



CBI Product Fact Sheet for Agricultural Radiators in Germany, France, Italy and Poland

'Practical Market Insights concerning your Product'

Agricultural machinery radiators are, and will likely continue to be, a growing market in Italy and France, and this market is likely to stagnate or further decline in Germany. The greatest opportunities lie in aluminium radiators, while the copper/brass segment is declining. The best way of accessing the market would be through OEM/OES subcontracting or selling through pan-European or national wholesaler/importer networks.

Product

Product specifications	
Type	In Western Europe, agricultural machinery radiators can be divided into radiators for gas engines, for diesel engines, or those compatible with both types of engines. Typically, radiators are specific to the type, make and size of the engine they are destined for and therefore they will have different dimensions and designs. The dimensions of radiators are typically dictated by the engine capacity (with higher capacity engines calling for bigger and more efficient radiators).
Quality and design	<p>The quality and expected durability of radiators used in agricultural machinery in Europe is very high because the machines are used daily for extended periods of time and do not always have extensive maintenance schedules. When purchasing agricultural machines and parts, consumers attach the highest importance to reliability and durability.</p> <p>Radiators are typically made of stacked layers of metal sheet, pressed to form channels and soldered or brazed. Modern OE manufacturers use aluminium in the production of radiators, although there is still a large aftermarket demand for brass/copper applications. The quality of materials used in the production of radiators needs to be high to assure their durability and safety. In addition, agricultural radiators need to comply with the relevant EU regulations. Although there is a differentiation between A, B and C brands (high, mid and low-end) in the area of agricultural machinery parts, the main issue is whether particular products are branded by a 1st, 2nd or 3rd tier producer rather than reflecting decreasing product quality.</p> <p>The design of radiators depends on the make, model and size of the machine they are to fit.</p>
Packaging and labelling	Radiators are typically packaged in cardboard and/or wooden boxes with foam to protect them from being damaged. The packages would typically be labelled with a description of content, including the technical parameters of the radiators, such as core size, model application, material, certifications, and serial number (e.g. XPROD139635 – where XPROD is the prefix which gives the model (XP), the assembly plant (R), and the production year/month (OD), followed by the serial number 139635). These numbers should match the serial prefix and serial number on the ID tag which is either on the radiator support panel or the inner guard,

	depending on the model.
Illustration	<p>Examples of radiators:</p> 

Legal requirements and standards	Description	More information
<i>Framework Regulation of the European Parliament and of the Council for Agricultural Vehicles</i>	Proposed regulation aimed at updating and simplifying legislation for all aspects of agricultural and forestry vehicles and at completing the current approval system for these vehicles. The regulation plans to incorporate existing international regulations and standards, such as those developed by UNECE, OECD, CEN/CENELEC and ISO.	In progress
<i>Amended regulation of type-approval of agricultural and forestry tractors</i> Directive 2010/62/EU	The directive amends five previous directives on the regulation of type-approval of agricultural and forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units, for the purpose of adapting to technical progress. It repeals Directive 74/150/EEC.	Amends: Directive 80/720/EEC Directive 86/297/EEC Directive 2003/37/EC Directive 2009/60/EC Directive 2009/144/EC
<i>Approval for agricultural or forestry tractors</i> Directive 2003/37/EC	Outlines a European-wide system of approval for agricultural or forestry tractors, their trailers and interchangeable towed machinery together with their systems, components or separate technical units. Type-approval is the confirmation that production samples of a design will meet specified performance standards.	Repeals: Directive 74/150/EEC
Non-legal requirements		
<i>ISO (International Organisation for Standardisation)</i> http://www.iso.org	ISO standards relating to agricultural engines can be accessed under the following link	Other agricultural machinery standards can be accessed here
SA 8000	Certification standard by Social Accountability International (SAI) for the improvement of working conditions.	http://www.sa-intl.org

For a full breakdown of directives and regulations on wheeled agricultural and forestry tractors, refer to the relevant [European Commission website](#); for more information on other legal and non-legal requirements, please refer to CBI's database on Market Access Requirements.

Promotion

- The agricultural machinery market has a similar structure, similar players and requires approaches similar to the automotive segments.
- DC producers interested in exporting into the EU must first decide on their sales strategy and, in particular, whether they want to supply parts directly to tier 1-3 suppliers, to distributors or to retailers. They may also decide on what type of radiators they will specialise in.
- In order to enter the European market, DC producers must have the necessary international certifications (e.g. ISO) and comply with EU standards as well as offering reliable product quality.
- Additional advantage is given to exporters who are capable of on-time delivery and short lead times.

Marketing:

- One way of marketing agricultural machinery parts is to approach international and local wholesalers/traders specialising in such parts, who in turn will sell the products to their retail customers. The advantage of this option is that large wholesalers take care of the merchandising and sometimes branding, which makes market access considerably easier for small and medium size exporters. Examples of such international wholesalers in the agricultural machinery parts include Sparex (www.sparex.com) and Kramp (www.kramp.com). One may also research and approach wholesalers in each of the targeted countries.
- Another way of selling agricultural parts would be through retailers such as tractor and implement dealers, agricultural engineers, country stores, repair shops, etc. Approaching smaller dealers would be much more time and capital intensive than approaching the wholesalers and generally more difficult to navigate for a new exporter. This option should be explored once the exporter is relatively well established in a local market.
- Trade fairs are very important for the promotion of your products and for establishing business contacts with potential European clients. In addition, they help you to review what the competition has on offer and what the latest trends are. The upcoming agricultural machinery fairs are listed below; for additional agricultural trade fairs, please consult [TradeFairDates](#).
 - Agraria, Wels, Austria (29 August-2 September 2012) www.agraria.at
 - Agra, Leipzig, Germany (25-28 April 2013) www.agra2011.de
 - EIMA, Bologna, Italy (7-11 November 2012) www.eima.it
 - Agritechnica, Hannover, Germany (12-16 November 2013) www.agritechnica.com
 - Polagra-Premiery, Poznan, Poland (13-16 February 2014) www.polagra-premiery.pl/en

Doing business in Germany, France, Italy and Poland

- It is important to be able to lead business discussions in English although the use of local language is always a plus. In France and in Italy it may be particularly advantageous to be able to speak the local language in order to conduct business. One has to keep in mind that the buying audience in each country can be completely different.
- It is important to have a person as a dedicated point of contact for the potential clients so there is some continuity during subsequent interactions.
- Client inquiries should always be acknowledged and replied to promptly (ideally within 2 business days) with adequate follow-up if necessary.

- Agreements with the client in regard to delivery times, quantities, product specifications and quality should always be closely observed.

For more information on entering the European market, please refer to CBI’s Buyer’s Black Box.

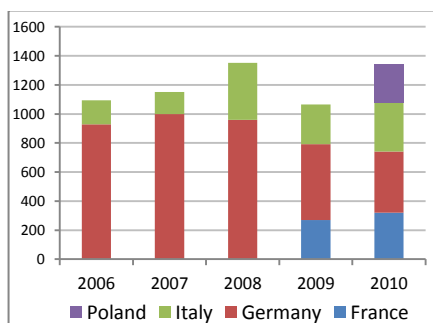
Price

Apart from the distribution of new parts, the aftermarket for agricultural parts also encompasses a lively distribution of used or overhauled parts and components. Pricing depends on the supply chain positioning. The aftermarket, in particular, is very discount-driven and has varied mark-ups at each distribution step, and for different parts and components. Due to a large variation in types and models of parts, it is difficult to provide a general overview of agricultural gear box prices but it is possible to provide some insight into margins imposed by different players in the supply chain. Based on margin ranges, DC suppliers selling to the tier 3 supplier in the OEM supply chain could price their products at between 64% and 81% of the OEM delivery price. In order to better ascertain prices of specific products and models, one may search the internet to determine the appropriate range or talk directly to wholesalers and/or retailers. The differences in price of branded spare parts will not be great among the various countries. Those players who are present in several European countries have largely harmonised their prices; any differences in pricing may occur because of the different logistics and local costs.

OEM supply chain	Margin
Tier 1 supplier delivering to OEM	6-8%
Tier 2 supplier delivering to tier 1	6-15%
Tier 3 supplier delivering to tier 2	10-25%
Aftermarket OES supply chain	Margin
Tier 1 delivering to OEM for OES sales through approved service chain	10-30%
Tier 1 delivering to OEM for OES sales through independent outlets	10-25%
OEM delivering OES parts through its approved service chain	25-65%
OEM delivering OES parts through its approved service chain	30-40%

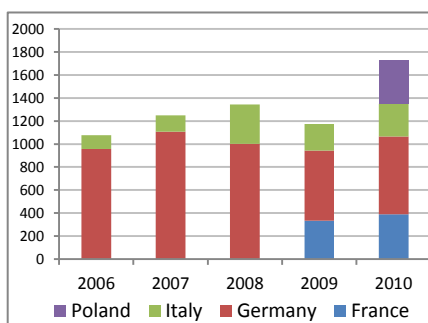
Place

Figure 1: Apparent consumption of radiators in Germany, France, Italy and Poland in € million



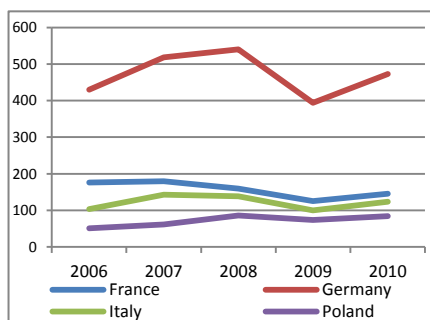
Data source: Prodcorn, 2012

Figure 2: Production of radiators in Germany, France, Italy and Poland in € million



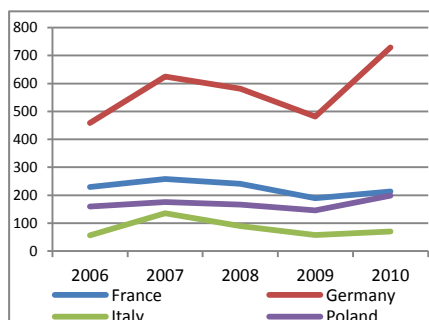
Data source: Prodcorn, 2012

Figure 3: Imports of radiators in Germany, France, Italy and Poland in € million



Data source: Prodcum, 2012

Figure 4: Exports of radiators in Germany, France, Italy and Poland in € million



Data source: Prodcum, 2012

For the past two years, agricultural markets have been in a boom phase, mainly due to the megatrends of population growth, migration to urban agglomerations, changing eating habits and additional demand for agricultural products for the generation of energy. In 2011, the EU agricultural machinery market was estimated at € 24 billion. It is predicted that the market will grow by 5% in 2012 and that for the majority of companies, the year will close with an increase in turnover.

Germany, France and Italy

- Germany is the main growth market and the economic pillar of the agricultural machinery market in Europe; it comprises some 20% of approximately €4.8 billion of the European market volume and is a net exporter of agricultural machinery.
- Agricultural equipment manufacturers are expanding their production capacity in the country, as opposed to outsourcing their capacity to lower-cost countries, meaning that they are planning on continuing to serve the region, and possibly other countries from local factories.
- Germany is the largest European producer of radiators. In 2010, it produced radiators worth €677 million and had exports worth €729 million. The apparent consumption of radiators in Germany (approximated as Production + Imports - Exports) decreased from €929 million in 2006 to €421 million in 2010.
- France is the second largest agricultural machinery market in Europe, comprising some 18% (or approx. €4.3 billion) of the EU market volume. France is a net importer of agricultural machinery.
- France is the 2nd largest radiator producer in Europe, with production value of €389 million and exports of €213 million. The apparent

Opportunities

- Germany, France and Italy are the greatest European producers of radiators; although Germany has been experiencing a stark decrease in radiator consumption, while both France and especially Italy have observed sizeable increases during the same period.
- These three countries and their OEM sector remain the most attractive export markets for a DC producer and the most coherent method of accessing them would be through pan-European wholesalers/importers and through subcontracting for the major local OEMs and/or component/systems suppliers.
- A limited number of radiators could also be sold through industrial web-shops.
- The greatest opportunities lie in aluminium radiators (as this is the modern standard to which the industry is increasingly turning).
- There is still some demand for the copper/brass radiators but it is a declining trend.
- In order to be successful in the market, it is important to integrate accessories like radiator caps, hoses and thermostats.

consumption of radiators in France (approximated as Production + Imports - Exports) increased from €271 million in 2009 to €320 million in 2010.

- Italy comprises some 9% of the EU agricultural machinery market (or approx. €2.2 billion). Italy is a net exporter of agricultural machinery.
- Italy is the 4th largest radiator producer in Europe, with production value of €283 million and exports of €70 million. The apparent consumption of radiators in Italy (approximated as Production + Imports - Exports) increased from €166 million in 2006 to €336 million in 2010.

Poland

- Poland comprises some 5% of the EU agricultural machinery market (or approx. €1.2 billion). Poland has managed to expand its volume considerably during recent years. Poland is a net importer of agricultural machinery.
- Since EU accession, Poland has benefitted from subsidies for purchases of agricultural machinery, which has helped modernise the local machinery park. However, the country also has more aged/used machines than its Western counterparts.
- Poland is the largest market in East and Central Europe and the 3rd largest radiator producer in Europe, with a production value of €376 million and exports of €198 million. The apparent consumption of radiators in Poland (approximated as Production + Imports - Exports) was at €262 million in 2010.

Opportunities

- Poland is one of the most dynamically growing countries in regard to agricultural machinery. Its need for modern machinery, coupled with a relatively strong economy, unsaturated market and inflow of EU subsidies makes it an attractive target for a DC exporter.
- As the second largest gear box producer in Europe, it presents an attractive market for the DC exporter.
- The Polish aftermarket is also well developed because of the preference for using machinery as long as possible and also because the agricultural machinery park in Poland is older than in Western Europe.

This survey was compiled for CBI by Global Intelligence Alliance
in collaboration with CBI sector expert Jan Oude Elferink

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