By cap hp

February 2023

Motorcycle market overview

The first month of the year sees little change in the world's problems. In fact the potential for a re-visit of global Covid infections is a possibility as China allows its citizens out and about again. The scale of the problem the country has had in the latest rise of infections has not been determined with any accuracy, but some reports from around the world have sparked some concern that there are significant number of tourists testing positive. Continued strikes in the public sector have yet to affect the national purse. But it's not all doom and gloom as inflation, mainly driven by fuel prices, is showing signs of slight easing. That will be helped by the rolling 12 month figures moving to comparisons from the start of the large increases.

New market

The latest figures from the MCIA are for December, so the full year new registrations can be compared to 2021, and the positive is that it shows a growth, albeit a small one of 1.9%, or in numbers 2,163. The month total numbers at -1% are significantly better than the last few months with a constant sizable monthly drop, at 5,926 machines.

After the rise over the last couple of years, mopeds reduced to 409 sales in the month (-15%), but again the recent continued monthly backwards movements when compared to the previous year has not stopped a small positive for the year at 1%. A similar trend is seen in the motorcycles categories when added together with -0.3% (14) down for December, but yet again the yearly figure is a positive, at 2%.

Drilling down into the details there are winners and losers, with some quite large in percentage terms. The smaller number sectors are always going to have a larger percentage change for not a lot of actual difference in real numbers. Custom is the biggest drop at -37% (147) in the month, but there has been a similar picture for the whole year, again being the big loser at -12.4% 1.060 less.

Competition joins the big loser club in December with just over a third less than the previous year, although that is not reflected in the years figure which is only 26 less and a negligible -0.4%. The big growth for the month is in the Modern Classic with 198 more than December last year equating to a 42.7% rise, with the year's total at 11.2% market share an increase of 13% in the number sold. The only category beating the increase is Touring adding a bit over a quarter to the year comparison, but after several years in the doldrums the sector is very small at less than 3% of the market. The second-place growth for the month is seen in the Scooter sector, which mirrors the strong yearly performance of 26,895 sold for 2022 and just short of a quarter of the market share.

December 2022 and Year to Date - New Registrations by Style

Mopeds	Registrations		% Market Share (%)		Year to	date	YTD	Market S	Market Share (%)	
wopeds	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
Naked	67	52	28.8%	16.4%	10.8%	647	729	-11.2%	9.1%	10.3%
Other	83	58	43.1%	20.3%	12.1%	1,110	868	27.9%	15.6%	12.3%
Scooter	259	371	-30.2%	63.3%	77.1%	5,366	5,457	-1.7%	75.3%	77.4%
Totals	409	481	-15.0%	100.0%	100.0%	7,123	7,054	1.0%	100.0%	100.0%
Matavavalas	Registra	itions	%	Market S	Share (%)	Year to	date	YTD	Market S	Share (%)
Motorcycles	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
Adventure	1,014	1,122	-9.6%	18.7%	20.6%	20,812	19,853	4.8%	19.2%	18.7%
Competition	351	534	-34.3%	6.5%	9.8%	5,779	5,805	-0.4%	5.3%	5.5%
Custom	247	394	-37.3%	4.5%	7.2%	7,491	8,551	-12.4%	6.9%	8.0%
Modern Classic	662	464	42.7%	12.2%	8.5%	12,115	10,723	13.0%	11.2%	10.1%
Naked	1,179	1,142	3.2%	21.7%	21.0%	23,645	24,659	-4.1%	21.8%	23.2%
Road Sport	362	371	-2.4%	6.7%	6.8%	8,704	8,138	7.0%	8.0%	7.7%
Scooter	1,466	1,298	12.9%	27.0%	23.8%	26,895	26,173	2.8%	24.8%	24.6%
Touring	130	116	12.1%	2.4%	2.1%	2,942	2,363	24.5%	2.7%	2.2%
Unspecified	24	8	200.0%	0.4%	0.1%	127	107	18.7%	0.1%	0.1%
Totals	5,435	5,449	-0.3%	100.0%	100.0%	108,510	106,372	2.0%	100.0%	100.0%

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Tricycles	Registra	ntions	%	Market S	Share (%)	Year to	date	YTD	Market S	Share (%)
	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
Other	55	27	103.7%	1.0%	0.5%	407	430	-5.3%	0.4%	0.4%
Scooter	27	31	-12.9%	0.5%	0.6%	494	515	-4.1%	0.5%	0.5%
Total Registrations	82	58	41.4%	1.5%	1.1%	901	945	-4.7%	0.8%	0.9%

Cummon	Registra	tions	%	Market 9	Share (%)	Year to	date	YTD	Market S	Share (%)
Summary	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
Total Scooter Total Moped, Motorcycle	1,752	1,700	3.1%	29.6%	28.4%	32,755	32,145	1.9%	28.1%	28.1%
& Tricycles (exc Scooters)	4,174	4,288	-2.7%	70.4%	71.6%	83,779	82,226	1.9%	71.9%	71.9%
Total Registrations	5,926	5,988	-1.0%	100.0%	100.0%	116,534	114,371	1.9%	100.0%	100.0%

The engine size tables like the style figures, show a mixed bag of winners and losers. The smallest, 50cc at 701 is a slight step back of 4.6%, compounded in the overall 16-year-old band by sub 4kW electrics shrinking by just over a third. The year is still a positive though with 409 more for the year than 2021, a 3.9% up.

The other learner legal sub 125cc group has a small loss compared to the previous year, but with commuters and delivery purchases still strong. Over a third of the market falls in this band and if added to the Mopeds there are 44% of all new machines in 2022 falling here. 126-650cc had a bad finish to the year, but narrowly finished the best of the rest with a fifth of the market and more importantly the largest yearly growth. 651-1000cc also had a reasonable year not that far behind with a 1.8% loss for the 1000cc plus band.

December 2022 and Year to Date - New Registrations by Engine Band

Engine Band	Regist	Registrations		Market Share (%)		Year to date		YTD	Market Share (%)	
	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
0-50cc	701	735	-4.6%	11.8%	12.3%	10,783	10,374	3.9%	9.3%	9.1%
51-125cc	2,089	2,135	-2.2%	35.3%	35.7%	40,404	40,664	-0.6%	34.7%	35.6%
126-650cc	1,285	1,461	-12.0%	21.7%	24.4%	23,418	21,978	6.6%	20.1%	19.2%
651-1000cc	983	877	12.1%	16.6%	14.6%	22,845	21,913	4.3%	19.6%	19.2%
Over 1000cc	868	780	11.3%	14.6%	13.0%	19,084	19,442	-1.8%	16.4%	17.0%
Total Registrations	5,926	5,988	-1.0%	100.0%	100.0%	116,534	114,371	1.9%	100.0%	100.0%

Power band - Electric	Regist	Registrations		Market Share (%)		Year to date		YTD	Market Share (%)	
	Dec-22	Dec-21	Change	Dec-22	Dec-21	2022	2021	% Change	2022	2021
Moped ≤ 4 kW	106	162	-34.6%	1.8%	2.7%	2,898	2,731	6.1%	2.5%	2.4%
Motorcycle ≤ 11 kW	225	217	3.7%	3.8%	3.6%	3,080	2,861	7.7%	2.6%	2.5%
Motorcycle ≤ 35 kW	6	9	-33.3%	0.1%	0.2%	131	54	142.6%	0.1%	0.0%
Motorcycle > 35 kW	1	5	-80.0%	0.0%	0.1%	121	133	-9.0%	0.1%	0.1%
Exempt	7	6	16.7%	0.1%	0.1%	84	130	-35.4%	0.1%	0.1%
Unknown	53	14	278.6%	0.9%	0.2%	212	119	78.2%	0.2%	0.1%
Total Electric Registrations	398	413	-3.6%	4.9%	4.2%	6,526	6,028	8.3%	3.1%	2.9%

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Honda finished the year off as would be expected in the number one slot by a significant margin, with several models making a showing in various categories and again the best-selling model in the PCX125.

December 2022 - Highest Registering Model by Style

Mopeds	Highest Registering Model by style	Dec-22
Naked	Triton MANIX ST-50	36
Other	Sur-ron LIGHT BEE	32
Scooter	Peugeot KISBEE 50	21
Motorcycles	Highest Registering Model by style	Dec-22
Adventure	BMW R 1250 GS	110
Competition	Beta RR 2T 300	29
Custom	Keeway SUPERLIGHT	35
Modern Classic	Royal Enfield HNTR 350	50
Naked	Honda CBF 125 M	129
Road Sport	Multiple Items	30
Scooter	Honda PCX 125	263
Touring	BMW R 1250 RT	29
Tricycles	Highest Registering Model by style	Dec-22
Other	Aidea AA-CARGO	34
Scooter	Piaggio MP3 300 SPORT	19

December 2022 - Highest Registering Model by Engine Size

ICE Engine Band	Highest Registering Model by Engine Band	Dec-22
0-50cc	Triton MANIX ST-50	36
51-125cc	Honda PCX 125	263
126-650cc	Honda CRF 300 L	59
651-1000cc	Honda NC 750 X	77
Over 1000cc	BMW R 1250 GS	110
Electric Power Band	Highest Registering Model by Power Band	Dec-22
Moped ≤ 4 kW	Sur-ron LIGHT BEE	32
Motorcycle ≤ 11 kW	NIU NQI GTS CARGO	61
Motorcycle ≤ 35 kW	BMW CE 04 15kW	3
Motorcycle > 35 kW	Zero Motorcycles SR/F ZF14.4	1
Exempt	Electric Motion EPURE RACE	7

New Registrations by Brand

Major Brands	Dec-22
Honda	1,276
Yamaha	522
BMW	492
Triumph	311
Kawasaki	260
Suzuki	227
KTM	210
Piaggio	210
Lexmoto	194
Royal Enfield	180

As we have done on several occasions over the past year, when comparing the registration numbers to the previous three years, there has been the influence of lockdowns affecting the monthly numbers and supply of parts, compounded by large periods of time with people not working. With that hopefully behind us it might be the last time we will compare the industry performance to the last real year of normality, 2019.

After many mentions of small bikes having a good time due to Covid and public transport worries creating a revived commuter market, and as people shopped and ate from home. The big winner being the Moped size band, once in a dire state, now showing an enormous percentage increase. When added to the other group requiring limited licence requirements, sub-125's, last year was 78.7% up. Take into consideration that the 50cc sales started from a very low position, but as the market share for the two was 44%, the influence they have had in the intervening years from the 37.8% in 2019 is significant to say the least.

One area that could be of concern for the future is the close to 2,000 less, larger capacity 1000cc plus bikes sold. This could cause problems for future used supplies and continue the position we have had for a while where demand is high, with low supply. Through the last three years problems, the industry should take solace and give itself a pat on the back for returning 8.5% more sales than the last real normal years trading pre-pandemic.



By cap hpi

Engine Band	Regist	Registrations		% Market Sh		are (%) Year to date			Market S	Share (%)
	Dec-22	Dec-19	Change	Dec-22	Dec-19	2022	2019	% Change	2022	2019
0-50cc	701	461	52.1%	11.8%	9.2%	10,783	6,764	59.4%	9.3%	6.3%
51-125cc	2,089	1,478	41.3%	35.3%	29.6%	40,404	33,874	19.3%	34.7%	31.5%
126-650cc	1,285	1,160	10.8%	21.7%	23.2%	23,418	22,451	4.3%	20.1%	20.9%
651-1000cc	983	927	6.0%	16.6%	18.6%	22,845	23,251	-1.7%	19.6%	21.6%
Over 1000cc	868	969	-10.4%	14.6%	19.4%	19,084	21,068	-9.4%	16.4%	19.6%
Total Registrations	5,926	4,995	18.6%	100.0%	100.0%	116,534	107,408	8.5%	100.0%	100.0%

Used market

Back after the Christmas break and revitalised ready for the upcoming season, this is always the time of year when the motorcycle industry has possibly the busiest time but with least sales. The reason is the rush for the upcoming season starts with the search for stock. It's a pattern we see every year, so there should be no big surprise as prices follow demand and start to increase. Although not at full pelt yet there are mentions from the trade that some effort is being made to fill showrooms with desirable machinery and even this early the quest is not as easy as it was in "the olden days".

The result is of course increasing prices which have been reflected in this month's reporting for some models, particularly in some brands that are experiencing quite large increases in new prices. That coupled with shortages tends to compound used price increases. What has become obvious over the end of last year is discontinued models are getting more attention than they were when available, a prime example being Harley-Davidson Sportster range that needed updates to continue to meet emission standards. Used examples have been seen achieving more than their original cost new. Suzuki's GSX1400 as another prime example, was difficult to give away when it was new, but as time moves on they are and have been for some time, more expensive as used examples. They are not isolated in this phenomenon, but good examples and why is it so? Perhaps dealing the best way of with the British public is to tell them they can't have it!

Auction

In the post-Christmas period there is always a lull in the number of sales that have taken place and the ones that do take place have a reduced number of entries. This makes reporting on results difficult, but the MAG sale at Rotherham with only 25 entries, and currently with the lack of definitive results, it looked like there was more action by bidders and prices around "book". Better information will start to become available from next month.

End notes

Continuing the theme from above with things not being as bad as some commentators are suggesting, Ducati has confirmed 2022 as its best year from a sales perspective, selling 61,562 bikes last year, a 3.1% increase over 2021.

Success in both World SBK and MotoGP last season cannot have hurt the brand, especially in their home country which was Ducati's strongest market with 9,578 bikes were delivered, a 10% increase on 2021. Although its second-largest market, the US, only 8,441 motorcycles were delivered, a 6% decrease, which they put down to "logistical difficulties and delays in overseas shipments" Ducati's most popular model in 2022 was the Multistrada V4 where 10,716 bikes were delivered worldwide.

Researchers at a Japanese university have discovered a breakthrough in solid state battery technology which addresses a major issue with this kind of battery and could mean the charging time for electric bikes will be significantly reduced to just minutes. Lithium-ion batteries are the standard for electric bikes and have been for a while, however there are flaws with lithium batteries. Many from the liquid-state of the electrolytes used. The solution is to use solid electrolytes instead and this is where the 'solid state' term comes from.

One problem to overcome is when lithium ions flow from one electrode to another causing an expansion or shrinking of the electrode and compromising the structure of the battery. Continued use, and many charge-discharge cycles result in damage to the electrode and therefore to the battery which cannot be overcome, so the performance begins to decline until it eventually fails completely. The positive with solid state batteries is that they can have the same capacity as current technology, but with smaller electrodes, so can be charged much more quickly, and of course important in motorcycles, they are lighter and use less space. Finding a solution is of course imperative and would therefore be an important discovery. Researchers think they have found at least the beginnings of a solution. Using a positive electrode made of lithium titanate and lithium vanadium dioxide they have found that the vanadium is able to



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counteract the shrinking of the electrode. The battery showed a capacity of 300mAh/g, which did not degrade over 400 cycles, has been described this as "remarkable capacity."

Continuing the look forward to the future, Royal Enfield has bought a 10 percent stake in Stark Varg, the Indian brand investing €50m Euros in the motocross bike maker. This is widely believed to be helping speed up Royal Enfield's development of its own electric motorcycles and will see the two partner for 'collaborative research and development' of road-going electric bikes. Stark Varg's first offering at the end of 2021, a 450cc equivalent 80hp motocross bike, made headlines around the world. One of the first, purpose-built battery-powered motocross bikes, but with nearly 1,000Nm of torque, 6-hours of runtime, and one-to-two-hour recharge times.

Like most motorcycle manufacturers, the future of personal mobility and electric power features heavily in plans and the investment in Stark should give Enfield a significant leap forward in understanding battery and controller technology, knowledge of which can now be used in its own electric prototypes.

The move to alternative fuels is inevitable and most of the news is positive, but there are two sides to every story and in balance, both sides need to be considered. Recently the Motorcycle Action Group (MAG) aired concerns that the incoming mandatory switch to electric or alternative power for all-new motorcycles in the UK will have a major impact on the market. Sales of new motorcycles with ICE (Internal Combustion Engines) is due to cease in 2035 with a view to reducing carbon emissions and move to a greener future. The counter argument from MAG is that the timeframe is largely dictated by the much larger four-wheel vehicle market, that has seen manufacturers introduce a broad range of alternatively powered options alongside their ICE models, and sales have shown sustained growth in recent years.

On the flip side the motorcycle industry has reacted slowly, in part because integrating electric powertrains into an already economical, lightweight and tightly packaged machine brings dynamic, ergonomic and aesthetic headaches. PTW sales are rising, but EVs are under 6% of all new motorcycles purchased in the UK in 2022. Compared to EV or hybrid cars making up 23% of new car sales.

The opinion of MAG is that "as both cars and motorcycles are bound by the same upcoming deadline, a forced change from ICE to electric power will significantly damage the new motorcycle market as potential buyers turn off and err towards used models". There are alternatives such as synthetic fuels and hydrogen. "The problem we have in the UK is that legislation is geared towards having zero emissions from the tailpipe, therefore it doesn't fit the policy." "Attitudes will naturally change as the pool of people who ride them will change too, so I suspect the danger is that an enforced change too quickly will effectively diminish the existing market and not be replaced by a new market."

A 2021 survey by MAG gauging opinion on the phase out of fossil fuels among the motorcycling community revealed 55% of those asked were opposed to the legislation, with 31% suggesting they were prepared to quit riding altogether. Two years later, with new models now available, the perceptions of EV power has changed to a certain extent. But it is certain there will be a sizeable proportion of riders who won't be prepared to adopt electric power on two wheels.

