



# THE EUROPEAN 2020 HVAC&R MARKET

## EMI ARTICLE PUBLISHED ON JARN SPECIAL EDITION NOVEMBER 2021







Published on November 2021 on JARN Special

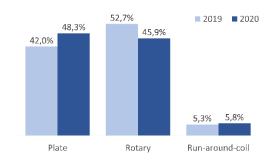
### 2020 European HVAC&R Market Article for JARN

#### Europe

The European chiller market was negatively impacted by the covid-19 epidemic, with an overall decrease of -5.9% for chillers above 50 kW compared to 2019, reaching EUR 1,287.5 million in 2020. Around 9% of the units sold went to data centres and as many to hospitals, the only two sectors to record strong growth in 2020. The other sectors where chiller sales are traditionally more important, such as industrial process (23%), offices (18%), hotels (8%) or retail (8%), have experienced sharp declines in 2020 due to numerous lockdowns and home office situations.

Globally in 2020, the type of unit that has continued to gain importance are multipipe units, increasing from 2.3% of the market to 3.3%, units with inverter compressor, increasing from 14.7% to 17.3%, units with HFO or Blend and free cooling units.

For the air handling units, the market declined by "only" -2.8% in Europe to reach 2.25 billion euros in 2020, because it benefited greatly from the boom in demand at the level of hospitals, schools, and data centres, where activity has been the strongest. Direct consequence of the covid: the rotary heat exchangers have given way to the plate and runaround-coils, since they do not offer any contact between the incoming air and the outgoing air.



Regarding fan coils, the market recorded a more significant drop: -12.6% compared to 2019, to remain at 396 million euros in 2020. This sharp drop is mainly due to the fact that fans coils are used in the sectors that have suffered the most from the pandemic: offices (32%), hotels (14.5%), shops (8%) and leisure (7.5%).

#### France

France is the European country with the strongest increase for chillers above 50kW: + 45% for water cooled units and + 25% for air cooled units, reaching 236.9 million euros in 2020. This sharp rise is explained by the incentives that took place at national level, as well as many big projects that year. It is also on high power units, or even very high power, that the largest increases were observed: for example, units over 1500kW went from 0.8% to 1.1% of the market between 2019 and 2020. The percentage of units with inverter compressor has increased at the same time from 14% to 23.9% and units with indirect integrated free cooling from 1.3% to 2.1%. Regarding AHUs, the market fell by 11.1% to reach 151 million euros in 2020 and that of FCUs fell by 12.6% to reach 54 million euros.

#### Germany

The German market for chillers above 50kW suffered a sharp decline in 2020, -3.1% for air cooled units and -12.2% for water cooled units, to reach 160.9 million euros. However, the





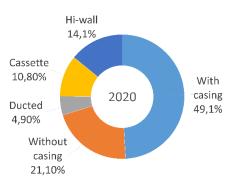
Published on November 2021 on JARN Special

market remains focused on water cooled units, with a 22.4% market share against 16.2% at European level, and units with magnetic bearing compressor: 7.3% of the market against 1.2% at European level. The sharp decline in the chiller market was partly offset by the relatively small decline in the AHU market, which was only -2.4% in 2020. AHUs are traditionally more used in Germany than in the rest of Europe and their market is more than double that of chillers. For fan coils, the market has surprisingly continued to grow, with +6.4% in 2020 to reach 39.2 million euros; ducted units especially benefited from this increase with +16% of units sold.

#### Italy

The market for chillers above 50kW fell to 188.7 million euros in 2020, with decreases of -7.6% for water cooled units and -5% for air cooled units. The market is still driven by the latter, which represent 90.2% of the market, and especially multipipe units, which represent 6.5% of the

market against 4.8% in 2019. The drop for fan coils was stronger with -9% in 2020, and the market today only reaches 84.7 million euros. Sales remain largely dominated by units with casing which account for half of the sales, but which lost -12% in 2020, while ducted units withstood the crisis with + 4%. In contrast, the market for air handling units did not decline and remained around 109.9 million euros. These two trends are indicative of the higher importance that ventilation has assumed in the wake of the pandemic.



#### Spain

The market for chillers above 50kW shrank to 78 million euros in 2020, having suffered quite significant declines: -9.6% for water cooled units and -24.3% for air cooled units. Among the latter, which dominate the market at 90%, the drop was particularly dramatic for cooling only units with -28% (against -19% for reversible or heating only units). The drop was recorded on all power ranges, however multipipe units continued to gain ground with 3.8% of sales against 3.2% in 2019. The fan coil market also suffered a sharp fall with -15% (among which -26% for units without casing, which dominate the market) to reach 26.9 million euros in 2020. The air handling unit market, however, fared very well, with +7.6% in 2020 thanks to the hospital sector, reaching 75.8 million euros.

#### **United Kingdom**

The chiller market has experienced divergent evolutions depending on the technology: + 35% for water cooled units (driven by cooling only units) against -9% for air cooled units, reaching a total of 127.1 million euros in 2020. Overall, air cooled units remain the majority with 88% of the market and the largest increases have been seen for units above 1500kW: they represent 2.7% of sales in 2020 against 0.8% in the previous year. At the same time, the AHU market remained stable at around 233.6 million euros, while the fan coil market fell by 18% to reach 30.2 million euros in 2020. This market weakness was the fruit of the combined effects of very strict

48-50 rue de la Victoire Paris 75009 FRANCE





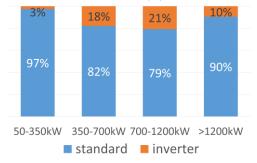
Published on November 2021 on JARN Special

lockdowns and the uncertainties linked to Brexit. Sales nevertheless recovered rapidly during the first half of 2021.

#### Russia

The market for chillers above 50KW saw a rather moderate decline given the context with -7.6% for air cooled units and -11.3% for water cooled units, bringing the total market to 55.7 million euros in 2020. As usual, the market is marked by the strong presence of condenserless units (10.3% in Russia against 2.1% on average in Europe) and the weakness of multipipe units which

are almost absent. Free cooling units continue to be increasingly sold in Russia with 22.2% of sales against 17.7% the previous year. Inverter units have also gained ground: in 2020 they represent around 9.5% of sales compared to 2.4% the previous year. The AHU market, which is very important in Russia, continued to grow by 10% to reach 148 million euros in 2020, while the fan coil market fell 15% to reach 18.1 million euros.



#### Turkey

The market for chillers above 50kW only amounted to 49.5 million euros in 2020. The impact of covid was quite strong on sales, with -27.3% for water cooled units and -9.9% for air cooled units. The decline did not spare the large powers above 1,500 kW since we went from 5.7% of the market in 2019 to 2.5% in 2020. The share of units with free cooling has however doubled since it rose from 2.2% to 4.1% in 2020. The market for air handling units remained rather stable at 134.9 million euros while that for fan coils fell to 22,9 million euros in 2020.

#### Benelux

The market of chillers above 50 kW withstood the crisis rather well, with a drop of 6.6% for water cooled units and an increase of 6.9% for air cooled units – increase driven by reversible units. The total market in 2020 amounted to 91.4 million euros and three quarters of which were air cooled units. The Benelux is the region with the highest rate of multipipe units, with 7.2% of sales in 2020 (compared to 3.3% on average in Europe), a percentage increasing since it was 5.2% the previous year. Units above 1500kW have also increased sharply since they went from 0.6% of sales to 1.3% in 2020. Regarding the AHU market, it fell slightly (stable in the Netherlands against -10% in Belgium and Luxembourg) to 142.7 million euros in 2020. Fan coil units recorded a more marked decline, with around -12% in the three countries, to come back to 16.6 million euros. It was mainly the cassette units and units without casing which recorded the largest decreases (around -21%) while the ducted units progressed slightly with +5%.

#### Northern Europe

The market for chillers above 50kW continued to increase during the covid crisis in Northern Europe, reaching  $\notin$  55.3M in 2020. Regarding water cooled units, the increase was generally around 12% except in Finland where sales fell 5%. For the air-cooled units, Denmark was the exception as sales fell by 16% while the rest of the region recorded increases of around 10%.

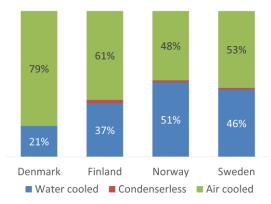




Published on November 2021 on JARN Special

Overall, water cooled units continue to be widely used since they constitute 42.4% of the market (up 3 points compared to 2019) while the European average is only 16.2%. It is also there that

we find the highest rate of free cooling units, after Russia, as they represent 9.4% of the market compared to 4.2% on average in Europe. The AHU market, totalling 386.9 million euros in 2020, is one of the largest markets in Europe. It fell slightly compared to 2019, by 2.2% on average, mainly due to the poor performance of Finland which saw sales fall by 11%. The FCU market declined by 5.7% despite the good performance of Denmark, which recorded an increase of over 30%, and stands at 12.6 million euros in 2020.







Published on November 2021 on JARN Special

#### 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.

#### Our participants and programmes

Tripled its number of participants in the last 6 years, and today, it reaches **more than 400 manufacturers** worldwide within **18 different programmes**.

→ For in-depth information and a list of all our participants, visit <u>www.eurovent-marketintelligence.eu</u>