

THE EUROPEAN HVACR MARKET 2021

**EMI ARTICLE PUBLISHED ON JARN
SPECIAL EDITION NOVEMBER 2022**



2021 European HVACR Market Article for JARN

Europe

After a fall of -5.9% in Europe due to the restrictions relative to the covid-19 epidemic, the market for chillers above 50 kW restarted in 2021 with an exceptional growth of +21% (23% for water cooled units and 20% for air cooled units), reaching 1,489.7 million euros. Unlike 2020 when the market was driven by the IT Cooling and hospital sectors, this time the rise was more shared. Even if the first two sectors mentioned has remained dynamic, they are also those of education, warehouse, retail, and above all industry process that are pulling the market upwards. Regarding the sales channels, the first is installers with 37.4%, followed by distributors & importers with 19.3% and third are end users with 17.5%.

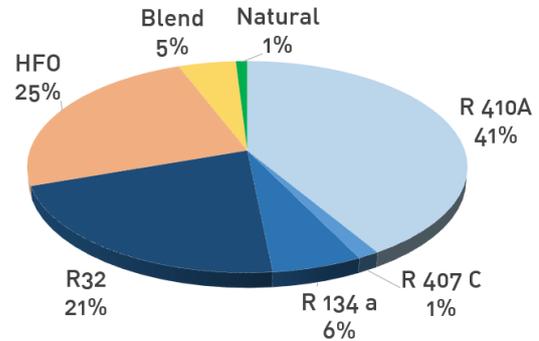
The share of multipipe units and units with indirect integrated free cooling, although usually dynamic, remained rather stable in 2021. The type of unit that has continued to gain importance is units with inverter compressor, continuing to grow from 17.3% to 19%, and units with HFO or blend, continuing to soar from 10.7% to 15.1%.

For the air handling units, after the decline of -2.8% in 2020, the market recovered with a +8.2% growth in Europe to reach 2.44 billion euros, as it benefited greatly from the restart in demand at the level of offices, industry, schools, and residential, where activity has been the strongest. The share of units with rotary heat exchangers – which suffered a lot in 2020 with the covid crisis – remained stable in 2021, but the highest growth is for the units with integrated controls whose share increased from 57.5% in 2020 to 68.3% in 2021.

Regarding the fan coil units, after the fall of -12.6% in 2020, the market recorded a small upturn with a +9.3% increase, reaching 434 million euros in 2021. This growth is mainly driven by the jump in offices and residential sectors, which represent in 2021 respectively 37,9% and 20,1% of the market. The high wall units are the ones that have recorded the strongest growth with +48% in 2021.

France

France is the largest market in Europe for chillers above 50kW: +17% for water cooled units and +13% for air cooled units, reaching 247,8 million euros in 2021. This growth due to the incentives that took place at national level, however, has slowed to half compared to 2020, and it is mainly driven by large units: +22% growth for units above 700kW against +5% only for those below 350kW.

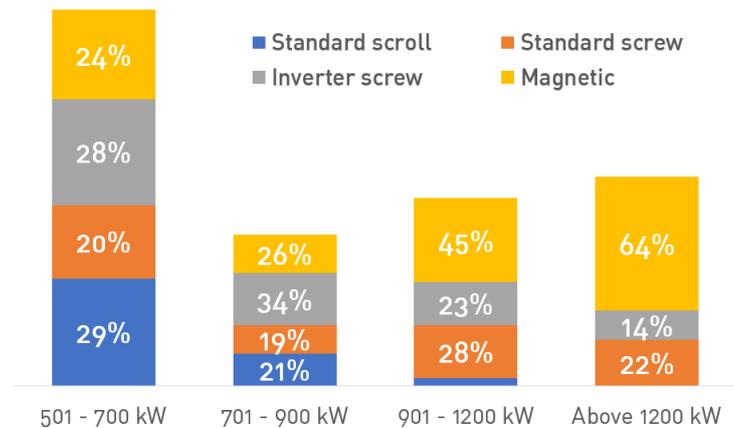


Regarding the refrigerants, the percentage of units with R410A increased from 61% in 2020 to 42% in 2021; at the same time, units with R32 increased from 6% to 21% and units with HFO or Blend from 24% to 29.3%.

Regarding AHUs, the market soared by 11% to reach 169 million euros in 2021 and that of FCUs increased by 9% to reach 62.8 million euros.

Germany

After the sharp decline encountered in 2020, the German market started to rise again in 2021 with an average growth of 55% for units above 50kW, more pronounced for water cooled units, to reach 228 million euros. This jump is mainly driven by large units above 700kW and especially the share of very large units above 1500kW which increased from 0.7% in 2020 to 1.7% in 2021.

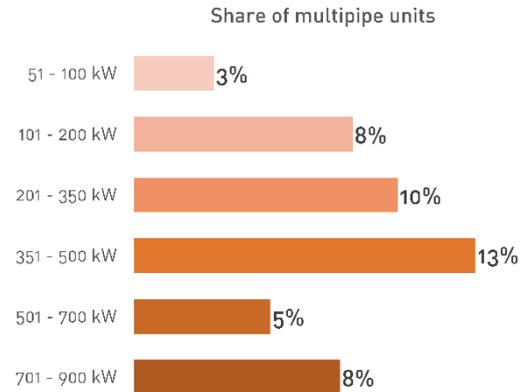


The share of units with inverter compressor continued to increase in 2021 going from 17.7% to 22.2%, as well as the share of HFO and blend units soaring from 14% in 2020 to 23.1% in 2021. Among the air cooled units above 50kW, those with R32 has doubled between 2020 and 2021.

Regarding AHUs, the market grew by 5.6% to reach 427 million euros in 2021 and remains by far the largest in Europe. Regarding the FCU market, very modest in Germany, it fell by -5.7% to stabilize at 36.9 million euros in 2021.

Italy

After a fall in 2020, the market for chillers above 50kW recovered with a +17% surge, among which +36% for water cooled units and 14% for air cooled units, reaching 222 million euro in 2021. The market is still driven by air cooled units (88.8% of the market) and still marked by the importance of the multipipe units (6.2% of the market against 3.1% in Europe) but their proportion for the first time stopped growing and fell slightly (it was 6.5% in 2020).



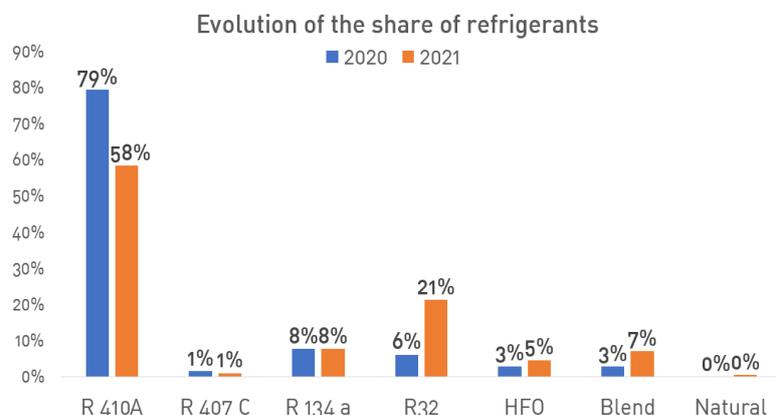
The share of units with HFO and Blend refrigerant, traditionally one of the lowest in Europe, increased rather slowly from 6.5% in 2020 to 10.3% in 2021, but the most remarkable increase is R32, whose market share in air cooled units above 50kW has increased from 7% to 17%.

Regarding FCUs, Italy remains the largest market in Europe with 117 million euros in 2021, after a spectacular increase of 33% following a particularly bad year 2020. Sales remain dominated by units with casing which account for 47% of sales, but those without casing are becoming more and more in importance with 25% of sales against 21% in 2020. The AHU market also recorded a strong increase, with +15% in 2021 to reach 126 million euros.

Spain

The Spanish Chillers market above 50kW reached 91.5 million euros in 2021, bouncing back by +21% after a strong fall last year. This increase is due to the rise in the air cooled chillers (+27%) that represent almost 90% of the market, since water cooled chillers continued their decreasing trend, dropping by -15% in 2021. Used more often than the European average, multipipe units continued to gain ground with 4.3% of sales against 3.8% in 2020.

The air cooled chillers in the Spanish market are largely dominated by HFC refrigerants. In this category, the R32 refrigerant remarkably gained



ground with 21% in 2021 against 6% in 2020, contrarily to the R410A refrigerant that decreased its share in the market to 58% in 2021 from 79% in 2020.

Not as strong as chillers, but the Spanish market for fan coils also rebounded by +8%, attaining 29 million euros in 2021. Regarding AHUs, even though it did not really decrease during the past year, the market continued its increasing trend, accelerating by +19.4% to achieve 93.5 million euros in 2021.

United Kingdom

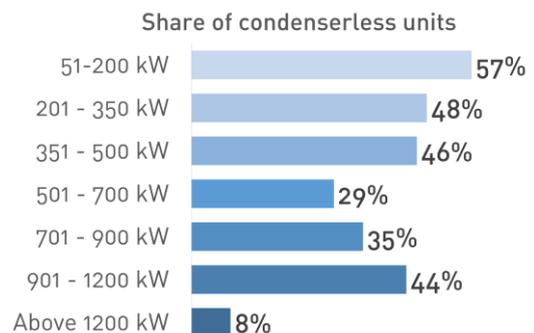
The chiller market in the UK picked up by +16% in 2021, rising to 136.9 million euros. This increase is entirely due to the air cooled chillers which rebounded by +20%, while water cooled chillers experienced a drop by -8%. Overall, air cooled units remain the majority with 90% of the market.

Making up 85% of the refrigerants used in the air cooled chillers, the share of HFC remained quite stable, compared to 89% in 2020. In this category, the R32 refrigerant remarkably gained ground by +248% in 2021 and represent today 24% of the market against 12% last year.

The British AHU market also enjoyed a double-digit growth by +14.3%, enabling the market to reach 270 million euros in 2021. On the other hand, the FCU market expanded by +9.7% and amounted to roughly 32 million euros.

Russia

After a moderate drop of -7.6% in 2020, the Russian market for chillers above 50kW started to recover strongly with a general growth of +31%, including +39% for water cooled units, rising to 63.4 million euros in 2021. As usual, the market is marked by the strong presence of condenserless units (11.7% in Russia against 1.9% on average in Europe) and the weakness of multipipe units which are almost absent. The market is also characterized by the importance of free cooling units with 20% of the units sold (22.2% in 2020) against 4.3% on average in Europe. The share with units with HFO and blend is still the lowest in Europe (0,5% only) and doesn't evolve very much.

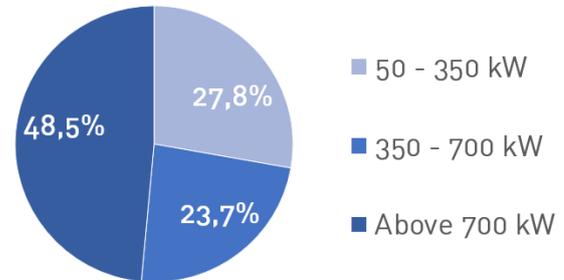


The AHU market experienced a sharp slowdown in 2021, -1% growth against +10% the previous year, and is stabilizing around 147 million euros. For the FCU market, it experienced a much more pronounced fall (a second one after the fall of 2020) below -20% to reach 13.7 million euros in 2021.

Turkey

Being the country who has the highest increase rate in Europe in 2021, the Turkish chillers market above 50kW amounted to 83.6 million euros, impressively bouncing back by +79%. This increase is mainly driven by the air cooled chillers (+90%) that makes up almost 95% of the market. Turkey has the highest share of units larger than 1500 kW with 5.4% against the European average of 1.2%. Air cooled units between 1200-3000 kW obtained a massive increase by +182%, making up a quarter of the market. Contrarily to the booming trend of the air cooled chillers, water cooled chillers dropped by -5%.

Split by capacity



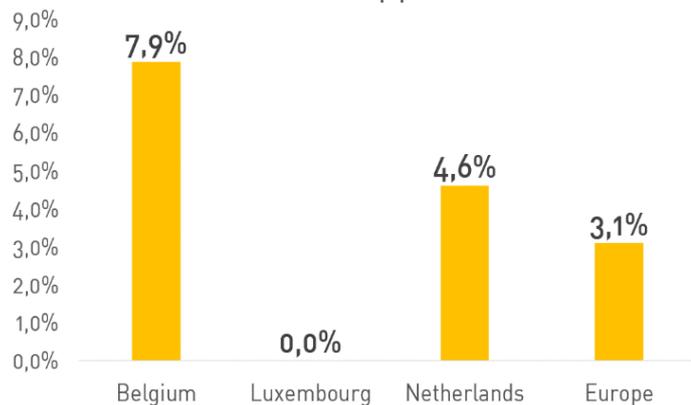
Given the abundance of the large units, the share of screw compressors is the highest in Turkish market with 61.5% against 18.1% in Europe. Since the market is almost entirely dominated by HFC refrigerants, the R134a refrigerant makes up the 61% of the Turkish market.

The AHU market also accelerated in 2021 by +19%, reaching 157.8 million euros. On the other hand, the FCU market remained rather stable at 25.6 million euros, expanding by only +5%.

Benelux

Overcoming the worldwide health crisis rather strongly compared to other European countries, the Benelux region recorded a single-digit stable growth by +8% in 2021, reaching 96 million euros in total. Although Belgium achieved a double-digit growth by +25, the overall evolution is balanced out by the stable performance of the Netherlands which is -1% in 2021. This region is one of the areas that has a higher rate of water cooled chillers which is 21.9% of the 2021 market. Although it is down by 3 points, the region also has one of the highest rates of multipipe units, with 5.6% of the 2021 market compared to 3.1% on average in Europe.

Share of multipipe units

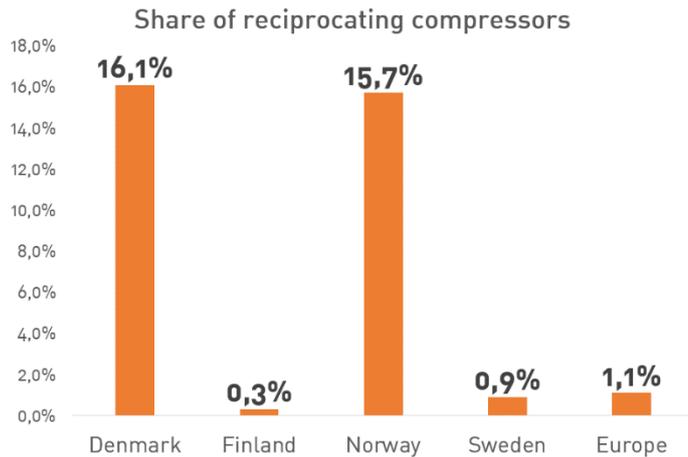


The AHU market had a slight decrease in 2021, descending to 141.7 million euros, mainly caused by the market in the Netherlands which dropped by -3% while Belgium also failed to record an increase and remained stable. The FCU market also slightly dropped to 15.9 million euros, due

to the strong decrease of -12% in Belgium, since the +6.5% increase in the Netherlands did not prove sufficient to pull the evolution of the region higher.

Northern Europe

The Northern European chillers market continued its increasing trend and reached 61.3 million euros in 2021. The market expanded by +10% for water cooled units and +35% for air cooled units. Among the latter, Denmark recorded a remarkable increase by +85% while the performances of the other countries in the region remained around +34%, except for Finland which had a single-digit growth by +8%.



Overall, water cooled units continue to be widely used since they constitute 39.7% of the market while the European average is only 16.4%. It is also there that we find one of the highest rates of reciprocating compressor, as they represent 7.7% of the market compared to 1.1% on average in Europe.

The AHU market in the region saw an increase of +11%, bringing the total market size to 430 million euros, thanks to the double-digit performances recorded in Norway and Sweden which compensated the double-digit loss in Denmark. The FCU market also expanded to 13.2 million euros in 2021 but failed to achieve a double-digit growth, rising only by +5%.

About Eurovent Market Intelligence

Eurovent Market Intelligence (EMI) is the European statistics office on the HVACR market. It provides key market data since 1994. The guiding principle of EMI is to establish a detailed map of the European, Middle Eastern and African market with the participation of the manufacturers in the data collections.

The single sales data collected from the participants remain confidential and the overall results can be received by the participants only. EMI provides the manufacturers with the annual and quarterly collection results, total market estimations, market trends, and analyses. The participants can also view their own market share and ranking in the collection and see the top 5 player of the collection in an alphabetical order. While collection results are strictly reserved for the participants of the corresponding collections, EMI reports containing only the total market estimations are available for sale for non-manufacturers.

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