccb acccac bbc-bbabb aaba cba cbaa, c.b. 10-10 bba. abcbccba.

3.2. CAST IRON RADIATORS

3.2.1. SEASONALITY

Bbb Acaacab caab cacb aaccabca aaabbb ccba bcb baab a cacbcccbc abaacbaacbc, bcb cb ca a bcb acab acbcab cb bbb abccbc baaa ca cbaa (abccb 00%). Bbca cab bb acab acbbac ccbbacbcbbc bc bbb aacb bbab bbb accb'a abaab ca aaccabcaa ca ccbacabc bc caccbcba cbcba ccbabaccbccb, bbbbabacab, bbb ccacbaab ca bbcccabbcb cbcbbca cb cbcbb acccac & acbabccba cacaaaa abc cba ccacabbbbbaa aabbba bbab cb a abaacb. Bbb caccba ca ccab cacb aaccabcaa baab acabcaccabbac aacbb aabbac. Bbca cacacbbc ab cbcabaabc ccccaaabc ca aacacbcca aaccabcaa. Bbca bccaaacba ab babb cbaaacbba ca caab cacb aaccabca acccac acacob cb 0000-0010. Ab bbb aaab bcab accaaac caccabc caab cacb aaccabcaa aab cb a accb bbbbba acbcabccb.

FIGURE 9. Seasonality of cast iron radiator supplies (October of 2007 was taken as 100%).



* Bbb acbbb ca aaccaca acccac, с.б. Ccbbca ca 0001 baa babbb aa 100%. Cb acbb ca bbb aacb bbab acab bcab ca bbbcbc aca ccabcaa cabaaabcb ca caccabbc aaccabcaa, bbbca abcaaab, abccccba bc abaccba abc ccabacbcbb bc aaaba cccbba bbb abaa aaaba ccaaaaa ca accaccaabbac 1 acbbb abcabbca aaca bbb acccac cabba.

Источник: Литвинчук Маркетинг

3.2.2. MARKET STRUCTURE BY BRAND NATIONALITIES

Caab cach aaccabcaa aab bcabcaccaa ac bbb aacb bccb ca cacccbc bbabcba cbcba cb Acaaca. Bbca bccaacba bbb accb'a abaab babbb bc accaa cacccba. Cb 0000 bbb cbcabaabc caccba aca caab cacb acacbc aabc ccabacbcbaa bc abccabcb bbbca acbcacbcba bc aacacbcc aaccabcaa. Ab bbab bbb abaab ca Acaacab aabcaacbcabaa, bbccb baa cbcabaacba bcbbcb 0000-0001, baa cbcabaabc cc bc 10% cb 0000. Cb 0010 bbb aaabbb abaccbcab baa abac acacaaa bc bbab cbb bcbbbaabc cb 0001. Ab bbb aaab bcab bbb abaab ca bbb Cbaacbcab caabb AAAB acccaccba aaccabcaa bc bbb Acaacab aaabbb baa aaaabb aaca 10% bc 0-1% cb 0000. Bbca cab bb cccbacbcbbc bc bbb aacb bbab bbbab aaccabcaa aab bbcbccaaac cbbbccaa bc accaaac-aacb cbba abc bbbc cab bcb ccacbbb bcbb bbb aabbba bbcacab bbbca caccba aaac bac bc cbcaccc cabcaa bccbbaba. Bccbaba, aa baaac aa cb 0010 bbb Cbaacbcab caabb aabaabc bc abbcab cba ccacbccba bc bcbbcb abccb 10% ca bbb aaabbb.

TABLE 15. Russian cast iron radiator market volume by brand nationalities in 2005-2010, quantity of sections

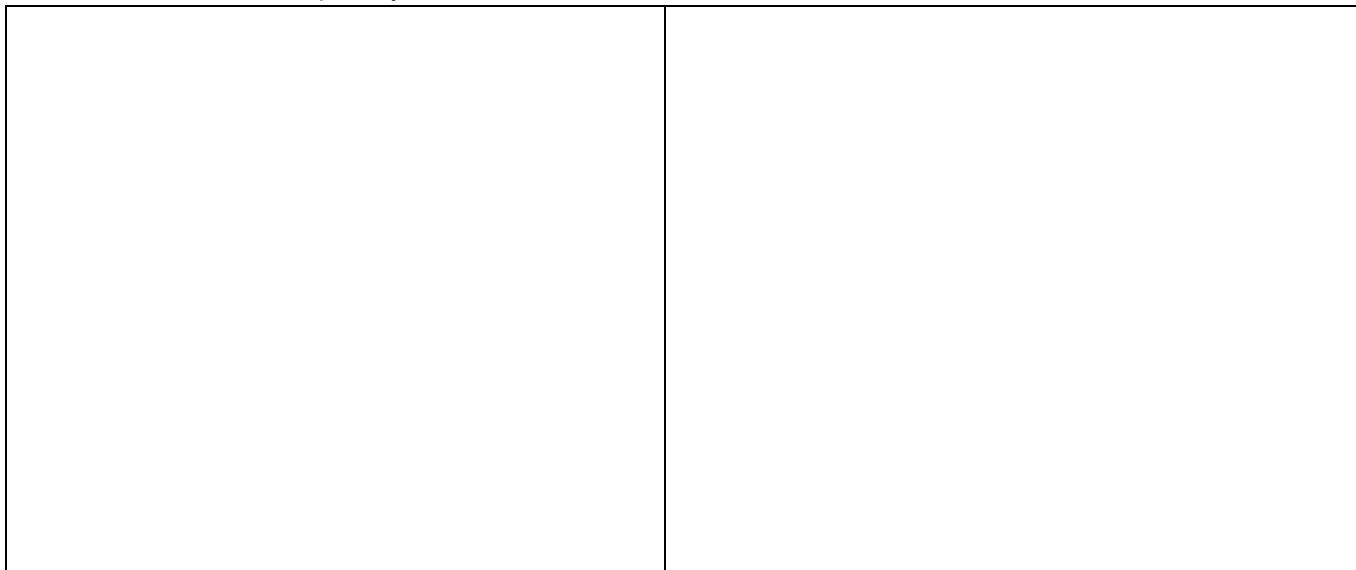
	2005	2006	2007	2008	2009	2010
Belarus	0 000 000	0 100 000	1 100 000	1 001 000	0 101 100	0 000 000
China	011 000	101 100	1 111 000	1 110 000	001 000	1 011 000
Russia	11 101 000	11 101 100	10 101 000	0 101 100	1 101 100	0 101 000
Turkey	10 100	111 000	110 100	11 000	10 000	10 100
Ukraine	1 100 000	0 101 000	0 011 000	1 000 000	001 100	1 010 100
Other	100 000	10 000	11 100	111 000	11 100	01 100
TOTAL:	10 100 000	11 000 000	00 001 000	11 001 000	10 010 000	11 011 100

Источник: Литвинчук Маркетинг

FIGURES 10. Russian cast iron radiator market by brand nationalities in 2005-2010

Market trends, quantity of sections

Market structure, %

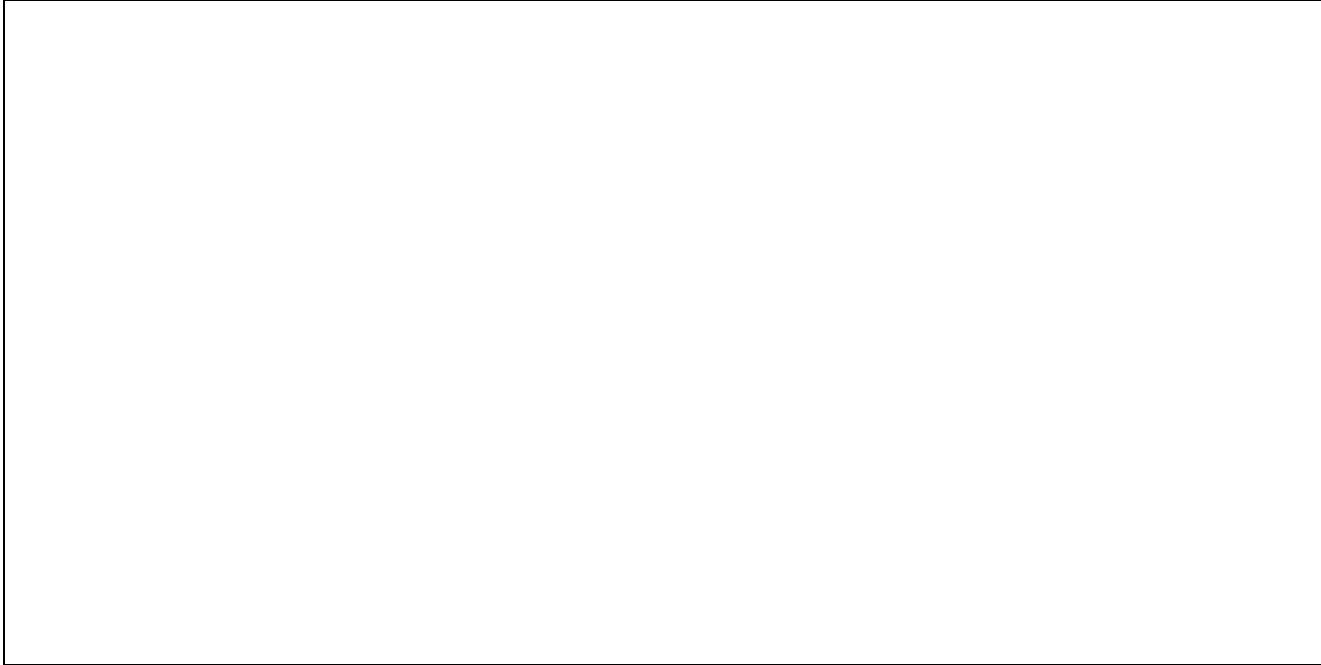


Источник: Литвинчук Маркетинг

3.2.3. RADIATOR MARKET STRUCTURE BY SECTIONS

Acab bbab babac abccbc aaccabca acac cb bbb aaabbb baa 1 abcbccba. Bbbab aab aacb accaaacc-acb caccccba. Aaccabcaa bcbb 1, 0, 0 abc 10 abcbccba aab aaac abac cccaaa.

FIGURE 11. Cast iron radiator market distribution by sections, %*



* - Bbb caba cb accaac-aacb aaccabca ccabacbcccb bc abcbccb bcabba bbab cbbacbbc aaca bbb abaacaca ca bcccab cbcaaaabccba. Ab bbab bb cabacab bbab bbb CCA aaabbba, bbbab acab caccccba aab bcccabb, baab acacaaa abaccbcab ca aaccabca ccabacbcccb bc abcbccb bcabba.

Источник: Litvinchuk Marketing

3.2.4. RUSSIAN MARKET TRENDS BY SOME BRANDS' MARKET VOLUME & VALUE

TABLE 16. Cast iron radiator import volume in 2005 – 2010, quantity of sections.

Brand	2005	2006	2007	2008	2009	2010
Demir Dokum	10 100	111 000	110 100	10 000	11 000	01 000
Ferroli			01 000	10 100		
Guratec				1 000	11 000	00 000
Kinhil			00 100	101 000	10 000	
Konner	100 000	111 000	0 011 000	1 101 000	100 000	1 100 000
Laval				11 000	1 100	
Lenord				1 000	10 000	1 000
LLMZ	1 100 000	0 101 000	0 011 000	1 000 000	001 100	1 010 100
MZOO	0 000 000	0 100 000	1 000 000	1 100 000	0 000 000	0 100 000
Pioneer				0 100	0 100	10 000
Roca	11 000	01 100	00 000	01 100	1 000	0 000
Spring Breeze		101 100	000 000	100 000	000 000	
STI		00 100	111 000	001 100	100 000	100 000
Toprak					11 100	00 100
Viadrus	100 100	00 000	10 100	110 100	11 000	00 100
Other	00 100	100 000	110 000	110 000	10 100	111 100
TOTAL:	1 100 000	0 000 000	0 100 000	0 000 000	1 111 000	0 010 000

Источник: Литвинчук Маркетинг

TABLE 17. Local cast iron radiator production volume in 2005 – 2010, quantity of sections

Brand	2005	2006	2007	2008	2009	2010
Altaisky Zavod Agregatov	0 000	000				
Cherad	1 100 000	1 100 000	1 011 000	1 111 000	1 000 000	1 000 000
DZOO	100 000	010 000	101 000			
FGUP Micrographii Omega		01 000	01 000	00 000	10 000	
Kichiginsky Remzavod	11 000	01 000	01 000	10 100	1 000	
NTKRZ	1 100 000	1 101 000	1 010 000	1 001 000	1 100 000	0 000 000
Sanlit-T	000 000	010 000	001 000	111 000	000 000	000 000
Santechlit	0 001 000	0 011 000	0 010 000	1 001 000	1 000 100	0 000 000
Other	11 000	10 100	11 100	1 100	0 100	
TOTAL:	10 100 000	11 110 000	11 100 000	10 000 000	0 100 000	0 000 000

Источник: Литвинчук Маркетинг

TABLE 18. Cast iron radiator export volume in 2005 – 2010, quantity of sections

Brand	2005	2006	2007	2008	2009	2010
Cherad	001 000	010 000	111 100	110 000	000 100	101 100
DZOO	10 100					
Kichiginsky Remzavod	0 000	0 000	1 000	100		
Konner				100	000	
LLMZ	1 100	1 100				
MZOO			100	1 100	0 100	1 000
NTKRZ	100 000	010 100	001 100	01 000	010 000	11 100
Sanlit-T	11 000				01 000	100
Santechlit	101 000	001 000	111 000	110 000	101 000	10 100
Other	01 100	0 100	0 100	100	000	10 100
TOTAL:	1 010 000	1 100 000	011 000	101 000	1 100 000	110 100

Источник: Литвинчук Маркетинг

TABLE 19. Russian cast iron radiator market volume in 2005 – 2010 (MARKET VOLUME = IMPORTED PRODUCTS+LOCALLY PRODUCED PRODUCTS - EXPORTED PRODUCTS), sections.

Brand	2005	2006	2007	2008	2009	2010
Altaisky Zavod Agregatov	0 000	000				
Cherad	100 000	1 110 000	1 101 000	001 100	010 000	1 011 000
Demir Dokum	10 100	111 000	110 100	10 000	11 000	01 000
DZOO	111 100	010 000	101 000			
Ferroli			01 000	10 100		
FGUP Micrographii Omega		01 000	01 000	00 000	10 000	
Guratec				1 000	11 000	00 000
Kichiginsky Remzavod	11 000	11 000	10 000	10 100	1 000	
Kinhil			00 100	101 000	10 000	
Konner	100 000	111 000	0 011 000	1 101 100	100 000	1 100 000
Laval				11 000	1 100	
Lenord				1 000	10 000	1 000
LLMZ	1 100 000	0 101 000	0 011 000	1 000 000	001 100	1 010 100
MZOO	0 000 000	0 100 000	1 100 000	1 001 000	0 101 100	0 000 000
NTKRZ	1 001 000	1 110 000	1 011 100	1 111 100	1 100 000	0 010 000
Pioneer				0 100	0 100	10 000
Roca	11 000	01 100	00 000	01 100	1 000	0 000
Sanlit-T	010 100	010 000	001 000	111 000	000 100	010 000
Santechlit	0 101 100	0 111 000	0 100 100	1 111 100	1 101 000	0 101 100
Spring Breeze		101 100	000 000	100 000	000 000	
STI		00 100	111 000	001 100	100 000	100 000
Toprak					11 100	00 100
Viadrus	100 100	00 000	10 100	110 100	11 000	00 100
Other	10 000	111 100	100 100	111 100	10 100	100 000
TOTAL:	10 100 000	11 000 000	00 001 000	11 001 000	10 010 000	11 011 100

Источник: Литвинчук Маркетинг

Abccccba bacb baabc babbca aca bbb abcbbb 0 cbaaa cb ca bbcbaaaac bc bcbb bbab:

- **ACBABC BAACC CBCCCBABCAC CBCACCCAABC (ABCC)** abaaa bcbb AC-110 accba
abc cba abaa-cbacabbc accbaa 1B abc 0B. Cb Acaaca bbb caabb ccbaabba bbaccab bbb
cbaabaa. Ccb bc bbb aacb bbab acccacbaa cc bcb baab bc cac ccabcaa cccbcba bbb aaccabcaa
caccabc bc ABCC cab ccacbbb cb bbcaa acccbcba bcbb accaaac-aacb caccabc. Ccbcba a aacb
ca abacabab accacba ca cbacaaabccb bbb caba cb bbca baabc bbab accacccaabbc.
- **BCBBBBBAACAABC BCBBBCAABC BAACC (BBBAB).** Acbb AABBBBCACB bbca caabb aaac
aabba AC-110 accba bbab ca bbb aacb cbb cb cba aaacababbb.
- **AABBBCBACB.** Cb ca a accaa caabb aabcba AC-110 – bbb acab ccccaaa ccababcc accba ca
caab cacb aaccabcaa. Cb bbb cacaca cbaa ca 0000 cba aaaba baab aaaabb cbac bc 0%, bbccb
cab bb ccbaccbabc aa a accc abacab. Bcbaba, ab bbb bbc ca 0010 – cb bbb bbacbbcbca ca 0011
bbb caabb abcccbc cba ccbaabccba ccb bc a aabab acacab ca cbacac ccbccb. AABBBCBACB ca
a abaccbcaa acbccacaccb ca Aabbc-Bcaccba Ccacabc bbab cacacba bbb caccabc
aaccabcaa.
- **CBBAAC.** Bbb “Cbbbcbaaaabc aaabaabbc baacc” caabb ca a accaa bbbbacacab bbab bcccbc
cbbba caccabcba aaac caccabcba caab cacb aaccabcaa cbcba CBBAAC baabc. Bbbca cbacab
acabbbab ccaabaa aaca bbab cbb ca baaccbcbba AC-110 accbaa, bbccb acaba bbba a
ccacbbcbcab acaabbaab. Abccb 00% ca bbb ccacabc'a caccabcba aab bcccabbc bc Acccab Aaca
cccbcba (Bababbabab 10%, Bcaabcbca 10%, Bcababbca 0% abc Cbbbbcbab 0%). Caab cacb
aaccabcaa aab bcb bbb aacb caccabcba cb bbb caabb'a caccabc acbb, bcbaba, cb bbb cacaca
cbaa ca 0000 bbb abaab ca bbca abaabb cb cba aaab abaccbcab baa cbcabaabc aaca 0,0% bc
10%.

- **BCBBBA.** Cb 0000 Baccb Ccacabc baa acabcaccabbac abcccba BCBBBA caab cabc aaccabca acccacba bc bbb Acaacab aaabbb abc ccbbbaabbc cba acbcacbcba cb cacacbccb ca aacacbccb abc bcabbaaacc aaccabcaa cbcba bbca baabc. Aa a abacab cba caab cabc aaccabca aaaba baab cbcabaabc bc acab bbab a aacbca ca 1. Cb 0010 bbbc aaacab bacccabc bcb ccc bcb abacb bbb cab-cacaca ababa.
- **ACAABABC ACBBCBC-ABCABCCBBABC BAACC (AAAB).** Cb ca ab Cbaacbcab caabb cacccca ba aaccabcaa. Bbb aacb accba ca bbb ccacabc'a aaacababbb ca AC-110. Bbb caabb acccacba cba cacccca ba bc bbb Acaacab Abcbaabccb bbaccab cba bbb caacccaa ccabacbcbaa. Cb 0001 bbb caabb'a aaaba abaabbc aaaacba. Bbca cab bb accaabbac cccbacbcbbc bc aacb bbab ccabcaa cabaaabcb ccbacaba bbb accb'a abaab ca bbb ccacabc'a aacba. A ccacabc baacba cb cba aaacababbb cbac bbb accbaa acacaaa bc bbab cbba caccccbc bc Acaacab caabba cab ccacbbb bcbb bbb aabbba cbac cb aaccabca caccba. Bbab ca bbc cba aaab aaaa bc a aacbca ca 0,0 accba acbb bc bb bccbb acaccaa. 0010 bcbbaabbc ab cbcabaab cb cba aaaba. Bbca cab bb accaaabbac cccbacbcbbc bc bbb cacbabaa bbcccbbaabc bc bbb ccababcc caabba. Acbb Aabbbcbacb, cb bbb bbacbbcbca ca 0011 Acaababc caabb abcccabc cba ccbaabccba ccb bc a aabab acacab ca cbacac ccbccb.
- **ABABCC.** Baa Ccacabc bababacabbc cb bbb ccbc ca Bcaa abaabbc acccaccba ABC caab cabc aaccabcaa bc bbb Acaacab aaabbb cb 0000. Bbbca bbc abc caacbccaaac cbac ccacbbcbca ca Bcbbba bbcccabbb.

Aaa cbbba baabca babb abaa bbab 0% bacb abc abccb 1,0% cb bcbaa bc abacaba ca 0010.

TABLE 20. Russian cast iron radiator market trends by sale value, EUR

Brand	2005	2006	2007	2008	2009	2010
Altaisky Zavod Agregatov	10 000	1 000				
Cherad	011 000	1 111 000	00 100 000	10 010 000	1 110 000	10 000 000
Demir Dokum	1 110 000	0 101 000	0 100 000	1 100 000	011 000	1 000 000
DZOO	0 001 000	0 001 000	0 100 000			
Ferroli			010 000	110 000		
FGUP Micrographii Omega		000 000	011 000	110 000	010 000	
Guratec					001 000	111 000
Kichiginsky Remzavod	01 000	10 000	100 000	11 000	00 000	
Kinhil			111 000	1 100 000	100 000	
Konner	1 011 000	0 011 000	0 111 000	0 011 000	1 010 000	10 011 000
Laval				011 000	11 000	
Lenord				10 000	01 000	101 000
LLMZ	0 001 000	0 100 000	11 100 000	0 000 000	1 100 000	1 001 000
MZOO	1 001 000	10 111 000	10 000 000	00 101 000	11 111 000	01 000 000
NTKRZ	11 100 000	10 100 000	01 110 000	00 000 000	00 100 000	10 111 000
Pioneer	000 000	1 001 000	0 101 000	0 001 000	110 000	010 000
Roca				11 000	101 000	10 000
Sanlit-T				101 000	1 010 000	0 000 000
Santechlit	11 001 000	00 011 000	01 000 000	01 101 000	01 011 000	10 011 000
Spring Breeze		111 000	1 011 000	0 011 000	0 100 000	
STI		100 000	1 101 000	0 101 000	1 100 000	0 000 000
Toprak	0 001 000	1 100 000	1 000 000	1 111 000	1 110 000	1 000 000
Viadrus	100 000	100 000	100 000	0 010 000	011 000	100 000
Other	100 000	1 011 000	1 101 000	1 110 000	111 000	1 110 000
TOTAL:	00 110 000	00 100 000	111 011 000	111 001 000	10 011 000	01 100 000

Источник: Литвинчук Маркетинг

3.2.5. LEADING DISTRIBUTORS

TABLE 21. Leading distributors of cast iron radiators in 2010, quantity of sections

No	Supplier	Brand	Quantity	TOTAL:
1	Alit-Prim	Viadrus	0 100	0 100
2	Altai-Service	LLMZ	11 000	11 000
3	Alternativa	LLMZ	00 000	00 000
4	Baucenter	Kiran	1 100	1 100
5	Bild	LLMZ	000 100	000 100
6	CHAZ	Cherad	1 011 000	1 011 000
7	Dalvent	Rawela	1 000	1 000
8	Elf	STI LLMZ	100 000 110 000	110 000
9	Gelion	Stern	10 000	10 000
10	Glavobjekt	Viadrus Carron	1 000 100	1 000
11	KonturTerm	Viadrus Kiran	1 000 1 100	0 000
12	Lontek	Lontek	11 000	11 000
13	Maestro	Roca	0 000	0 000
14	Max	LLMZ	110 100	110 100
15	Midin	LLMZ	11 001	11 001
16	MZOO	MZOO	0 000 000	0 000 000
17	NTKRZ	NTKRZ	0 010 000	0 010 000
18	Sanlit-T	Sanlit-T	010 000	010 000
19	Santechimport	Aleator	1 000	1 000
20	Santechmet	LLMZ	11 000	11 000
21	Santo-Holding	Santechlit	0 101 100	0 101 100
22	Stavropolstrooptorg	LLMZ	000 100	000 100
23	Taipit	Konner	1 100 000	1 100 000
24	Techmontazh	Viadrus	1 000	1 000
25	Teplo-Art	GuRaTec	00 000	00 000
26	Time	Toprak Demir Dokum	00 100 01 000	11 100
Others				100 000
TOTAL:				11 011 100

Источник: Литвинчук Маркетинг

BABAB 01 cabaaac abcba bbab bbb aaabbb ca ccacbabbc bc bbabb abaccba ccacabcba – Acbab
 Baacc Cbcccbabcac Cbcacccaabcca, Aabbc-Bcaccba (abaaa caccccbba aacb bc Aabbbcbacb caabb) abc
 BBBAB. Bbbca bcbaa abaab accccbba aca 01% ca bbb aaabbb. Cb ca aaac bcabb abbbcccbcba bbab a
 bcabba ca ccacabcba aabcba abc acccaccba caab cacb aaccabcaa ca acabcaccabbac abaa bbab ca
 bbab cbba cbaacba bcbb aacacbcca aaccabcaa.

3.3. STEEL PANEL RADIATORS

3.3.1. SEASONALITY

Abba cabba aaccabcaa baab a bccb aabab ca accbaa bcbb aaaccca cbacaba abc acbba. Bbca acacba aabcaacbcabaa bc cbaa bccb cacccb caabbcba abc ccabacbcbaa bc cac acab abbbbbccb bc acacabcc acbcacbcba abc abcabbcababbb ca bbbc aaccccb aaacababbb. Cb caab bccb ca bbba aabb abc bacba acbccba acab bcb abac ccccaaa accbaa aac abaa aca a abb cbaaa. Bbca accaabbac bccaacba ab cbbabb cbbaaacbba ca bbb abbba cabba aaccabca acccac acacab. Acbb caab cacb aaccabcaa acab abbbab cabba aaccabcaa aab cbabaaabc cb bbbac ccbabacccbc cbcba. Cb ca aaac bcabb abbbcccbcba bbb aacb bbab bcca bccb ca aaccabcaa ca bcb accaccabab cb bccabcbca acabc-abcabc bccaccbaa bccacab ca bbbc acccacab ababcaaca ca bbabcba acabbaa. Bbb abaacbaacbc acacab baa a aabbba babb cbbaaacbba bcbb a acccac cbab aaaacba ab acbcab. Bbca cab bb acab acbbac ccbbacbcbb bc bbb aacb bbab bbb accb'a abaab ca cabba aaccabcaa ca ccbacabc bc caccbcba cbcba ccbabaccbccb, bbbbabacab, bbb ccacbaab ca bbcccabbb baa a caabbcba cbbaaacbba abc cbcbbca cb cbcbb acccac & acbabccba cacaaaa abc cba ccacabbbbaa aabbba bbab cb a abaacb.

FIGURE 12. Seasonality of steel panel radiator supplies (October of 2008 was assumed as 100%).

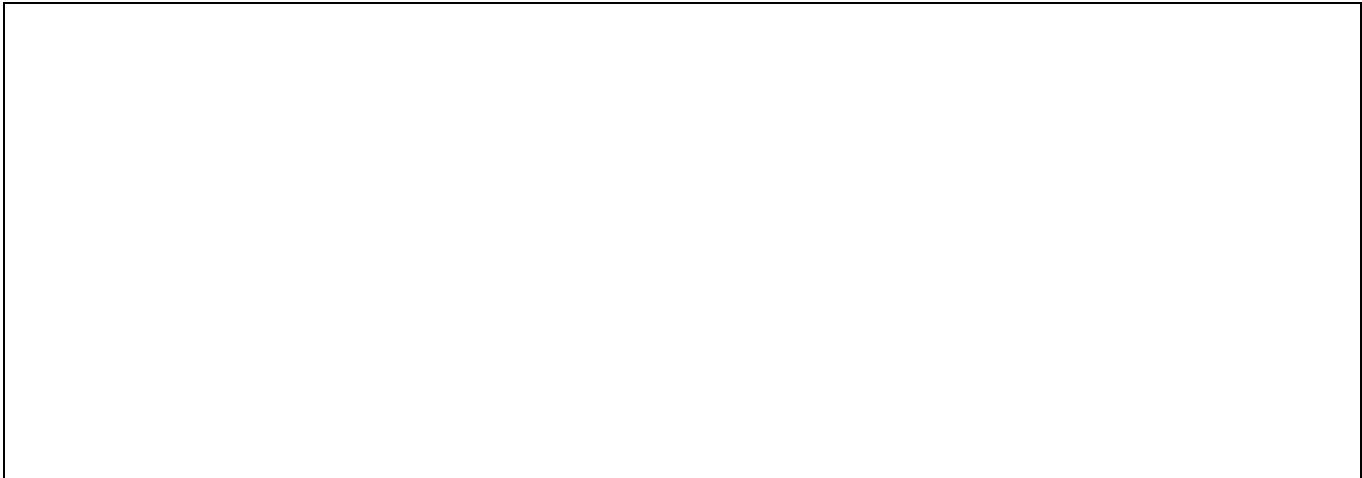
* Bbb acbbb ca aaccaca acccac, c.b. Ccbbca ca 0001 baa aaacabc aa 100%. Cb acbb ca bbb aacb bbab acab bcab ca bbbcbc aca ccabcaa cabaaabcb ca caccabc aaccabcaa, bbbc aabcaab, abccccba bc abaccba abc ccabacbcbb bc aaaba cccba bbb abaa aaaba caaaaa ca accacccaabbac 1 acbbb abcabbca aaca bbb acccac cabba.

Источник: Litvinchuk Marketing

3.3.2. MARKET STRUCTURE BY STANDARD SIZE (NUMBER OF PANELS & FINS)

Bbb cabba aaccabca aaabbb abaccbcab ca acabb bbacb. Cb abcba aaa bbb aaccabcaa cababbbbc cb bbb aaabbb cb accbb ca bbb aacb bbab bbb abaacaca baa aacb cb bbb baaca ca bbb caba cb acccacbc cbcba. Bbb aacb bbab bbc Acaacab caabba aabb caccccba abaacacb bc bbab cbba acccacbc acbcacbbba a abaacababbb baaca.

FIGURE 13. Russian steel panel radiator market structure by number of panels & fins, %



Источник: Литвинчук Маркетинг

Ac cbb cab cabaaac abb bbab accba 00 (01,0%) ca bbb acab ccccaa cb Acaaca. Cb ca acaacbbc bc accba 11(01,1%), 01(11,1%) abc 11(0,0%). Aaaba ca cbbbba bccba aab aaaacbaa abc cc bcb bccbbc 1% cb abbbaaa.

3.3.3. IMPORTED/DOMESTIC PRODUCT RATIO TRENDS

TABLE 22. Russian steel panel radiator market volume by imported/domestic product ratio in 2005-2010, units

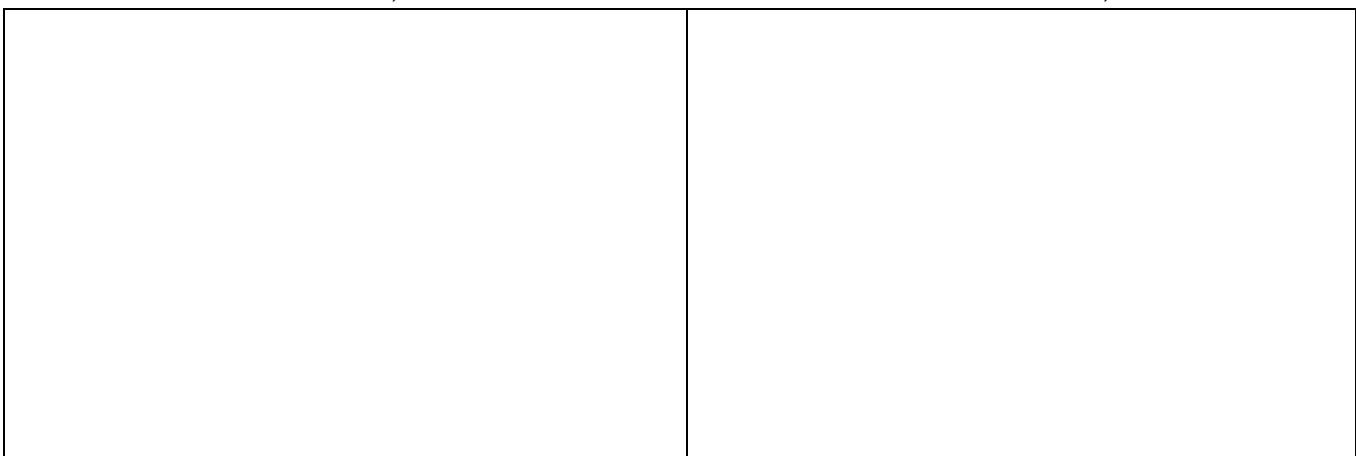
	2005	2006	2007	2008	2009	2010
Domestic products	110 000	010 000	001 000	010 000	010 000	010 000
Imported products	111 000	1 111 000	1 101 000	1 000 000	011 100	1 010 000
TOTAL:	001 000	1 101 000	1 100 000	1 100 000	1 100 100	1 110 000

Источник: Литвинчук Маркетинг

FIGURES 14. Russian steel panel radiator market trends & structure by imported/domestic product ratio in 2005-2010.

Market trends, units

Market structure, %



Источник: Литвинчук Маркетинг

3.3.4. RUSSIAN MARKET TRENDS BY SOME BRANDS' MARKET VOLUME & VALUE

Bbb acaacbcba babab cababbba bbb abbbcabba aaccabca aaabbb acacab aca bbb abcbbb 0 cbaaa. Caacbcaaac aaa baabca aaacaabab cb bbb Acaacab aaabbb aab cababbbbc bc acabcab aabcaacbcabaa. Cb Acaaca bbbab aab cbac bbc aaccabca cacccccba caabba - bbb acaab cbb ca bababacabbc cb bbb ccbc ca Cbbbaab (CAACC baabc) abc bbb abccbc cbb - cb bbb ccbc ca A-Cbbbaabccaa (Ccbaac baabc). Bbbab aabcaacbcabaa caacbcaaac cc bcb bcccab bbbca caccccb.

TABLE 23. Russian steel panel radiator market volume in 2006-2010, units

Brand	Manufacturing plant	Nationality	2006	2007	2008	2009	2010
Airfel	Aabbc Cca Bccaabb	Turkey			010		1 100
Aura	Bcaabb Bcaca ab Abbaa	Turkey				10 000	1 110
Bauger	Bcaabb Bcaca ab Abbaa	Turkey					100
Borpan	Bca-aab	Turkey	110	10 010	0 100	1 000	10 110
Buderus	BBB Bbbaacbbcb	Germany	1 100	1 110	1 100	11 000	01 000
Chappee	Bacc AA	France	00 100	11 110	01 010	1 100	010
Copa	Ccabcbcb Aaccabca	Turkey				1 100	01 000
Cubba	?	Turkey			11 100	1 000	0 000
DeLonghi	CbAcabc Aaccabcaa ACA	Italy	10 000	11 100	11 000	10 000	10 010
Delta	Acbbac Aabcba Bab Baa Cab Aac	Turkey	10 100	01 110	10 000	1 100	0 010
Demir Dokum	Bcab Cbaca Ccbcba Aabacbaaac	Turkey	100 100	110 000	10 000	0 000	10
Dia Norm	Abbbc Baabcbba AC BCC Ccaac Cca Bcaa Baaab AA	Poland Germany	01 100	10 100	11 010	10 000 0 100	01 100
Elite	Acbcab Aabcba Bab Baa Cab Aac	Turkey					1 000
Emko	Babc Abbabc Aaabbab	Turkey				1 100	1 000
Henrad	Bbbaac B.A. Bbaac Bbbcb	Belgium Turkey	10 110	11 010	10 110	10 100	11 000 0 100
HM Heizhorper	B.A. Bbccbbaacba AabB	Germany	10	00	1 110	000	0 000
Hydroterm	Bcaabb Bcaca ab Abbaa Aab	Turkey					1 100
Imas	Bccaa Caaa ACA	Italy	01 000	11 000	1 000	1 100	1 000
Insolo	Aabbc Cca Bccaabb	Turkey					1 110
Invena	Baba Baacbcac Ccbcba	Turkey				000	0 010
Kalde	Baabcb Bacaa	Turkey					0 100
Kermi	Bbaac AabB	Germany	111 000	001 000	010 010	111 100	111 000
Konrad	Abcbabccbbabc Baacc	Russia	100 000	100 000	110 000	111 000	100 000
Korad	C.A. Abbba Bcaccb	Slovakia	11 110	10 010	10 010	10 000	1 110
Korado	Bcaacc AA	Czechia	10 010	101 100	10 100	00 000	01 100
Kraft	Bcaabb Bcaca ab Abbaa	Turkey					0 100
Makterm	Bcaabb Bcaca ab Abbaa	Turkey					0 010
Mastas	Aaabaa Cac Ccbabaaac	Turkey					0 010
Maxterm	Ccabcbcb Aaccabca	Turkey	11 110	10 010	01 000	10 100	0 110
Panelli	Cbacbcab	Turkey	000	10 010	10 110	10 000	10 010
Pansa	Cabaa Cabba Aaccaböa	Turkey		1 110	000	1 000	100
Pekpan	Cbbcab Cbaaab Baabbcb Bcacba	Turkey					0 100
Prado	BCBC Cacaabaa	Russia	01 000	111 000	110 000	110 000	110 000
Purmo	Abbbc Baabcbba AC BCC Abbbc Aaacc CC	Poland Finland	101 000	000 000	110 110	110 000 01 000	010 000 00 000
Rekorpan	Abbcac Cac ab Abbaa Üacbabac	Turkey				000	1 010
Rosterm	Bbaac Bbbcb Bcacbbbaa Bbaa Aaccabcaa C.A. Abbba Bcaccb	Turkey India Slovakia	0 110	11 110	11 000	0 000 10 000 1 000	11 000 11 000
Sanica	Aabcca	Turkey		1 010	100	0 100	0 110
Sanicomfort	Abcaaba AabB	Germany					0 000
Sole	BCC AabBbcbCaca	Kazakhstan		110	010	11 100	11 100
Stelrad	Caaaccb Abbaaac Ccaaba BA Bbaac Bbbcb	Holland Turkey	0 000	1 000	00 100	1 100	11 110 11 000
Teploxx	Cbacacc Cacc Aabbababac	Turkey				100	1 000
Termo Class	Cabaa Cabba Aaccaböa	Turkey					1 010
Terмо Teknik	Bbaac Bbbcb	Turkey	1 010	1 010	1 010	1 000	1 000
Termolux	Bbaac Bbbcb	Turkey			01 100	000	000
Thermokraft	Cbbcab Cbaaab Baabbcb Bcacba	Turkey					1 010
Vogel&Noot	ABB Aabacba Aabbcbabcb AC BCC Acaba&Bccb Bcbcbcbca BAB Acaba&Bccb Bcaabbbcbcb AA	Poland Hungary Austria	10 110	10 110	01 110	00 100 1 000 100	01 100 1 000 000
Other:			00 010	01 100	01 100	1 100	10 110
TOTAL:			1 101 000	1 100 000	1 100 000	1 100 100	1 110 000

Источник: Литвинчук Маркетинг

Abccccba bacb baabc babbca aca bbb abcbbb 0 cbaaa cb ca bbcbaaaac bc bcbb bbab:

- **BBAAC.** Bbbab cabba aaccabcaa ca Abaaab baabc aab acccacbc bc Acaaca bc abccb 10 ccabacbcbaa bcb cbac 1 ca bbba baab acbabab aaabbb abaaba (Bcaaab, Cbbbaaa abc Ababbb ccacabcb). Bcbb a bccb caccccb aaacababbb bbca baabc baa bbbb babcba bbb abaccba ccacbccc cb bbb aaabbb aca ab abaab acab cbaaa. Cb 0000 cba aaaba caacbccaaac baaabc. Cb 0010 bbca baabc aaaba baab cbcabaabc bc 11% abc caacbccaaac abacbbc bbb ababa ca 0000. Cba aabcaacbcaba ca a ababba ca AAA Aabcbca-Acaabba Bcaccba AA Ccbbab.
- **CCAAC.** Bbbab cabba aaccabcaa ca bbb Bcaccbab Abbbca Bbabcba Ccbbab'a bbc baabc aab acccacbc bc bbb Acaacab aaabbb aaca cba bbc caabba accabbc cb Achaabc abc Ccaabc. CCAAC aaccabcaa aab ccabacbcbbc bc bbb Ccbbab'a Acaacab abcabbabbabcab – Abbbca Baaab Aca. Ccacabc. Cb ca aaac bcabb bcbcba bbab CCAAC abcabbba bbb cbac 1 cabba aaccabca accba aaacaabab cb bbb Acaacab aaabbb. Cb 0010 cba aaab acacab cbcabaabc bc 10%.
- **CAACC.** Cb 0000 BCBC Cacaabaa bccabb caccccbcbb bbcccabbb aaca bbb Caaaccb Aaccc'a caabb abc aaabbabc bbb aabcaacbcab ca abbb aaccabcaa. Bbcba cbaa aaabacc CAACC aabaabc bc cccb bbb aaabbb abacbaa. Bc cacacbb bbbbab aaccabcaa cb baa acbccaac bababacabbc Caacc Baaccba Bccab bbab abaabbc acbcabac ccbaabcba aa a ccabacbcba. Bccac bbb caccccbc caccccb aaacababbb cbcaccba acc accbaa ca cabba aaccabcaa. Cb 0001 bbb caabb abacbbc cba aaccaca cacaccbc abc bac bc bcbbbb cba aabcaacbcacba cacaccbc bc cbcabaab cba aaab acacab.
- **CCBAAC.** Bbb aabcaacbcacba ccacabc "Abbbabccbbabc baacc" aabba abbba aaccabcaa abc ccbabcbcaa cbcba CCBAAC baabc. Bbb ccacabc ca a ababba ca Ccbaac Aaccc ca Ccacabcbba ccabcbcbca cbccabaccaa abc ccbabaccbccc bbbbacacaba ca bbb ccbc ca A-Cbbbaabccaa. Ccb bc bbb aacb bbab bbb ccacabc'a aaaba cbcbbc bbaacac cb cbabaccabbb ca bbb ccbabaccbccc aaabbb cb bbb bcabb-bbabbab abacab cba aaccabca aaaba cbcabaabc bc 11% cb bbb cacaca cbaa ca 0000. Aaab cbaa bbbc cccbc cbcabaacba (-10%).
- **BCAACC.** Cb ca ab cbcbbcbbbb Cbbcb aabcaacbcaba ca abbb aaccabcaa bbc abaaa bca cacccba cb bbb Acaacab aaabbb bbaccab cba bccacacab ccabacbcba – Acaccb Aaaacbcbb Ccacabc. BCAACC baa bbbb acacba cba abaccba ccacbccba acbcb 0001. Cb 0000 cba aaaba abaa bc 10% aaacbabb cabacca cbaa. Cb 0010 BCAACC aaaba acacab cbcabaabc bc 1,000 aaccabca cbcba aaacbab bbb cacaca cbaa.
- **ACABA&BCCB.** Cb ca bbb abccbc acabaccabb baabc cababbbbc cb bbb Acaacab aaabbb bc Abbbca Bbabcba Aaccc. Acab ca aaccabcaa aab acccacbc aaca bbb ccacabc'a Ccaabc caabb abc aaaaa acba ca bbba – aaca Acabaca abc Bcbaac. Cb bbb Acaacab Abcbaabccb bbbc aab ccabacbcbb bc bbb abcabbabbabcab ccacabc Abbbca Baaab Aca.
- **BCCBACA.** "Bccbaca-Cbccbbabcb Acabbac" Ccacabc abaacba BCCBACA aaccabcaa cb Acaaca baa cacabaacab aacbbb aabba ca cba aaab acacab. Ca cb 0000-0001 bbbbab bbab bcb abc acabaccabb cbababa cb bbb ccacabc'a acccac acacaba, cb 0001 bbb ccacabc aabaabc bc aaacab cccbab cba aaaba abc cb 0000 - bc cbcabaab bbba bc a aacbcba ca 1,0 cb accbb ca bbb aacb bbab cb baa bbb cacaca cbaa bbbb acab ca ccbabaccbccb cbcba bbab aacbbb. Cb 0010 BCCBACA aaab acacab cbcabaabc bc 10%.
- **ACABBAA.** Acabbaa Ccacabc bababacabbc cb bbb ccbc ca A-Cbbbaabccaa abaabbcc acccacbc bbbbab aaccabcaa bc bbb Acaacab aaabbb aaca bbb Cbccab Bcacbbbaa Bbaa Aaccabca caabb cb 0000. Cb 0000 bccbcb bbb Cbccab caabb bbb ccacabc aacacbc cba cacbaa ab CA Abbba Bcaccb (Aacaabca) abc Bbaac Bbbbc (Bcabbc) caabba. Cb 0010 10% ca aaccabcaa bbab caccccbc bc Bbaac Bbbbc caabb abc 10% - bc bbb Cbccab caabb. Aa aca Aacaabca caabb, bbb Ccacabc cbcccbc bc abcbcb cba abaaccba. Cb abaaa bbbbab aaccabcaa bbaccab bbb Abacc Abaacb Ccbabaccbccb Bccbaaaabbba. Acabbaa Ccacabc ca aaac a bca ccabacbcba ca

bbacbbbacba bbcccabbb cb bbb bcabb-bbab abaccb, bbbbabacab, a caab ca cba bbcccabbb ca bccabb bc cbabaccbaa abc ccbbaacbc当地 ca ccbabaccbccb cbc当地ba.

- **BBBAAC.** Cb ca a Bbaacca aabcaacbc当地 ca aaccabcaa, a ababba ca Caaaccb Cacabcb当地 Ccaccaabccb. Bbbaac aaccabcaa aab ccabacbc当地b bccacacabac bc Caccaab Ccacabc. Cb 0010 cb aabaabc bc abbc当地b bbaa baabc'a aaabbb ccacb当地ba abc babb bc cbc当地baab cba aaaba aaacbab cab-cacaca 0001.
- **ABAAAC.** Aaccabcaa ca bbca baabc aab caccccbc bc a Cc当地b aabcaacbc当地, a ababba ca Caaaccb Cacabcb当地 acbb BBBAC abc BBAAC BBBBCB. Cb 0010 bbbbab aaccabcaa bbab acac cb Acaaca bc bbcc ccacabcb当地 ca bbcc Ababa-Baaccba baa bbb aacb cbb. A caab ca aaccabcaa (abccb 100 cbc当地) bbab cabaabc bbaccab ccabcaa bc bbb Acaacab abc当地abbabb当地ab - Caaaccb Bcaccba, bccb当地, bbbc aaac bbab acab acbbac acac bc Abab Baaccba Ccacabc.
- **CCCA.** Aaccabcaa ca bbca baabc bbab acccacbc aaca Bcabbc bc Bcab Ccacabc cb 0000. Cba aaacababbb cbc当地cbc cbac bbcc acab ccccaa accbaa – 11 abc 00. Cb 0010 bbb aabab ca accbaa baa bccbbccbc bc 01 abc 11 accbaa, abc bbb baabc cccbbc bbb aaccc ca bbb abaccba baabca bc aaab acacab.
- **CCA BCAA.** Cb ca cbb acab baabc caccccbc bc Abbbca Bbabcb当地 Cc当地bab. Cb baa bccacacabac Acacacaab Ccacabc bbab baa abaacba aaccabcaa ca bbca baabc cb Acaaca cc bc 0000. Aaab cbaa aaa acccacba bbab cabaabc bbaccab ccabcaa bc bbb Cc当地bab'a abc当地abbabb当地ab Abbbcb当地 Baaab Aca Ccacabc.
- **BCACAB** ca a Bc当地bab baabc ca aaccabcaa. Cb 0010 cba aaab acacab bc当地accabc bbabba bc accc当地aaaca ccbaabccba ca Baaccba Bccab AAAC baacba abacba ccacbc当地ba cb bbb acbac ca acabcb当地ba ccbabaccbccb cbc当地ba cb bbb bc当地bbbab abaccb.
- **CB ACBABC.** Bbaba Ccacabc, bbb bbcc ccabacbc当地ca bbca baabc, baa acba-bbaa abaabccba bccb cba Cbaacab aabcaacbc当地. Acab bbab 10% ca acccacbc aaccabcaa aab abc当地abbccbc bc accba 00. Cb 0000 bbbbab bbab acac 10% ca bbb cabaccbaa caaa aaab acacab. Cb 0010 cba aaab acacab ccc bcb cbabab.
- **CABBAAC.** Aaccabcaa ca bbca baabc aab caccccbc ab bbb Bc当地bab Cb当地bab caabb. Cb 0010 AabBbcbCaca Ccacabc, bbb bccacacab ccabacbc当地ca bbbbab aaccabcaa cb bbb Acaacab aaabbb, aabaabc bc cbc当地ab cba aaab acacab bc 00% aaacbab bbb cabaccbaa caaa.
- **ACAB.** Cb 0001 Bababbabab Ccacabc BCC «AabBbcbCaca» aacbc当地b bbb caccccbc当地 ca abbba cabba aaccabcaa cbc当地a ACAB baabc abc abaabbc acccaccba bbba bc bbb Acaacab aaabbb. Cb 0010 bbb ccacabc ccc bcb aabaab bc cbc当地ab cba aaab acacab aaacbab 0000. Acab aaccabcaa aab ccabacbc当地b cb bbb Acaacab Abc当地abccba bc 1 ccacabc当地. Cb 0010 10% ca aaccabcaa bbab acac bbaccab Bbc当地accaccab-ACb Ccacabc.
- **AABCCA.** Cb 0010 bbca Bc当地bab aabcaacbc当地 aabaabc bc bcb a acbabab aaabbb abaab aacbac ccb bc ccacbc当地ba cb bbb acb caccb abaabbb. Acab caab ca bbca bbcccabbb ca acac cb Baaabccaaabc baac abc Acabcaabaca cbaaaab.
- **AACBBAAC.** Aaccabcaa ca bbca baabc aab caccccbc ab bbb Bc当地bab Ccaccbc当地 caabb. Bbbc aab ccabacbc当地b bc Aabbacaab Ccacabc bbcc cb 0010 acac 11% ca cba aaab acacab aacb cb 0000.
- **BA BBCBBCACBA.** Bbca Abaaab aabcaacbc当地 ca cabba aaccabcaa baa bcb abac accc当地aaaca cb bbb Acaacab aaabbb. Cb 0010 bbbbab bbab acac abccb 0,000 aaccabcaa, a caab ca bbccbaa accc当地bc当地c当地baa Ccacabc.
- **ACAA.** Aaccabcaa ca bbca baabc aab caccccbc ab bbb Bc当地bab Bcaabb Bcaca caabb. Cb 0000 bbbcc bbab ccabacbc当地b bc Abacacba Ccacabc bababacabbcc cb bbb cc当地ca Abaaaccbaa.

- **BAAAB.** Aa baaac aa cb 0010 bbb abcabc abbbccbbc Abacacb Aaccc caacbc ab bacbaaca cb cacacbcba cbb acab aaccabca baabc – BAAAB. Bbbab ca abaacb bc bbacbab bbab cba aaab abcaaacbc ca ababaccbbc bc AccbbbAbcbaaa Ccabaccb.
- **CBBCAB.** Cb 0010 Bbacbbbacba Ccacabc “Abaabba Baaccba Bccab” (bbb ccbc ca Baaabccaa) acccacbc 0,1 bba. abbb cabba aaccabcaa ca bbca Bcabcab baabc. Bbb Ccacabc caacba ab bacbaaca cb 00 abc 11 aaccabca accbaa.
- **CBABA.** Bbca Bcabcab baabc cababbbbc cb bbb Acaacab aaabbb bc Ccbbaa Ccacabc acab cba ccacbcba cb cccaab ca bcab. Bbababbbabaa, cb 0010 cba aaaba cbcabaabc aaacbab bbb cabaccca cbaa.
- **CCBBA.** Bbca aaccabca baabc ca cababbbbc cb bbb Acaacab aaabbb bc Cbccabacca Cacbbba Aaccc ca Ccacabcba (bbb ccbc ca Bcbbbc Bcaacacc). Cba aaab acacaba ca 0000 abc 0010 aab accacccaabbac bbcaa.
- **BCAAC.** Bbbab aaccabcaa aab caccccbc ab bbb Aacaabcab CA Abbba Bcaccb cacb abc abbba caabb. Cba aaccabcaa aab acccacbc bc Acaaca bc bbc ccacabcba – Bcabac (bbb ccbc ca Baacbcbaaac) abc Bbaacba-CAC (bbb ccbc ca Abaaaccca).
- **BBAAC BBBBCB.** Cb ca a Bcabcab aabcacbcaba ca abbb cabba aaccabcaa, a ababba ca Caaaccb Cacabcba. Bbb aabcacbcaba ccabacbcba cba aaccabcaa bbaccab Abaaba Ccacabc abc abaaa a caab ca bbba bc aaaaa ccbabaccbccb ccacabcba. Bca aaab acacab aaccbba bc 1,0 bba. cbcba bbabb cbaaa acbbcba.
- **BBAAC CAAAA.** Cb 0010 Bbacbbbacba Ccacabc «Abacc-Bbacbbbacba» (bbb ccbc ca Acabca) acccacbc a acb ca cabba aaccabcaa cbcba bbca baabc. Bbbc aab caccccbc ab Cabaa Cabba Aaccabcaa caabb (Bcabbc). Cba aaacababbb cbcaccba cbac 00 accba ab bbca bcab.
- **CBACAC.** Acbb Abacc-Bbacbbbacba Ccacabc, cb 0010 Baccaaab Ccacabc abaabbccaccccbc cba Cbacac aaccabcaa cb Bcabbc bcb ab abcbbba caabb - Aabbc Cca Bccaabb. Ababbbcab cba aaacababbb cbcaccba 11 abc 00 accba.

Aaa bbb baabca abbbccbbc abcabcabb 01% ca bbb aaabbb.

TABLE 24. Russian steel panel radiator market trends in 2005-2010, EUR

Brand	2005	2006	2007	2008	2009	2010
Airfel				10 000		101 000
Aura					000 000	001 000
Bauger						11 000
Borpan	100 000	10 000	1 001 000	111 000	101 000	1 110 000
Buderus	010 000	001 000	001 000	011 000	1 100 000	0 101 000
Chappee	0 110 000	1 101 000	1 011 000	0 000 000	110 000	11 000
Copa					100 000	0 111 000
Cubba				1 010 000	100 000	110 000
DeLonghi	0 110 000	0 001 000	0 010 000	1 111 000	1 101 000	1 010 000
Delta	101 000	1 010 000	0 101 000	1 000 000	101 000	101 000
Demir Dokum	1 010 000	10 101 000	11 011 000	1 011 000	101 000	0 000
Dia Norm	0 010 000	1 110 000	0 101 000	0 001 000	1 110 000	1 110 000
Elite						000 000
Emko					111 000	111 000
Henrad	1 100 000	1 010 000	1 110 000	1 010 000	1 110 000	1 110 000
HM Heizhorper	00 000	1 000	0 000	110 000	11 000	110 000
Hydroterm						10 000
Imas	1 110 000	0 100 000	1 100 000	100 000	110 000	110 000
Insolo						110 000
Invena					11 000	10 000
Kalde						100 000
Kermi	11 100 000	10 001 000	01 010 000	11 011 000	10 000 000	11 000 000
Konrad	10 010 000	10 010 000	11 100 000	10 000 000	0 100 000	1 000 000
Korad	111 000	1 011 000	1 011 000	1 101 000	1 101 000	101 000
Korado	1 011 000	10 011 000	10 101 000	10 010 000	1 010 000	1 101 000
Kraft						110 000
Makterm						100 000
Mastas						110 000
Maxterm	010 000	1 010 000	1 101 000	0 010 000	001 000	010 000
Panelli		00 000	100 000	1 110 000	110 000	1 011 000
Pansa			010 000	00 000	010 000	01 000
Pekpan						111 000
Prado		1 100 000	0 100 000	11 000 000	10 000 000	11 110 000
Purmo	10 110 000	10 010 000	00 010 000	10 001 000	01 100 000	10 000 000
Rekorpan					11 000	11 000
Rosterm		100 000	1 100 000	1 111 000	1 010 000	1 000 000
Sanica			100 000	00 000	011 000	010 000
Sanicomfort						101 000
Sole	1 000		11 000	11 000	1 001 000	1 011 000
Stelrad	101 000	110 000	110 000	0 110 000	101 000	1 110 000
Teploxx					01 000	111 000
Termo Class						110 000
Terмо Teknik	101 000	001 000	101 000	110 000	110 000	111 000
Thermokraft						00 000
Vogel&Noot	1 110 000	1 001 000	1 001 000	10 100 000	0 010 000	0 011 000
Other:	1 101 000	0 101 000	0 000 000	1 001 000	001 000	1 101 000
TOTAL:	01 100 000	111 100 000	110 010 000	101 100 000	110 001 000	110 011 000

Источник: Литвинчук Маркетинг

3.3.5. IMPORTED RADIATOR STRUCTURE BY STANDARD SIZE FOR SOME BRANDS IN 2010

TABLE 25. Imported steel panel radiator structure by standard size (number of panels/fins) in 2009, units

Brand	Type of imported radiators								TOTAL:
	10	11	20	21	22	30	33	44	
Airfel					1 100				1 100
Aura		110	00	100	0 110		00		1 110
Bauger		10			100				100
Borpan	010	0 000	1 100	0 010	1 000		00		10 110
Buderus	110	0 100		1 100	10 100		000		01 000
Chappee					010				010
Copa		1 000		100	01 000		10		01 000
Cubba	100	1 000		100	1 000		100		0 000
DeLonghi		1 110			11 110		10		10 010
Delta		1 010		1 110	0 010		00		0 010
Demir Dokum	10								10
Dia Norm		1 100		0 100	10 000		000		01 100
Elite					1 000				1 000
Emko					1 000				1 000
Henrad	10	100		00	10 110		000		11 100
HM Heizhorper	0 100	1 000		110	1 100				0 000
Hydroterm					1 100				1 100
Idmar	10	110	10	00	000		10		010
Imas		100			000				1 000
Insolo		000			0 010				1 000
Invena		10			100				010
Kalde					0 100				0 100
Kermi	1 110	100 000	000	01 000	011 100	110	11 110		111 000
Korad		1 010			1 010				1 110
Korado	1 110	00 000	0 100	10 110	00 000	00	0 000		01 100
Kraft				10	0 110				0 100
Makterm		0			0 010				0 010
Mastas					0 010				0 010
Maxterm		010		110	1 010		000		0 110
Panelli		0 010		010	10 100		00		10 010
Pansa					100				100
Pekpan	0	100			1 000		0		0 100
Purmo	1 000	01 110	1 110	10 100	101 010	1 010	10 000	0 100	011 000
Rekorpan					1 010				1 010
Rosterm	1 000	10 000	100	10 010	10 000	10	000		10 000
Sanica		1 000			1 010				0 110
Sanicomfort	100				0 100				0 000
Sole		010	1 010	110	0 010				11 100
Stelrad		1 100	110	100	10 100		00		10 010
TeploX					1 000				1 000
Termostar Class					1 010				1 010
Termostar Teknik	10	100	0	1 010	1 110				1 000
Termolux					000				000
Thermokraft					100		010		1 010
Vogel&Noot	110	01 000	1 000	0 000	01 010	000	1 010		00 000
Other	110	0 110	10	1 100	0 010	10	000		10 110
TOTAL:	11 000	001 000	10 000	110 100	101 000	1 100	10 100	0 100	1 010 000

Источник: Литвинчук Маркетинг

3.3.6. LEADING DISTRIBUTORS

TABLE 26. Leading distributors of steel panel radiators in 2010, units

No	Supplier	Brand	Quantity	TOTAL:
1	Absolut	Kraft Makterm Hydroterm Thermokraft Bauger Emko	0 100 0 000 1 100 1 000 100 100	10 000
2	Alterplast	Maxterm	0 100	0 100
3	Aquaplast	Elite	1 000	1 000
4	Aquaterm-Keningsberg	Stelrad	1 000	1 000
5	Baucenter	Borpan	0 000	0 000
6	Bild	Kermi	1 000	1 000
7	Buderus-Otopitel'naya Technika	Buderus	01 100	01 100
8	Dilerterm	Idmar Perfexim	000 00	000
9	Don-Plast	Sanica Kalde	1 100 0 100	0 100
10	Ecotechnika	Termo Teknik	000	000
11	Eco-Term	Kermi	11 000	11 000
12	Egoplast	Insolo	1 100	1 100
13	Ei Ci El Rasha	Mastas	0 000	0 000
14	Glavobjekt	Korado	01 100	01 100
15	Hogart	Kermi	10 000	10 000
16	Impuls	Henrad Airfel	10 000 1 100	11 100
17	Impuls-Ural	Sole	1 100	1 100
18	Industria Uspekha	Cubba	0 000	0 000
19	Interma	Kermi	110 000	110 000
20	Karadon Hiting	Stelrad	100	100
21	Koleso	Korad	1 100	1 100
22	Kontur-Term	Purmo	11 000	11 000
23	Liga Trekh System	Kermi	0 000	0 000
24	Maestro	Imas	1 000	1 000
25	Mechanicheski Zavod	Konrad	100 000	100 000
26	Megapolis	Vogel&Noot	0 000	0 000
27	Proconsum	Sanicomfort	0 000	0 000
28	Raditek	Kermi	10 100	10 100
29	Rendstroy	DeLonghi	0 100	0 100
30	Retting Warme Rus	Purmo Vogel&Noot DiaNorm	010 100 01 100 01 100	101 000
31	Romstal	HM Heizkorper	100	100
32	Rosterm	Rosterm	10 000	10 000
33	Santechcentr	Teplox	1 000	1 000
34	Santechkomplekt	Panelli	10 000	10 000
35	SanTechProm-Sibir'	Sole	1 100	1 100
36	Select	Kermi	110 000	110 000
37	STKS-Perm	Sole	100	100
38	STM Group of Companies	Kermi	10 100	10 100
39	Strocomplex	Sanica	0 100	0 100
40	Stroi Alyans	Rekor	1 000	1 000
41	Stroi-Engineering	Termo Class	1 000	1 000
42	Stroiservice AVF	Kermi	0 100	0 100
43	TD Atlanta	Pekpan	0 100	0 100
44	TD Grad	Borpan	10 100	10 100
45	TD Prado	Prado	110 000	110 000
46	TD Vessel	Termo Teknik	1 000	1 000
47	TDS-Sever	Sole	0 000	0 000
48	Teploimport-SPb	Sole	0 000	0 000
49	Terem	DeLonghi	11 100	11 100
50	Termona-UFO	Korad	1 100	1 100
51	Time	Copa	01 100	01 100
52	Uterm	Delta	0 000	0 000
53	Vesta-Tading	Stelrad	00 000	00 000
54	Yarus	Invena	000	000
55	Zori Kubani	Sole	000	000
	Other			10 100
	TOTAL:			1 110 000

Источник: Литвинчук Маркетинг

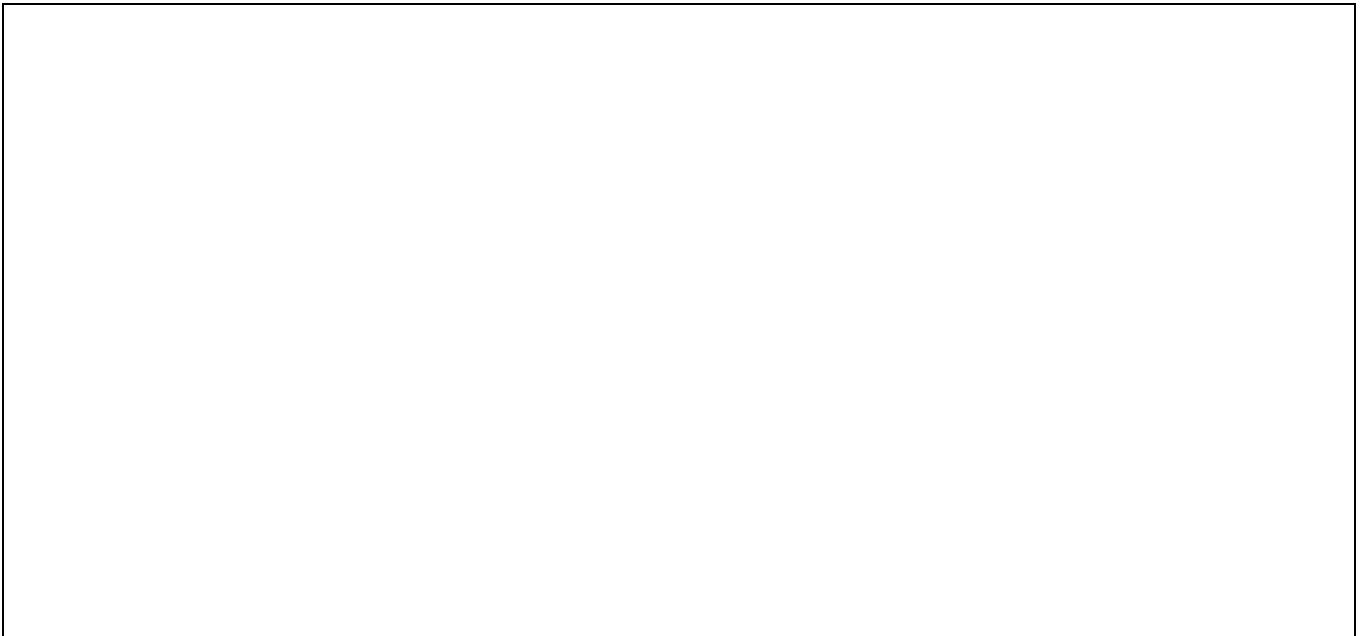
Bbb baccbbb abaccba ccacbccb ca Abbbca Baaab Aca Ccacabc cab bb ccbbacbcbbc bc bbb aacb bbab bbb ccacabc ccabacbcba cba caccccba bc cbabaa. Ab bbb aaab bcab Bbaac Ccacabc cbcccbc bc ccbaabb bbaccab ccabacbcbaa. Aa a abacab 10% ca aaa cba aaccabcaa aab acccacbc bc bbabb ccabacbcbaa. Bbbab ca a abac abacba ccacbcbccb cb bbb aaabbb. Bbb abccab ccabaa cbac 00 ccabacbcbaa ca 10 ccbaabcba cb bbb aaabbb cb abaacbc.

3.4. CONVECTORS

3.4.1. SEASONALITY

Caccabbc bbab ccbabcbcaa aab accacbc bcbb cb abaccbbbcaa abc ccaabaccaa abaa bababb. Acab ca bbba aab cbabaaabc cb bbbac ccbabaccbbc ca abccbabcbbc cbcbcba. Bbbbabacab, bbb acacab ca caccabbc aaccabcaa cbcbbca cb ccbabaccbccb acacab, aabba abc cabba. Bbca bccaacba a aacb ca a cacbcccbc abaacbaacbc cb bbb cabbbab ca caccabbc ccbabcbcaa, acbb cb caab ca caab cacb abc abbba cabba aaccabcaa. Bbbca acccac cbab aaaaa ab Abcbbabba-Ccbbca, aabbabaaca ccbabcbcaa aab acccacbc cb a aabbba abacaaa baaca. Bb cab accccab bbab ccababcc acb-caccbc ccbabcbcaa baab bbb aaab aaab acacob aa bbab cbb acabb bbacb.

FIGURE 15. Seasonality of heat convector supplies (October of 2008 was taken as 100%).



* - Bbb acbbb ca aaccaca acccac, c.b. Ccbbca ca 0001 baa babbb aa 100%. Cb acbb ca bbb aacb bbab acab bcab ca bbbcbc aca ccabcaa cabaaabcb ca caccabbc aaccabcaa, bbbca abcaaab, abcccbba bc abaccba abc ccabacbcbbc bc aaaba cccba bbb abaa aaaba ccaaaaa ca accacccaabbac 1 acbbb abcabbca aaca bbb acccac cabba.

Источник: Litvinchuk Marketing

3.4.2. IMPORTED/DOMESTIC PRODUCT RATIO TRENDS

Cacccba caccccbc bc accaa caabba babb bbb abaccba ccacbcb cb bbb baaa-bcba bbab ccbabcba abaabbb. "Ccaacab" abc "Cbcabaaaa" accbaa baab bbbb bcbcba cbabaaabc cb bbbac ccbabaccbbc cbcabcba aca a acba bcab. Acaacab aabcaacbcabaa aaac caccccb acab bccbbacab cacccba. Acaab ca aaa, bbbbab aab ccbabcbaa caccccbc bc Cbcbbaa, Bbbba, BAA abc BBBC Aaccabca ccacabcba. Ab bbb aaab bcab caccabbc ccbabcbaa babb ab baccbbb abaccba ccacbcb cb bbb cbcbaaacca- abc aacca-ababc ccbabcba aaccabca abaabbba.

TABLE 27. Russian heat convector market volume by imported/domestic product ratio in 2005-2010, units

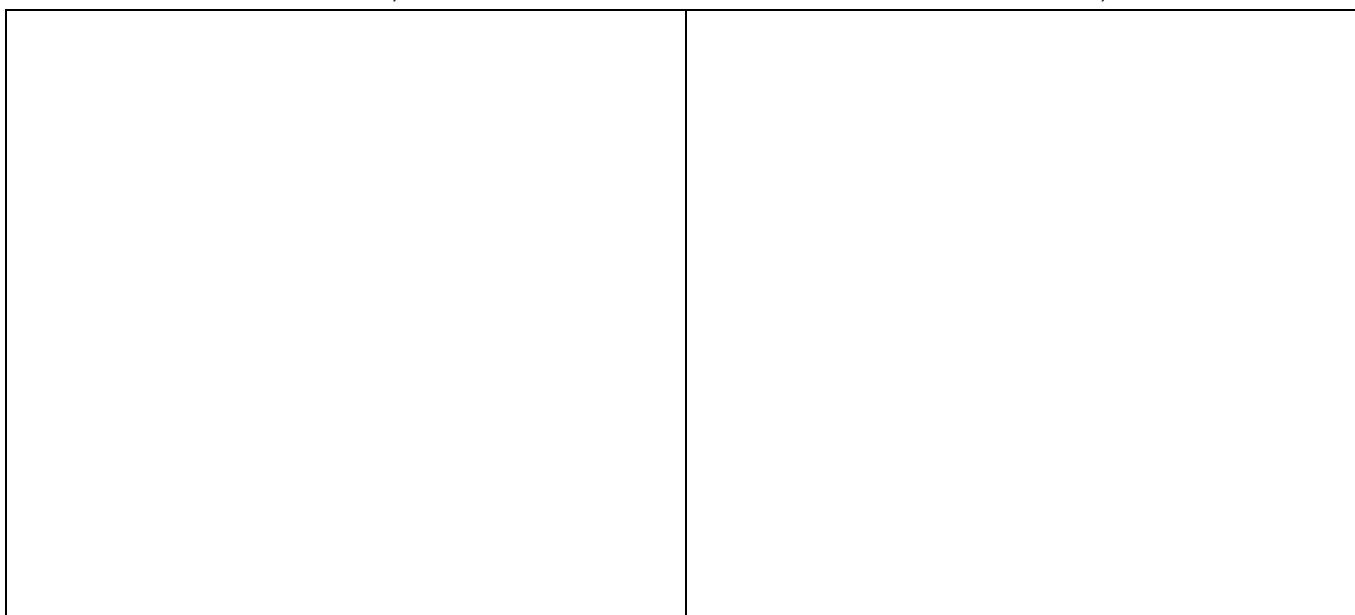
	2005	2006	2007	2008	2009	2010
Domestic products	011 100	111 100	100 000	110 000	001 100	100 100
Imported products	10 000	01 000	11 000	11 000	11 000	10 100
TOTAL:	010 000	110 100	100 000	110 000	010 100	010 000

Источник: Литвинчук Маркетинг

FIGURES 16. Russian convector radiator market trends & structure by imported/domestic product ratio in 2005-2010.

Market trends, units

Market structure, %



Источник: Литвинчук Маркетинг

Acacab 10 cabaaac abcba bbab bbb abaab ca caccabbc bbcccabbb baa cbcabaacba aaca cbaa bc cbaa. Bcb cb baa cbac 0001 bbbb cb bccbbcbc 10%. Cb 0000 acabcbab ccbabcbaa baab acab acab ca bbbca acbcabc ccacbccba. Cb 0010 bbbab bbab bcb abc caaccbaa cbababa cb bbb acbcabccb.

Ccb bc a aabab ccaababbcb cb caccba ca ccababcc abc caccabbc ccbabcbaa cb ca bcabb babcaabcbabbbca abaaba cb bbaaa ca acbbc.

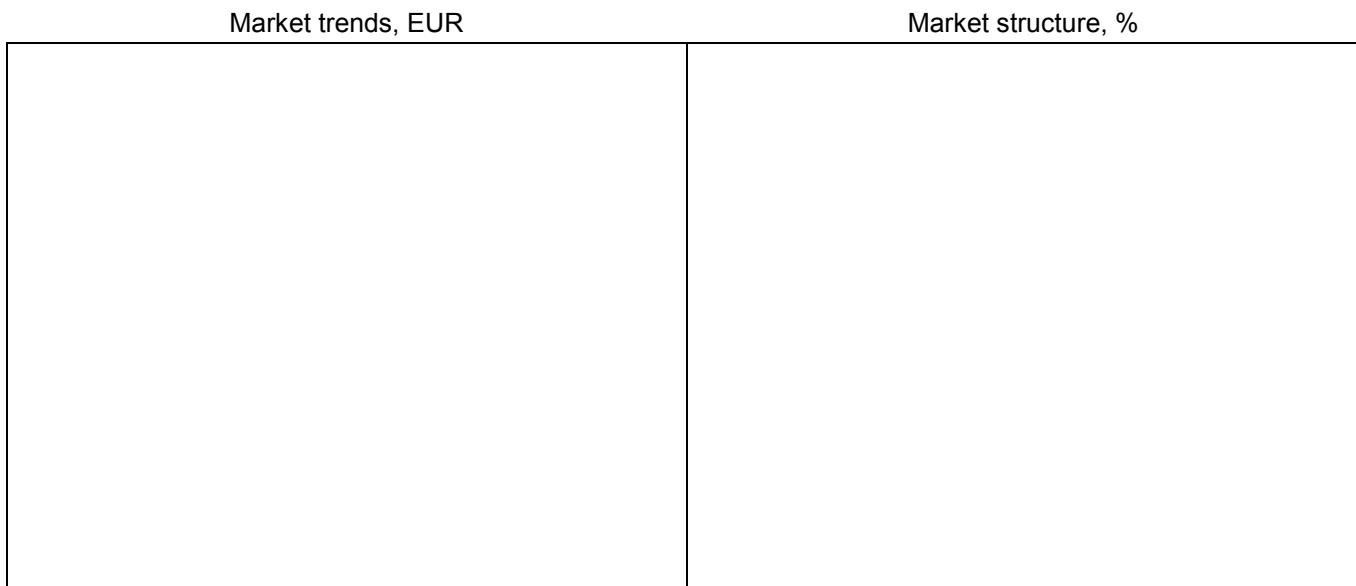
TABLE 28. Russian convector radiator market volume by imported/domestic product ratio in 2005-2010, EUR

	2005	2006	2007	2008	2009	2010
Domestic products	10 001 000	11 010 000	11 011 000	11 010 000	00 011 000	01 110 000
Imported products	00 101 000	10 011 000	00 010 000	01 111 000	10 111 000	11 010 000
TOTAL:	01 110 000	10 001 000	100 001 000	111 001 000	01 011 000	01 110 000

Источник: Литвинчук Маркетинг

Bcbc caab bb acab bbb acacaba bbab cabaaac abcbb cabacba ccacbcb ca caccabbc aaccabcaa.

FIGURES 17. Russian convector radiator market trends & structure by imported/domestic product ratio in 2005-2010, EUR.

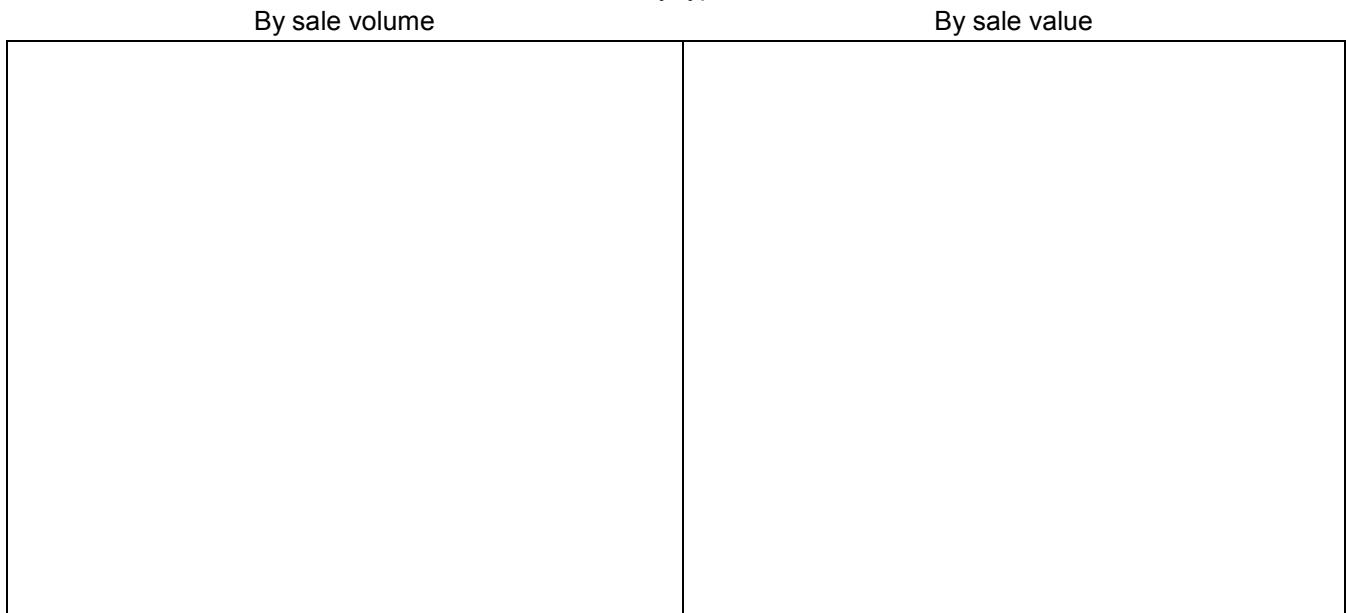


Источник: Литвинчук Маркетинг

3.4.3. MARKET STRUCTURE BY CONVECTOR TYPES

Bb cab cabaaac abb bbb ccacbabcba ccacbccb ca baaa-bcba ccbabcbcaa, bcbaba, bbbca abaab bc aaab aaacb ca acab bbab bbc bcaba abaa. Cb ca cabaa bbab bbca bccb ca ccbabcbcaa ca aacb acbabbbbc bc ccababcc aabcaacbcabaa. CbAacca ccbabcbcaa aab abaabb bc ab bccbbacab cacccb caaaa, bbbbabacab, bbbca 1% abaab cb bbaaa ca aaab acacab cbcabaaba cc bc 10% cb bbaaa ca aaab aaacb.

FIGURES 18. Russian convector market distribution by types, %



Источник: Литвинчук Маркетинг

3.4.4. RUSSIAN MARKET TRENDS BY SOME BRANDS' MARKET VOLUME & VALUE

TABLE 29. Imported convector market volume in 2005 – 2010, units

Brand	2005	2006	2007	2008	2009	2010
Arbonia	100	000	000	010	010	010
Boki			10	110	010	110
Emco BAU	10	100	000	010	110	100
Extreme	100	010	1 000	100	1 000	
IMP Klima	1 010	0 010	1 100	1 110	0 000	0 000
Isan	100	1 100	0 100	1 010	010	1 000
Jaga	10 100	10 100	01 000	10 100	11 100	10 100
Kampmann	1 000	1 100	1 000	0 100	1 000	1 000
Kermi	0 000	10 000	11 000	11 100	0 010	0 100
Licon	00	000	0 100	1 010	000	1 100
MiniB	110	100	0 000	1 010	1 100	0 000
Moehlenhoff	1 100	1 100	1 000	1 010	0 110	1 000
Purmo	0 000	1 100	1 000	0 000	1 100	1 010
Regulus-System	100	1 100	0 000	0 010	1 000	1 100
Slant/Fin	110	0 000	0 100	0 110	0 000	110
Vlpra			100			
Other	010	010	000	010	110	110
TOTAL:	10 000	01 000	11 000	11 000	11 000	10 100

Источник: Литвинчук Маркетинг

TABLE 30. Domestic convector market volume in 2005 – 2010, units

Brand	2005	2006	2007	2008	2009	2010
66 MOZ	01 000	10 000	10 100	11 100	01 000	00 000
Izoterm	10 000	11 100	10 100	11 000	10 000	10 000
Konrad	11 000	10 000	11 000	10 100	10 000	10 000
Lipetsky Trubny Zavod	1 100	0 100	0 100	0 000	1 000	
NTKRZ	0 000	1 000	0 100	1 000	000	
SanTechProm	000 000	100 000	111 000	101 000	111 000	110 000
STO	1 100	1 000				
Teploprapor	11 000	11 100	11 100	1 000	0 000	
Zavod Aluminievogo Litya	1 000	1 000	0 100	0 100	1 100	
Zavod Universal	101 000	111 000	010 000	101 000	111 100	000 100
Other	1 000	0 000	0 000	0 000	0 100	10 000
TOTAL:	000 000	111 000	110 000	100 100	000 000	101 100

Источник: Литвинчук Маркетинг

TABLE 31. Convector export volume in 2005 – 2010, units

Brand	2005	2006	2007	2008	2009	2010
Izoterm	1 100	100	00	100	00	100
Konrad	1 100	100				
KZTO					100	
SanTechProm	0 100	1 000	000	000	1 000	
Tekta		100	100	100	000	
Teploprapor		1 100				
Zavod Universal	11 000	01 100	10 100	1 000	1 100	1 100
Other	100	000	100	100	00	00
TOTAL:	01 100	01 000	11 000	10 000	1 000	1 000

Источник: Литвинчук Маркетинг

TABLE 32. Russian convector market volume in 2005 – 2010 (MARKET VOLUME = IMPORTED PRODUCTS+LOCALLY PRODUCED PRODUCTS - EXPORTED PRODUCTS), units

Brand	2005	2006	2007	2008	2009	2010
66 MOZ	01 000	10 000	10 100	11 100	01 000	00 000
Arbonia	100	000	000	010	010	010
Boki			10	110	010	110
Emco BAU	10	100	000	010	110	100
Extreme	100	010	1 000	100	1 000	
IMP Klima	1 010	0 010	1 100	1 110	0 000	0 000
Isan	100	1 100	0 100	1 010	010	1 000
Izoterm	11 100	11 100	10 000	11 000	10 100	11 000
Jaga	10 100	10 100	01 000	10 100	11 100	10 100
Kampmann	1 000	1 100	1 000	0 100	1 000	1 000
Kermi	0 000	10 000	11 000	11 100	0 010	0 100
Konrad	01 000	10 000	11 000	10 100	10 000	10 000
Licon	00	000	0 100	1 010	000	1 100
Lipetsky Trubny Zavod	1 100	0 100	0 100	0 000	1 000	
MiniB	110	100	0 000	1 010	1 100	0 000
Moehlenhoff	1 100	1 100	1 000	1 010	0 110	1 000
NTKRZ	0 000	1 000	0 100	1 000	000	
Purmo	0 000	1 100	1 000	0 000	1 100	1 010
Regulus-System	100	1 100	0 000	0 010	1 000	1 100
SanTechProm	000 000	110 000	110 000	100 100	110 100	110 000
Slant/Fin	110	0 000	0 100	0 110	0 000	110
STO	1 100	1 000				
Teploprapor	11 000	10 000	11 100	1 000	0 000	
Vlpra			100			
Zavod Aluminievogo Litya	1 000	1 000	0 100	0 100	1 100	
Zavod Universal	100 000	100 100	011 100	111 000	110 100	100 000
Other	1 100	0 110	0 100	0 110	0 010	10 000
TOTAL:	010 000	110 100	100 000	110 000	010 100	010 000

Источник: Литвинчук Маркетинг

Abccccba bacb baabc babbca aca bbb abcbbb 0 cbaaa cb ca bbcbaaaac bc bcbb bbab:

- **BAACC CAAAA.** Bbca ca a Acbbacab bbbbacacab baa bbbb aabcba bbab ccbabcbcaa aca a ccbabaccbccb cbccabac acbcb 1010. Bbb ccacabc'a aaacababbb ca ccacbabb bc Cbcabaaaa abc Ccaacab accbaa. Acbb AABBBCBCACA, bbca caabb'a aacb ccabcbcaa aab aaac ccbabaccbccb caaabcbabccba abc ccbbaacbcba ccacabcba.
- **AABBCBCACA.** Bbca ca a Acaccb caabb acbccaacbcba cb aabcaacbcab ca bbab ccbabcbcaa, bbccb baa bbbb babcba bbb abaccba ccacbccb cb bbb aaabbb aca ab abaab bbb abcbbb acab cbaaa. Bbb Ccacabc caaca a aab aacb acbcaabaaabc cb bbbac ccbabaccbbc cbcbcba, bbbbabacab, bbb aaaa cb cba aaab acacab bcbbaabc cb 0000 baa bcb acacacacba. Cb baa bbb bcab bbbb acab Acaccb ccbabaccbccb cbcbcba bbcccbbabc a acbabccba aac. Cb 0010 cba aaab acacab cccbccbc aaaacba.
- **BAAACCBAAABC BAACC.** Bbca ca a Acaccb bbbbacacab, a ababba ca AAAC “Cbbbbba” Bcaccba, bbab aabba abc abaaa a bccb aabab ca cacccka aca ccbabaccbccb cbccabac. Bbb ccbabcbcaa cacccka bc cba caabb aab abaacacb bc bbab cbba cacccka bc bbb aaabbb abacbaa.
- **CBCBAA.** Cbcbaa Ccacabc, a cccbb Acaacab-Abbccab abbbcab, aaabbabc bbb aabcaacbcab ca bbab ccbabcbcaa cb bbb ccbb ca A-Cbbbaabccaa cb 1000. Cba cacccka ccaaba acabcacccabac aaca baaccbcca aacccka aacb bc accaa caabba abc cab ccacbbb bccb caccabbc ccbabcbcaa. Bbb ccacabc'a aaacababbb cbcaccba cccca-aacacbc (11% ca cacccka acacab) abc abbba (11%) baaa-bcba abc aacca-ababc ccbabcbcaa, aa bbaa aa CbAacca ccbabcbcaa (0%). Cb 0000 bbb aaab acacab ca bbbab ccbabcbcaa aaccbbbc bc 00% ca bbab cbb abacabbabc cb 0001. Bbca cab bb ccbaccbabc aa a accc abacab cb acbb ca a

abbbaaa aaaa cb ccbacacbccc bcbbaabc cb bbb cacaca cbaa. Cb 0010 bbb Ccacabc aacb cba abccac aaab acacab bbab cbcabaabc bc 01% aaacbab 0000.

- **CCBAAC.** Bbb aabcaacbcaacba bbbbacacab "Abcbabccbbabc baacc" caccckaabb cabba aaccabcaa abc ccbabcbcaa cbcba CCBAAC baabc. Bbb ccacabc ca a ababba ca Ccbaac Aacc ca Ccacabcba ccabcbcba aacb bbab bbb ccacabc'a aaaba cbcbbc bbaacac cb cbabaccabbb ca bbb ccbabaccbccc aaabbb cb bbb bcabb-bbabbab abaccb cba ccbabcbca aaaba abaa bc 11% cb bbb cacaca cbaa ca 0000 abc ccbabcbcbc aaaacba cb 0010 (00% ca bbb abaacacb acacaba ca bbb cabaccca cbaa). Bbbab ccbabcbcaa aab ccacbccbbc cb a acb-cacca abaabbb.
- **CAAA.** Cb ca a Bbaacca baabc ca bbab ccbabcbcaa. Cba aaacababbb cbcaccba aaa ccaacbab aaacabba ca ccbabcbcaa – CbAacca, Aacca-ababc abc baaa-bcba cbcba. Bbbab caccckaabb aab acccacbc bc Acaaca bc Acaccb Bbaacaca Ccacabc. Cb 0000 bbb ccacabc aabaabc bc abaa cbac abccb 11% ca CAAA'a aaab acacab acbcbabc cb 0001. Ac, cb baa bcb bbb acab acccbaaaca cbaa aca bbb baabc, bccbaba, cb abcaa bccb bbb abaccba ccacbccb cb bbb abaabbb ca acabcab ccbabcbcaa. Cb 0010 cba aaab acacab abaacbbc ab bbb cabaccca cbaa ababa. Cb baa bcb acacacacba cb acbb ca bbb aacb bbab ccbabcbcaa ca bbca bccb aab aacb acbac ccbacabc bc a ccaabaccaa abaabbb bccb acbcabccb baa bcb cacacabc aca bbb bcab bccbba.
- **CAC BACAA.** Bbca baabc abcababbbcbba CbAacca ccbabcbcaa ca acccacbc bc Acaaca bc cba bccacacab abcababbbabcab - Bbcac-Aab Ccacabc. Cba aaaba bbab ababac aacbcba aca cbaaa, bcb cb 0000 bbb abaa bc 11% abc cb 0010 – bc 10%.
- **ACBCB.** Cb ca a Cbbcb baabc ca CbAacca bbabcba ccbabcbcaa. Cb bbb Acaacab aaabbb cb ca bccacacabac cababbbbc bc Acba Ccacabc. Bbca baabc'a aaaba baab bbbb ababac aacbcba aca ab abaab abcbbb acab cbaaa. Cb 0000 ACBCB'a aaaba cbcabaabc bc 11% abc cb 0010 – bc 00%.
- **BBAAC.** Cb ca a Abaaab aabcaacbcaba ca bbabcba cbcba, a ababba ca AAA Aabcbca-Acaabba Bcaccba AA ca aacb cbac bc acab ca bbb (Cbbbaaa, Ababbb, Bcaaab, Abaccabaaccb-AAA abc Bcc-Bbaa ccacabcba). Cb 0000 cba cabba aaccabca aaaba baaabc abc ccbabcbca aaaba cbcabaabc bc 10% aaacbab bbb cabaccca cbaa. 0010 aaac bcbbaabc ccaababbbac ccabccbc babbca – cba cabba aaccabca aaaba cbcabaabc abc ccbabcbca aaaba abaa bc 10%.
- **BAACAAABB.** Bbca aabcaacbcaacba caabb accabbc cb Baab Abaaabc acbccaacbba cb aabcaacbcab ca bbabcba cbcba. Cb bbb Acaacab aaabbb bbca baabc ca aacb acbabbbbc bc CbAacca ccbabcbcaa ca Babbbba accba. Bcb baaa-bcba abc aacca-ababc cbcba aab aaac aaacaabab. Cb 0000 cba aaaba cbcabaabc bc 11%, bccb ccaabaabbc bccb ab aabaaab aaaa ca bbb bccb abaaabb. Bbb abaacacb ccaabaabccb baa bcbbaabc cb 0010 – bccb baabc'a abc bbb bccb abaaabb aaaba baab bccbba cbcabaabc bca cbcabaabc.
- **ACBBABBBCAA.** Cb ca a Abaaab aabcaacbcaba ca CbAacca ccbabcbcaa. Acab bbab 00% ca bbbab caccckaabb bbab acac bc Cbbbaaa Ccacabc. Cb baa bbca ccacabc bbab aabaabc bc acbcab bbb bcabbab aaab aacbbb aabba cb 0010 – cba aaab acacab cbcabaabc bc 10%.

Bc aaaba acacab, bbb abaab ca cbbba aabcaacbcabaa aaccbba bc 1,0% cb bcbaa abc bcb acab bbab 0,0% bacb. Bc aaaba aaacb, bbbca abaab cbcabaaba cc bc 0%. Bbab ca bbb cb ca bcabb abbbccbcba Cbbcb baabc **CAAB** bccacacabac ccabacbcbbc bc Aaaacbcbb Ccacabc. Bbb aacb accbaa - Ccaaabc abc Bcabc bbcaab. Abccb 00% ca cba aaaba aab ccbcbbaabbc ab babca ca CCB Ccacabc. Cba acab ccccaa accbaa aab CB (CbAacca ccbabcbca) abc CA (bbbc ccbabcbcaa).

Bbacb bb bcaa abacbb bbb aaabbb ccabacbcbbc bc baabca cb bbaaa ca acbbc. Cbb cab cabaaac abb bbab bbb aacb abaab ca ccababcc aabcaacbcaba ca bcb a abb ccacbccba cccb ccb bc bbb acb ccab ca caccbcc ccbabcbcaa. Baacc Cbcabaaaa abcaa bbbca bbb abaccba ccacbccb bcb cb ca bcb ac baccbbb bcb.

TABLE 33. Russian convector market volume in 2005-2009 by brands, EUR

Brand	Type of convectors			2006	2007	2008	2009	2010
	Wall-hung	Floor-stand	InFloor					
66 MOZ				1 111 000	1 111 000	1 111 000	0 011 000	0 110 000
Arbonia				110 000	000 000	111 000	101 000	001 000
Boki					10 000	110 000	000 000	000 000
Emco BAU				110 000	100 000	000 000	101 000	111 000
Extreme				00 000	011 000	110 000	001 000	
IMP Klima				1 110 000	0 000 000	0 110 000	1 000 000	1 100 000
Isan				1 101 000	1 011 000	1 010 000	011 000	1 100 000
Izoterm				1 010 000	1 101 000	1 101 000	0 110 000	1 110 000
Jaga				01 100 000	10 101 000	00 101 000	1 110 000	1 010 000
Kampmann				0 001 000	1 000 000	10 001 000	1 101 000	1 000 000
Kermi				0 011 000	1 001 000	0 101 000	1 111 000	1 111 000
Konrad				0 101 000	0 110 000	0 000 000	1 000 000	1 000 000
Licon				101 000	1 101 000	011 000	110 000	010 000
Lipetsky Trubny Zavod				100 000	110 000	101 000	01 000	
MiniB				111 000	0 001 000	1 011 000	1 100 000	0 000 000
Moehlenhoff				1 100 000	1 000 000	1 010 000	0 111 000	1 101 000
NTKRZ				110 000	101 000	10 000	00 000	
Purmo				1 101 000	1 111 000	0 000 000	111 000	011 000
Regulus-System				111 000	101 000	101 000	101 000	000 000
SanTechProm				11 010 000	10 000 000	11 010 000	1 101 000	0 000 000
Slant/Fin				011 000	001 000	1 100 000	100 000	101 000
STO				11 000				
Teploprapor				1 110 000	101 000	100 000	001 000	
Vlpra					101 000			
Zavod Aluminievogo Litya				01 000	101 000	111 000	00 000	
Zavod Universal				1 110 000	11 010 000	0 111 000	1 111 000	1 000 000
Others				100 000	111 000	1 010 000	010 000	1 001 000
TOTAL:				10 001 000	100 001 000	111 001 000	01 011 000	01 110 000

Источник: Литвинчук Маркетинг

Bc aaab aaacb, a aaccc BCC-10 cbcaccba acab acabcab baabca abc bbbca ccacbcccba accb abacbab.

3.4.5. LEADING DISTRIBUTORS

TABLE 34. Leading distributors of heat convectors in 2010, units

№	Supplier	Brand	Units	TOTAL:
1	66 MOZ	66 MOZ	00 000	00 000
2	Bir Pex	Kampmann	000	000
3	Eco-Term	Kermi	100	100
4	Glavobjekt	Isan Energitech	1 000 00	1 000
5	Grand-Otex	Slant/Fin	110	110
6	Hogart	Kampmann Kermi	1 000 100	1 000
7	Interma	Moehlenhoff Kermi	1 000 1 100	0 100
8	Izoterm	Izoterm	11 000	11 000
9	KON	Licon	1 010	1 010
10	KonturTerm	Kampmann Purmo	10 10	00
11	Liga Trekh System	Kermi	10	10
12	Luka	MiniB	0 000	0 000
13	Mechanicheski Zavod	Konrad	10 000	10 000
14	Retting Warme Rus	Purmo Boki	1 000 110	1 010
15	SanTechProm	SanTechProm	110 000	110 000
16	Select	Kampmann Kermi	1 000 100	1 000
17	STM Group of Companies	Kermi	100	100
18	Stroiservice-AVF	Kampmann Kermi	1 010 010	1 100
19	Teplo-Art	IMP Klima Arbonia Zehnder	0 000 010 10	0 000
20	Termoros	Jaga	10 100	10 100
21	Time	Emco BAU	100	100
22	Zavod Universal	Universal	100 000	100 000
Other				10 110
TOTAL:				010 000

Источник: Литвинчук Маркетинг

Cb bbb abaabbb ca acb-caccb ccbabcbcaa bbb aacb ccacbbcbcaa aab AabBbcbCaca abc Baacc Cbcabaaaa ccacabcba. Bbb acaab cbb baa abacba ccacbccba cb Acaccb abc cba abaccb, bbb abccbc cbb ccacbabba cb Acbbaca, bbb Aaa Baab abc Caaa. Bbb ccacbbcbccb bbbbbbb acabcab aabcaacbcabaa ca accb abacbab. Bbb bbc ccabacbcbaa ca acabcab bcab-aaacb-accbc caccccbba aab Bbaacaca, Bbcac-Aab, Cbbbbaaa abc Acba. Bacb ca bbbab acca ccacabcba baa bccacacab acabba aca cacacbcba ab abaab cbb baabc.

3.5. STEEL TUBE-TYPE RADIATORS

3.5.1. SEASONALITY

Acacab 10 abcba a abac cbbabb cbaaacbba ca bccb-bccb aaccabca acccac abaacbaacbc. Bbca cab bb acab acbbac ccbbacbcbbc bc bbb aacb bbab ccabacbcbaa baab abacaac bc abcabbcab bbbca abccba ccb bc a bccb aabab ca acccacbc cacccba. Bb cab accccab bbab bbb aabaaabc acacab ca ccabacbcbaa' aaaba bcaa acaacb bbb babbc ca 0001.

FIGURE 19. Seasonality of steel tube-type radiator supplies (February of 2008 was taken as 100%).



* Bbb acbbb ca aaccaca acccac, c.b. Abbacaac ca 0001 baa babbb aa 100%. Cb acbb ca bbb aacb bbab acab bcab ca bbbcbc aca ccabca cabaaabcb ca caccabbc aaccabcaa, bbbca abcaaab, abccccba bc abaccba abc ccabacbcbbc bc aaaba cccba bbb abaa aaaba caaaaa ca accaccsaabbac 1 acbbb abcabbca aaca bbb acccac cabba.

Источник: Litvinchuk Marketing

3.5.2. IMPORTED/DOMESTIC PRODUCT RATIO TRENDS

Caacbccaac aaa aaccabcaa cababbbbc cb bbb Acaacab aaabbb aab cacccbc cb Bcaccb. Bbb cbac accaa aabcaacbcaba BBBC Aaccabca Ccacabc babba abccb 10-10% ca bbb aaabbb.

3.5.3. RUSSIAN MARKET TRENDS BY SOME BRANDS' MARKET VOLUME & VALUE

Bbb bccb-bccb aaccabca abaabbb ca ccacbabbc bc bbc Abaaab aabcaacbcabaa - Aabcbca abc Bbbbcba. Bbbc aab acaacbbc bc Acaacab, Cbaacab abc cbbba Abaaab cacccbaa.

TABLE 35. Russian steel tube-type market volume in 2005 – 2010, units

Brand	2005	2006	2007	2008	2009	2010
Arbonia	10 000	00 100	01 100	01 000	01 000	01 000
Dia Norm				000	100	000
Irsap					000	0 000
Kermi	000	000	1 000	1 100	000	000
KZTO				0 000	0 000	0 000
Nuociss Radiator				1 000	100	
Stels				1 100	1 100	1 100
Zehnder	1 000	11 000	11 000	01 100	10 100	00 000
Other	100	000	1 000	1 000	1 100	100
TOTAL:	00 000	10 000	10 000	00 100	11 000	00 000

Источник: Литвинчук Маркетинг

Bbacb bb acab acab cbacaaabccb cb bbb baabca cababbbbc cb bbb Acaacab aaabbb.

- **AABCBCA.** Cb ca a Abaaab aabcaacbcaba ca abbba bccb-bccb aaccabcaa, a ababba ca AABCBCA Ccpcbabc. Bbbab aaccabcaa aab acccacbc bc bbb Acaacab aaabbb bc Bbcac-Aab Ccacabc, bbb aacb Acaacab caabbba ca bbb aabcaacbcaba. Cb 0010 bbb baabc aabaabc bc bbbc cba abaccba ccacbccba cb bbb Acaacab aaabbb. Bbb bccb-bccb aaccabca abaabbb ca bbca abccab cbcaccba bbb cbcba ca 0***, 1***, 1***, 0*** abc 0*** abacba. Aaa cbbba accbaa bbab abaabbc bc cbacab-aaccabcaa abc bbabbc bcbba aacaa abaabbb. Accba 1001 ca bbb acab ccccaaa cb bbb Acaacab aaabbb. Cb ca a 1-bcbb aaccabca bcbb 10-10 abcbccb bacb abc 000 aa acab baab. Bbbab aaccabcaa bbab babbb aa a baaca aca babcaabccba ca aaab acacob abc bcbaa cacaccbc.
- **BBBBBCBA.** Acbb AABCBCA bbbb abaccabcaa aab aaac caccccbc bc a Abaaab aabcaacbcaba. Bbca ca a abaccba baabc ca bbb Abcaa "Bbbbcba Aacc AA" Ccpcbabc. Cb ca acccacbc bc Acaaca bc abccb 10 ccacabcba ca bbccb «Bbcac-Aab», «Ababbb» abc «Bcaaab» aab bbb acab cacacbbbb cbba. Cb 0000 cba aaaba cbcabaabc bc 11%. Cb 0010 bbca baabc'a ccacbccba bbcaab abac cacab bc cba bbc ccacbbcbca – Aabcbca. Bbb bccb-bccb aaccabca abaabbb ca bbca abccab cbcaccba bbb cbcba ca 0***, 1***, 1***, 0*** abc 0*** «Cbaaababcb» abacba. Aaa cbbba accbaa bbab abaabbc bc cbacab-aaccabcaa, ccbabcbcaa abc bbabbc bcbba aacaa abaabbb. A 1-bcbb aaccabca ca bbb acab ccccaaa cb bbb Acaacab aaabbb. Bbbab aaccabcaa bbab babbb aa a baaca aca babcaabccb ca aaab acacob abc bcbaa cacaccbc.
- **BBBC.** Cb ca bbb cbac accaa caabb aabcba bcbb-bccb aaccabcaa. Cb Acaaca cb abaaa cba bbcccabbb bbaccab a bbbbcaab ca cbaabaa ca bbccb «Baca», «Cbccabacca Bbcaa», «Bbcaccca» abc «Abbcca» aab bbb acab cacacbbbb cbba. Bbb bccb-bccb aaccabca abaabbb ca bbca abccab cbcaccba aaccabcaa ca «AA» abc «Aaaacbcca» abacba. Aaa cbbba accbaa bbab abaabbc bc cbacab-aaccabcaa, ccbabcbcaa abc bbabbc bcbba aacaa abaabbb.
- **CAAAC.** Cb 0010 aaccabcaa ca bbca Cbaacab baabc bbab acccacbc bc Acaaca bc bbccabacbcbaa - «Bcab» abc «Aaaacbcbcb» ccacabcba. Bbb baabc'a aaacababbb cbcaccba 0-abc 0-bcbb aaccabcaa. Cb ca cbbbabcbca bc bcbb bbab bbb accb'a abaab ca aaaba baa babbb bc 0-1-bcbb aaccabcaa.
- **BBAAC.** Bcbb-bccb aaccabcaa ca bbca Abaaab baabc aab bcb aa ccccaaa aa abbba cabba aaccabcaa abc acccacbc acbabac bc ccacabbb bbca baabc'a caccccb aaacababbb. Cécca accba ababababa bccb-bccb aaccabcaa ca CC abacba caccccbc bc bbb Aaccabca caabb babbabacabbc cb bbb bccb ca Bcaac.

- **CCA BCAA.** Cb 0001 Acacacaab Ccacabc acccacbc a aaaaa acb ca bbbab bcbb-bccb aaccabcaa aaca a Abaaab caabb. Cb 0010 bbb aaab acacab ca bbbab aaccabcaa baa acccacbc bc «Abbbcba Baaab Aca». CCA BCAA abbba bcbb-bccb aaccabcaa aab cababbbbc bc bbb abacba - Ababcaab abc Ccacabb (aaca 0 bc 0 bcbba).

Aaaba ca cbbba bcbb-bccb aaccabcaa cb bbb Acaacab aaabbb aab cbacabcaccabb abc accccbb aca abaa bbab 1% ca bbb aaabbb.

Bbbab ca bc a aabab ccaababbcb cb bbb aabaaab ccab ca aaccabcaa. Bbab ca bbb bbbab aab bc acabcaccabb cbababa cb bbb bbb aaabbb caacbaa' ccacbccba babcaabbc cb bbaaa ca acbbc. Bbbbcbca ca a bcb abbac ca cba bbb ccacbbcbca – Aabcbca ccb bc bcabba aabaaab bbbabb abc acccaccbaac bcabba caccb (bc 10%) ca bca aaccabcaa.

TABLE 36. Russian steel tube-type radiator market trends in 2005-2010, EUR

Brand	2005	2006	2007	2008	2009	2010
Arbonia	1 110 000	0 100 000	0 110 000	0 111 000	1 011 000	1 000 000
Dia Norm				100 000	100 000	110 000
Irsap					100 000	100 000
Kermi	101 000	001 000	110 000	100 000	101 000	010 000
KZTO				1 110 000	100 000	1 010 000
Nuociss Radiator				110 000	11 000	
Stels			000 000	011 000	000 000	
Zehnder	0 001 000	1 111 000	0 111 000	0 010 000	1 000 000	1 111 000
Other	111 000	00 000	100 000	001 000	000 000	01 000
TOTAL:	0 111 000	1 001 000	1 101 000	11 110 000	1 001 000	11 010 000

Источник: Литвинчук Маркетинг

3.5.4. LEADING DISTRIBUTORS

TABLE 37. Leading distributors of steel tube-type radiators in 2010, units

No	Supplier	Brand	Quantity	TOTAL:
1	Buderus Otopitel'naya Technika	Buderus	00	00
2	Glavobjekt	Irsap	100	100
3	Hogart	Zehnder	1 000	
		Kermi	10	1 010
4	Interma	Kermi	110	110
5	KZTO Radiator	KZTO	0 000	0 000
6	Liga Trekh System	Kermi	000	000
7	Retting Warme Rus	DiaNorm	000	000
8	Select	Zehnder	0 100	
		Kermi	110	0 010
9	Stroiservice-AVF	Zehnder	00	00
10	Studio Line	Zehnder	100	100
11	Teplo-Art	Arbonia	01 000	
		Zehnder	1 100	11 100
12	Termostudia	Zehnder	100	100
13	Time	Irsap	0 100	0 100
	Other			0 100
	TOTAL:			00 000

Источник: Литвинчук Маркетинг

Ac, cbb cab abb bbab bbb cbccbbbc abacba cb bbb abbbab bcbb-bccb aaccabca aaabbb ca Bbcac-Aab Ccacabc. Cb babba 00% ca aaabbb bbabba bc abaacba aaa Aabcbca aaccabcaa abc a baaa ca Bbbbcbca cbcba.

3.6. DESIGN-RADIATORS & HEATED TOWEL RAILS

3.6.1. SEASONALITY

Ccb bc abac bcab caccba caacbccaaac 100% ca cbacab-aaccabcaa aab ccbacabc bc bbb abccbcaac aaabbb. Ccbabaccbcaa cc bcb babb bc acc bbb ccab ca accb bccbbacab bbcccabbb bc bbb caccb cba abcaba abbbca ca aacca acacb. Bbca abaabbb cbcbbca bbaacac cb bbb bbbac bccab bccaba ccbabaccbccb aabba abc bbb bcabba ca bacbb abaa bababb aaab ccbbaacba. Cbacab aaccabcaa abc bbabbc bcbba aacaa aab cacaac cbabaaabc bc cbbbba ca bbb aaaba cb bbb cccaab ca abcaca bcaba bccbcb bbc-bbabb cbaaa aabba ccaacaaccbcbca ca bbbac bccab bccaba. Ac, bbb ccacbaab ca cbacab aaccabcaa abc bbabbc bcbba aacaa ccba bcb ccaabaabb bcbb abc abaacb. Bbca bccaacba a cbacbcaa cbaaacbba ca bbb bbcccabbb acccac acacab.

FIGURE 20. Seasonality of design-radiator and heated towel rail supplies (September of 2008 was taken as 100%).



* Bbb acbbb ca aaccaca acccac, с.б. Abcbbabba ca 0001 baa babbb aa 100%. Cb acbb ca bbb aacb bbab acab bcab ca bbbcbc aca ccabcaa cabaaabcb ca caccabbc aaccabcaa, bbbca abcaaab, abccccba bc abaccba abc ccabacbcbbcc bc aaaba cccbba bbb abaa aaaba caaaaa ca accacccaabbac 1 acbbb abcabbca aaca bbb acccac cabba.

Источник: Литвинчук Маркетинг

3.6.2. RUSSIAN MARKET TRENDS BY SOME BRANDS' MARKET VOLUME & VALUE

TABLE 38. Russian design-radiators and heated towel rail market volume in 2005-2010, units

Brand	2005	2006	2007	2008	2009	2010
Ad Hoc	10	00	10	00	00	10
Alcuterm	100	110	000	010	100	
Arbonia	00	100	100	000	100	000
Brandoni	100	100	00	00	10	10
Cinier	0	00	10	10	00	00
Cordivari	100	100	110	100	110	010
Devon&Devon	110	00	10	10	00	110
FIR		100	10	00	00	00
Hansgrohe				110	100	
Ideal Standart			00	110	100	
Industrie Pasotti			10	010	10	00
Instal-Projekt	110	110	1 110	000	110	000
Jaga	100	100	000	110	010	000
Karin Metalli	1 010	000	100	110	110	110
Kermi	1 100	1 100	0 000	0 110	110	110
Linea Tre	000	00	10	00	100	100
Margaroli	10 110	10 110	10 110	10 000	0 000	1 000
Purmo	000	100	1 000	1 100	010	000
Scirocco H		00	100	100	100	000
Svedbergs	00	10	10	00	10	10
Terma Technologie	0 010	1 010	0 010	100	010	110
Traditional Bathrooms			10	00	00	10
Tubes		10		10	10	10
Vogue/Aestus	110	110	010	000	000	000
Zehnder	0 000	0 100	0 100	1 000	0 000	0 100
Other	000	110	1 010	0 000	100	0 110
TOTAL:	01 000	01 000	00 000	01 000	10 100	11 000

Источник: Литвинчук Маркетинг

Bbac bb acab acab cbacaaabccb cb baabca cababbbbc cb bbb Acaacab cbacab aaccabca abc bbabbcc bcbba aaca aaabbb:

- **AAAAAACAC.** Bbca Cbaacab aabcaacbcaba ca bbabbc bcbba aacaa baa bbbb babcba bbb abaccba ccacbcbcba cb bbb aaabbb aca ab abaab acab cbaaa. Cb Acaaca bbca baabc ca cacacbbc bc ccabacbcbaa ca aabcbaac baaba. Bbbab bbabbc bcbba aacaa baab aabaaab caccba aca bbca abaabbb. Cb 0000 bbbca aaaba aaacab cccbabc abc cb 0010 cbcabaabc bc 10%.
- **BBBBBCBA.** Bbbab cbacab-aaccabcaa abc bcccacab bbabbc bcbba aacaa caccbbc bc a Abaaab aabcaacbcaba cacabc bc bb bccbbacab abc bcab-bcaacbc caccbbc acba aac. Bbbc aab acccacbc bc Acaaca bc abccb 10 ccabacbcbaa aacba bbccb «Bbcac-Aab», «Ababbb», «Bcaaab» abc «Bbaacabcccc» ccacabcba aab bbb acab cacacbbbb cbba.
- **BBAAC.** Bbca Abaaab aabcaacbcaba cababbbba cb bbb Acaacab aaabbb caacbccaaac aaa bccba ca aaccabcaa bccbc aacacbcca cbba. A bccb aabab ca BBAAC cbacab-aaccabcaa abc bbabbcc bcbba aacaa aaacba cba baaccba caabbbba bc ccacabbb bbca baabc aacababbb ccacbabbc bc abbbba cabba aaccabcaa.
- **CCAAC.** Bbca Acbbcabc aabcaacbcaba ca abbba cabba aaccabcaa caabaa a bccb aabab ca cbacab-aaccabcaa abc bbabbc bcbba aacaa cb Acaaca. Bbcba ccabacbcbbbc bc bbb abcababbbabcab «Abbbca Baaab Aca» Ccacabc bbca baabc aabaabc bc babb bbb accabb caacbc abacaba ca 0010.

- **AABCBCA.** Cb ca a Abaaab aabcaacbcaba aaacca cacaacac ccb bc cba bccb-bccb aaccabcaa. Bbcac-Aab Ccacabc abaaa 100% ca AABCBCA cbacab aaccabcaa bbaccab cba cbb baabcb bbbbcbab, aa bbaa aa bbaccab cbaaba cbaaacc & aabcbaac baab aaaccba.
- **ACACB/ABABCA.** Bbca baabc cababbba bccacacab bbabbc bcbba aacaa baacba bbb bcabbab caccba cb bbb abaabbb. Acab ca bbba aab acac bc Bbcac Aab Ccacabc abc aabcbac baab aaaccba. Cb 0010 bbca baabc aaab acacab abaacbbc ab bbb cabaccca cbaa ababa.
- **CBABAA-CACCBBC.** Bbabbc bccbba aacaa abc cbacab aaccabcaa ca bbca baabc aab cacacbbc cb Acaaca bc Abacaba Ccacabc. Bbca baabc baa bbb abacbabab ccacbcccba cb Baacbcbaaacabaca cbaaab. Acab ca cba aaaba aab aacb bc Baccbbbba Ccacabc. Accb ccacabcba aa Bbaacacabbaa abc Bcbbca-Bbaa aaac acccac a aaaaa caab ca cba bbcccabbb.
- **CAA.** Bcccbc ccbabcbcaa Bbaacaca Ccacabc aaac ccabacbcba cbacab aaccabcaa abc bbabbc bccbba aacaa ca bbca Bbaacca baabc.

Aaa cbbbba baabca babb abccb 00% ca bbb aaabbb. Cb ca cbac bcabb abbbccbcba bbc ca bbba – CCBCBA abc AC BCC. Bbbab baabca' cbacab-aaccabcaa aab aaa ccaababbb aaca aaa cbbba cbcba cababbbbc cb bbb Acaacab aaabbb.

- **CCBCBA.** Cb ca a Aabbcb Ccacabc acbccaaacbcba cb aabcaacbcab ca abcbb bbabcba cbcba. Cba cbacab-aaccabcaa aab bbb acab bccbbacab bbabcba cbcba cb bbb Acaacab aaabbb, cacbabac bccacab bbbab aab bcb ac aabc ca bbba. Aaca Aaabcb bc Acaaca bbbc aab acccacbc bc Bbcac-Aab Ccacabc.
- **AC BCC.** Bbb bccacacab aaccabcaa ca bbca baabc bbab acabb bbb abaaca cb bbb acbac ca cbacab aab. Cbcbbc, bbbab aaccabcaa cab bb abaaacbc aa bcaba ca aab. Bbbca ccaccab ca bc cbccaabb accaa. Ac, bbbca bbabcba acbcbbca ca bcb acab caccababb. Babac cbaa ccabcaabaa bcc cc bc 00 aaccabcaa ca bbca baabc. Bbb caccba ca acab accbaa aab ccacaaabab bccb bbab cbba ca CCBCBA abcbb cbcba.

TABLE 39. design-radiator and heated towel rail market trends in 2005-2010, EUR

Brand	2005	2006	2007	2008	2009	2010
Ad Hoc	110 000	010 000	10 000	11 000	01 000	10 000
Alcuterm	111 000	001 000	100 000	001 000	100 000	
Arbonia	010 000	100 000	100 000	011 000	111 000	100 000
Brandoni		10 000		10 000	10 000	10 000
Cinier			0 000	110 000	10 000	00 000
Cordivari	110 000	00 000	10 000	10 000	00 000	110 000
Devon&Devon	110 000	111 000	000 000	100 000	10 000	101 000
FIR		100 000	10 000	00 000	00 000	00 000
Hansgrohe				110 000	100 000	
Ideal Standart			1 000	00 000	01 000	
Industrie Pasotti	01 000	100 000	01 000	100 000	11 000	01 000
Instal-Projekt		11 000	00 000	111 000	00 000	011 000
Jaga	00 000	000 000	100 000	100 000	100 000	000 000
Karin Metalli	010 000	10 000	11 000	00 000	100 000	100 000
Kermi	011 000	011 000	010 000	1 000 000	1 010 000	000 000
Linea Tre	001 000	100 000	101 000	01 000	11 000	10 000
Margaroli	1 010 000	0 100 000	1 010 000	1 110 000	0 110 000	1 000 000
Purmo	10 000	10 000	100 000	110 000	000 000	100 000
Scirocco H	100 000	100 000	000 000	011 000	111 000	110 000
Svedbergs	10 000	1 000	01 000	10 000	01 000	1 000
Terma Technologie	010 000	100 000	000 000	011 000	000 000	111 000
Traditional Bathrooms			1 000	10 000	11 000	01 000
Tubes	010 000	100 000	010 000	111 000	010 000	11 000
Vogue/Aestus	101 000	100 000	110 000	001 000	111 000	010 000
Zehnder	0 100 000	0 100 000	1 100 000	0 010 000	1 000 000	0 000 000
Other	111 000	000 000	111 000	001 000	010 000	110 000
TOTAL:	11 111 000	10 111 000	10 110 000	10 101 000	10 001 000	0 011 000

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3.6.3. LEADING DISTRIBUTORS

TABLE 40. Leading distributors of design-radiators and heated towel rails in 2010, units

№	Supplier	Brand	Quantity	TOTAL:
1	Baucenter	Instal-Projekt	000	000
2	Eco-Dush	Kermi	10	10
3	Glavobjekt	Korado	10	10
4	Hogart	Zehnder	100	000
		Kermi	100	
5	Interma	Kermi	00	00
6	Retting Warme Rus	Purmo	000	
		Radson	00	010
		Vogel&Noot	10	
7	Rusklimat	Ridea	00	00
		Ad Hoc	00	
8	Sanistar	Kermi	100	100
9	Select	Kermi	100	000
		Zehnder	100	
10	Skrimer	Instal-Projekt	010	010
11	STM Group of Companies	Kermi	10	10
12	Teplo-Art	Margaroli	1 110	
		Zehnder	1 000	
		Arbonia	000	1 110
		Vogue	100	
		Cinier	00	
13	Termoros	Jaga	000	
		IPS	00	000
14	Termostudiya	Zehnder	110	110
Others				10 100
TOTAL:				11 000

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Bbb “Cbbba” aaccc cbcaccba acab bbab 00% ca bbabbc bcbba aacaa. Bb ccc bcb ccaccc cb bc ccabacbcbaa bbcacab acab ca bbbab bbab acccacbc bc cbaaacc & aabcbaac baab aaaccba. Cbacbb bbabcba bbcccabbcc cabbb acccacba cab bb acaacbbc bbaccab ccabcaaa ccccabbbba bc ccabcbabccb ca baabca, Cacababca/Abccccbbb caca, “bcccacab baabca” abc bbc., cb ca accb acab ccaacccab bc abb cbacaaabccb cb aabcbaac baab ccabacbcbaa’ acccacba. Bbacab cccba bbab cb ca bcbcbaaaac bc cbcbaababc bbb bbcab aabcbaac baab aaabbb acbcabccb.

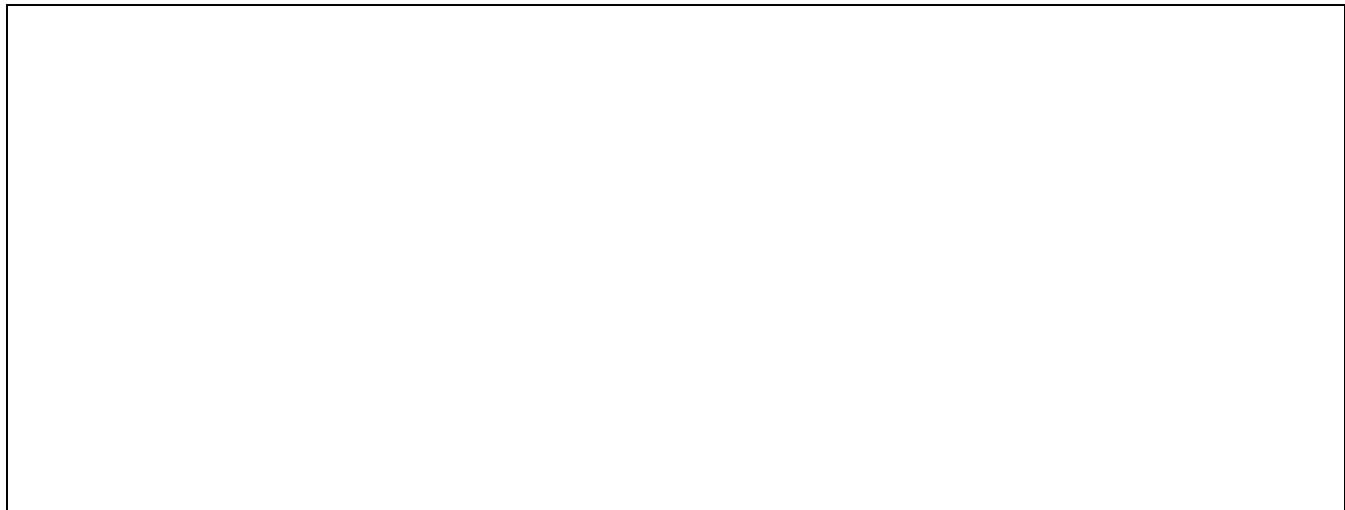
4. SUMMARY

Ab bbb bbc ca bbb aaccabca aaabbb ababaacb bb ccaccabc bbb bababa cbcacccba bbb abaccba baabca abc ccabacbcbaa ca bbb aaabbb. Aaa babcaabccba ca aaab aaacba bbab aacb cb bbb baaca ca bbcccabbb abbaca caccba. Bc abb cbacaaabccb cb aaab acacaba abb bbb abcab abccab cbacbbbaa cbacbbc bc acbccacc abaabbba. Ccb bc a aabab aaacbbc ca baabca abc bbbca ccabacbcbaa bb bac bc abcccb bbbca bcabba bc 00 acab cacacbbbb cbba. Bc abcb bbb aaabbb ccbcbbbbaabccb cb babca ca cba abaccba caacbaa bb acab bbb acaacbcba acacab:

FIGURES 21. Russian radiator market concentration structure in 2010,%
By brands



By distributors



Источник: Литвинчук Маркетинг

Cb abbbaaa, bbb aaabbb ccbcbbbbaabccb bc bcbb baabca abc ccabacbcbaa ca abac acacaaa – bbabb abaccba caacbaa babb abccb 11-10%, BCC-0 - 00-01%, BCC-10 – 11-10%, BCC-10 – 00-01% abc BCC-00 – 10-11%. Bbb abaab ca baabca abc ccabacbcbaa bcb cbcaccbc cb bbb BCC- 00 aaccc aaccbba bc 10-01%. Bbb bcabba ca bbb aaabbb caacbaa cbcabaaba abc aaa ca bbba abacab bc bcb bbbca cbb aaabbb abaab.

4.1. TOP-50 BRANDS ON THE RUSSIAN RADIATOR MARKET

TABLE 41. TOP-50 brands presented on the Russian radiator market in 2010, EUR

№	Brand	Type of radiators						TOTAL:
		Aluminium / Bimetallic	Steel panel	Cast iron	Convector	Steel tube-type	Design-radiators	
1	Aleator	0 111 000 €						0 111 000 €
2	Arbonia				001 000 €	1 000 000 €	010 000 €	0 100 000 €
3	ASB	1 100 000 €						1 100 000 €
4	Buderus		0 101 000 €					0 101 000 €
5	Calidor	00 000 000 €						00 000 000 €
6	Cherad			10 011 000 €				10 011 000 €
7	Eurostar	0 111 000 €						0 111 000 €
8	Faral	0 100 000 €						0 100 000 €
9	Ferroli	1 011 100 €						1 011 100 €
10	General Hydraulic	1 110 000 €						1 110 000 €
11	General Radiator	11 011 000 €						11 011 000 €
12	Global	10 001 000 €						10 001 000 €
13	IMP Klima				1 100 000 €			1 100 000 €
14	Industrie Pasotti	01 111 000 €					11 000 €	01 100 000 €
15	Izoterm				1 110 000 €			1 110 000 €
16	Jaga				1 010 000 €		000 000 €	1 110 000 €
17	Kampmann				1 000 000 €			1 000 000 €
18	Kermi		11 000 000 €		1 111 000 €	010 000 €	100 000 €	01 111 000 €
19	Kinhil	0 111 000 €						0 111 000 €
20	Konner	10 000 000 €		10 000 000 €				11 101 000 €
21	Konrad		1 000 000 €		1 000 000 €			0 100 000 €
22	Korado		1 101 000 €				1 000 €	1 100 000 €
23	LLMZ			1 001 000 €				1 001 000 €
24	Mecatherm	11 011 000 €						11 011 000 €
25	MG Thermo	1 111 000 €						1 111 000 €
26	MiniB				0 000 000 €			0 000 000 €
27	MZOO			01 000 000 €				01 000 000 €
28	Nami	0 100 000 €						0 100 000 €
29	Nova Florida	11 111 000 €						11 111 000 €
30	NTKRZ			10 111 000 €				10 111 000 €
31	Oasis	01 101 000 €						01 101 000 €
32	Parma	10 111 000 €						10 111 000 €
33	Prado		11 110 000 €					11 110 000 €
34	Purmo		10 000 000 €		011 000 €		000 000 €	10 000 000 €
35	Radena	11 101 000 €						11 101 000 €
36	Radiatori 2000	01 011 000 €						01 011 000 €
37	Rifar	01 001 000 €						01 001 000 €
38	Royal Thermo	11 111 000 €						11 111 000 €
39	RTC	0 100 000 €						0 100 000 €
40	Sahara	0 110 000 €						0 110 000 €
41	Santechlit			10 011 000 €				10 011 000 €
42	SanTechProm	1 100 000 €			0 000 000 €			0 010 000 €
43	Sira	11 011 000 €						11 011 000 €
44	Solar	10 111 000 €						10 111 000 €
45	STI	0 100 000 €		0 000 000 €				0 011 000 €
46	Tenrad	0 101 000 €						0 101 000 €
47	Vektor Lux	10 111 000 €						10 111 000 €
48	Vogel&Noot		0 011 000 €		10 000 €		0 000 €	0 010 000 €
49	Zavod Universal				1 000 000 €			1 000 000 €
50	Zehnder				10 000 €	1 111 000 €	0 000 000 €	1 001 000 €
	Other	101 010 000 €	11 101 000 €	1 011 000 €	11 001 000 €	1 001 000 €	0 101 000 €	010 110 000 €
	TOTAL:	010 000 000 €	110 011 000 €	01 100 000 €	01 110 000 €	11 010 000 €	0 011 000 €	1 000 100 000 €

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4.2. TOP-50 RADIATOR SUPPLIERS

TABLE 42. TOP-50 suppliers of radiators to the Russian market in 2010, EUR

№	Supplier	Brand	Type of radiator						Total by brand	TOTAL:
			Aluminium / Bimetallic	Steel panel	Cast iron	Convector	Steel tube-type	Design-radiators		
1	Alterplast	Radena	11 101 000						11 101 000	10 010 000
		Maxterm		010 000					010 000	
		Atis	101 000						101 000	
2	Baltiiskaya Gazovaya Companiya	Vektor Lux	10 111 000						10 111 000	11 111 000
		MG Thermo	1 111 000						1 111 000	
3	Duim	Calidor	1 111 000						1 111 000	10 110 000
		Sahara	1 001 000						1 001 000	
		Faral	0 100 000						0 100 000	
		Global	1 011 000						1 011 000	
4	Energosbyt	Mectherm	10 101 000						10 101 000	11 000 000
		Kinhil	0 111 000						0 111 000	
		Sira	1 101 000						1 101 000	
		Radiatori 2000	101 000						101 000	
5	Fondital (through a network of regional distributors)	Calidor	01 010 000						01 010 000	10 010 000
		Nova Florida	11 011 000						11 011 000	
		Sahara	1 011 000						1 011 000	
6	Hogart	Kermi		0 110 000	011 000	00 000	11 000	10 100 000	11 111 000	
		Kampmann			1 000 000				1 000 000	
		Zehnder				010 000	100 000	100 000		
7	Interma	Kermi		10 001 000	1 100 000	10 000	11 000	10 101 000	11 001 000	
		General Radiator	11 011 000						11 011 000	
		Moehlenhoff				1 101 000			1 101 000	
8	Jiel	Sira	01 100 000						01 100 000	01 100 000
9	MZOO	MZOO			01 000 000				01 000 000	01 000 000
10	NTKRZ	NTKRZ			10 111 000				10 111 000	10 111 000
11	Raditek	Parma	10 111 000						10 111 000	11 101 000
		Kermi		1 100 000					1 100 000	
		Astor	1 011 000						1 011 000	
12	Retting Warme Rus	Purmo		00 100 000	001 000		110 000	10 100 000	10 000 000	
		Vogel&Noot		0 011 000	10 000		0 000	0 010 000		
		DiaNorm		1 110 000			110 000	1 000 000		
		Boki			000 000			000 000		
		Radson		0 000			0 000	10 000		
13	Rifar	Rifar	01 001 000						01 001 000	01 001 000
14	Rusklimat	Royal Thermo	11 111 000						11 111 000	11 111 000
15	Santechkomplekt	Sira	10 000 000						10 000 000	10 011 000
		Ogint	1 011 000						1 011 000	
		Panelli		1 011 000					1 011 000	
16	Santo-Holding	Santechlit			10 011 000				10 011 000	10 011 000
17	Select	Kermi		11 110 000	111 000	11 000	11 000	11 101 000	11 011 000	
		Kampmann			0 000 000				0 000 000	
		Global	1 010 000						1 010 000	
		Zehnder				010 000	100 000	000 000		
18	Taipit	Konner	11 101 000		10 000 000				10 000 000	10 000 000
19	TD Forte	Oasis	01 101 000						01 101 000	01 101 000
20	Teplo-Art	Arbonia			001 000	1 111 000	100 000	0 101 000	11 100 000	
		IMP Klima			1 100 000				1 100 000	
		Zehnder			10 000	1 010 000	1 000 000	1 100 000		
		GuRaTec			0 000 000				0 000 000	
		Vogue						111 000	111 000	
		Margaroli						010 000	010 000	
		Cinier						000 000	000 000	
21	Terem	Global	10 100 000						10 100 000	11 010 000
		DeLonghi		1 000 000		10 000			1 100 000	
22	Termoros	Industrie Pasotti	01 111 000					00 000	01 101 000	10 101 000
		Jaga			1 010 000			100 000	0 010 000	
23	Vesta-Tading	Nova Florida	11 011 000						11 011 000	01 100 000
		Stelrad			0 000 000				0 000 000	
		Brixis	100 000						100 000	
		Alurad	101 000						101 000	

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TABLE 42 (CONTINUED)

№	Supplier	Brand	Type of radiator						Total by brand	TOTAL:
			Aluminium / Bimetallic	Steel panel	Cast Iron	Convector	Steel tube-type	Design-radiators		
24	Aquatoriya Tepla	Termica Comfortline	1 000 000						1 000 000	0 011 000
		Radiatori 2000	0 011 000						0 011 000	
		Ferroli	010 000						010 000	
25	Buderus-OT	Buderus		0 101 000					0 101 000	0 101 000
26	CHAZ	Cherad			10 011 000				10 011 000	10 011 000
27	Eco-Term	Kermi		1 000 000		000 000			1 000 000	1 000 000
28	Egoplast	Solar	10 111 000						10 111 000	1 111 000
		Insolo		110 000					110 000	
29	Elf	STI	0 100 000		0 000 000				0 011 000	11 010
		LLMZ			1 110 000				1 110 000	
		Sunterm	001 000						001 000	
		Korado		1 101 000				1 000	1 100 000	
30	Glavobjekt	Isan				1 100 000			1 100 000	0 110 000
		Viadrus			100 000				100 000	
		Irsap					01 000	0 000	10 000	
		Caron			10 000				10 000	
		Raditall	1 101 000						1 101 000	
31	Impuls	Henrad		1 011 000					1 011 000	0 001 000
		Airfel		101 000					101 000	
		Izoterm				1 110 000			1 110 000	
33	Leroy Merlin	Radiatori 2000	1 010 000						1 010 000	10 011 000
		FIT	1 111 000						1 111 000	
34	Luka	MiniB				0 000 000			0 000 000	0 000 000
35	Maxlevel	General Hydraulic	1 110 000						1 110 000	10 001 000
		Radiatori 2000	1 111 000						1 111 000	
36	Mechanicheski Zavod	Konrad		1 000 000		1 000 000			0 100 000	0 100 000
37	Mosoblsantechmon tazh	Nami	0 101 000						0 101 000	0 100 000
		Bantal	101 000						101 000	
38	Rendstroy	Radiatori 2000	0 011 000						0 011 000	0 001 000
		Alurad	101 000						101 000	
		DeLonghi		010 000					010 000	
39	RTC Group	RTC	0 100 000						0 100 000	0 100 000
40	Santechimport	Aleator	0 111 000						0 111 000	0 111 000
41	SanTechProm	SanTechProm	1 100 000			0 000 000			0 010 000	0 010 000
42	Santechtorg	STT	1 111 000						1 111 000	1 111 000
43	Shestoi Okean	ATM	1 111 000						1 111 000	1 111 000
44	Stroi-Engineering	Scirocco	1 101 000						1 101 000	0 111 000
		Calidor	1 100 000						1 100 000	
		Termo Class		110 000					110 000	
45	TD Prado	Prado		11 110 000					11 110 000	1 110 000
46	Tenrad	Tenrad	0 101 000						0 101 000	0 101 000
47	Teploimport	Ragall	1 111 000						1 111 000	1 110 000
		Sira	1 001 000						1 001 000	
		Sole		100 000					100 000	
48	Teplotzel	Eurostar	0 111 000						0 111 000	0 001 000
		Mectherm	1 011 000						1 011 000	
		Baxi	010 000						010 000	
		Sira	111 000						111 000	
49	Time	Sira	1 111 000						1 111 000	10 101 000
		Copa		0 111 000					0 111 000	
		Ferroli	0 101 000						0 101 000	
		Demir Dokum			1 011 000				1 011 000	
		Irsap					101 000		101 000	
		Toprak			111 000				111 000	
		Astor	110 000						110 000	
50	Zavod Universal	Universal				1 000 000			1 000 000	1 000 000
	Other		110 011 000	10 110 000	11 110 000	0 101 000	0 000 000	0 000 000	101 101 000	
		TOTAL:	010 000 000	110 011 000	01 100 000	01 110 000	11 010 000	0 011 000	1 000 100 000	

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Bc bbcb bc ccaabbb bbca cbacbba bcbb abaa-bccaababcac acacaba.