

# Integrating consumer and customer needs

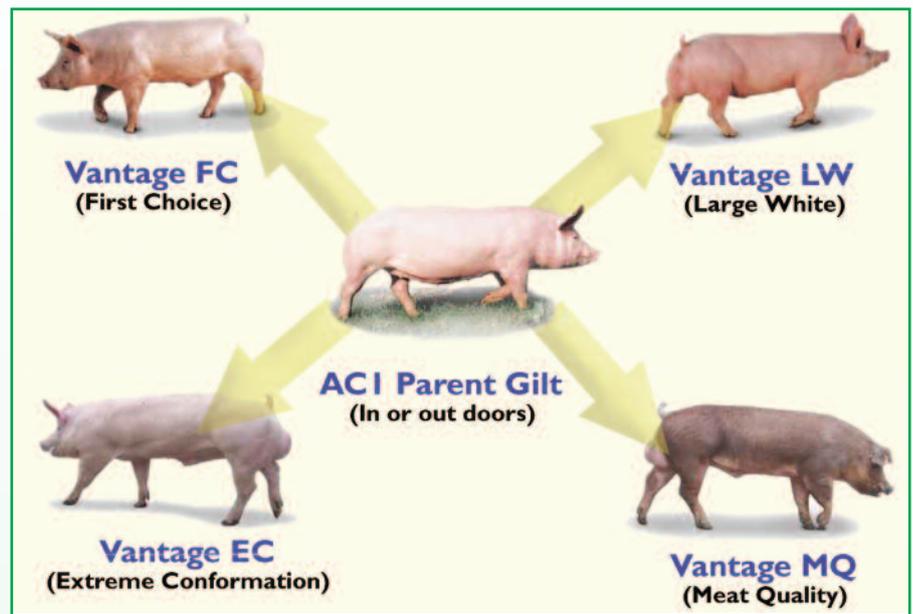
Modern pig breeding is not just about producing pigs – it is about much more! To find out just what goes into modern pig breeding and how the modern producer can use this to best advantage, International Pig Topics recently spent some time with the technical team at ACMC Ltd, one of the leading and most progressive of the international pig breeders.

“Modern pig breeding,” technical director Ed Sutcliffe told us, “is about a lot more than just the pigs – it is about integrating the requirements of consumers and customers into the breeding programme so that the resulting product satisfies their requirements and gives the producer a healthy bottom line in his business. If we are not constantly satisfying these three key players in modern pig production then it is very easy for the proverbial wheels to come off the wagon!”

To achieve this ACMC have not just invested in their pig stocks and conventional breeding programmes, they have also invested in a technical team that is respected within the industry and able to assist customers anywhere in the world.

The expertise within this team is not just in the traditional areas, but heavy emphasis is also given to molecular genetics and the application of recording systems to best effect on customers’ farms.

The last point is very pertinent in modern pig production because many of the management decisions that need to be taken can



ACMC's Breeding Hub system.

so often be hindered by the quantity or, more often, the quality of the production data available.

Central to ACMC's breeding philosophy is flexibility and this is achieved by utilising the 'Breeding Hub' system which uses different boars on their renowned ACI Parent Gilt to produce different commercial generation products.

Typically this means using the Vantage FC

boar but, where there is a requirement for Large White male line genetics, the Vantage LW boar comes into its own. For extreme conformation ACMC recommend their Vantage EC boar and where meat quality is to the fore in the consumers', and hence the customer's requirements, the use of the Vantage MQ boar in the 'Hub' is recommended.

The ACI Parent Gilt is derived from using

Fig. 1. Genetic trend for feed conversion ratio (FCR).

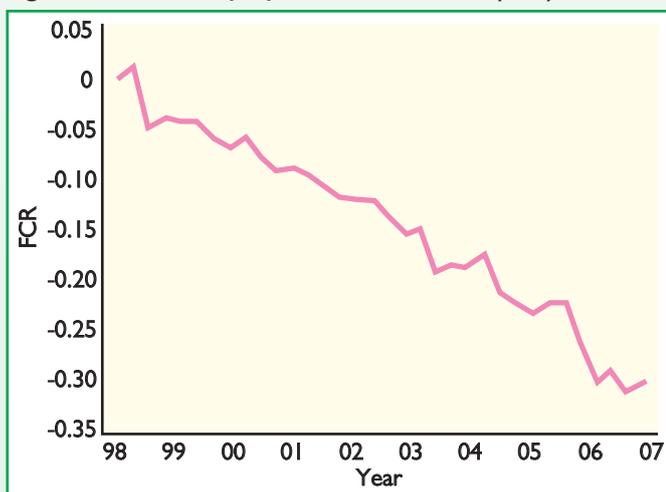
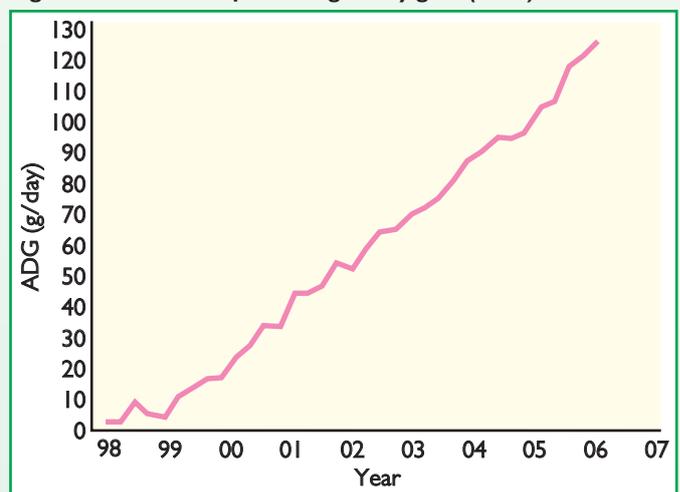


Fig. 2. Genetic trend for average daily gain (ADG).





### **Gilt monitoring.**

the Volante boar on the Meidam female. The latter brings fecundity to the table while the former brings great performance and carcass attributes. The real benefit is that the ACI brings those extra piglets that can impact so much on the bottom line of today's progressive pig integrator.

So, what do these boars bring to the table?

The Vantage FC is well respected for its production performance and carcass attributes and it is based on more than 30 years development of its lines of origin the ACMC Large White and their Hamline. This is the boar if you are looking for continued fast growth at the heavier weights.

The Vantage EC gives your commercial generation extreme conformation and that extra yield that is so critical in certain market places.

This is achieved by increasing the lean content of the ham and loin so that commercial progeny have a higher killing out percentage. The Vantage EC on the ACI Parent Gilt produces the perfect product for volume lean meat production.

The Vantage MQ on the other hand should be your preferred boar if you are in a market in which meat quality is the overriding factor as its genetics give high meat quality characterised by a darker colour and a higher intra-muscular fat level in commercial progeny which are robust and grow quickly.

All this adds up to a key thing when you look at the global market place. It means that the ACMC breeding programme is extremely flexible and can be tailored to the requirements of discerning consumers.

What is more, the 40 years of work that have gone into the development means that they have consistent performance. This is something that is so critical in modern production when meat plants have to complete large orders day in, day out from demanding and discerning customers.

So, how does the ACMC philosophy help pig producers around the world?

The cornerstone to this answer lies in

their selection approach which focuses on growth, back fat and FCR to give increased lean tissue growth at an improved FCR and focuses on litter size, weaning weight, teat numbers, conformation and structural leg soundness and rebreeding interval to maximise the sow's lifetime productivity.

Interestingly, the heritability for numbers born alive in the Meidam is 13% compared to less than 10% in the white breeds (Landrace and the Large White). This means that the Meidam has a 30% greater rate of improvement for this characteristic over the white breeds.

All of this is achieved by the detailed monitoring and recording of thousands of animals, both boars and gilts, every year in the breeding pyramid so that only the best possible genes go into the animals that will eventually be offered to customers around the world.

At the genetic nucleus level well over 3,000 boars a year (roughly equal numbers of Vantage and Large White, Volante and Meidam boars) are individually monitored for feed consumption, growth rate and FCR.

In addition, over 1,500 Vantage gilts are monitored for feed intake and subjected to muscle scans. Weight for age measurements and muscle scans are also carried out on a further 6,000 Volante and Meidam gilts per year and on 2,000 Large White boars a year.

In the 21st Century increasing emphasis is being placed by both consumers and customers on meat quality and here the company's thinking is very much to the fore with utilisation of a variety of modern technologies to assess back fat depth, muscle depth, lean percentage and intra-muscular fat.

In the case of the last parameter ACMC slaughter generation stock typically have 1.38% marbling fat compared to an average figure of 0.8% for the UK.

In taste panel evaluations at a major meat plant ACMC meat was well above the factory average for juiciness and texture, while

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Continued from page 23 marginally below it for pork flavour intensity, which is not necessarily a bad thing.

Overall, when these indices were combined, the total still came out above the factory average.

However, in this day and age breeding is not about any one particular trait but it is about getting the selection balance right.

At the commercial level ACMC place relative emphasis on total born alive, FCR, daily gain, litter weight, muscle depth and backfat.

This must be working because the genetic gains over recent years have been dramatic.

For example since 1998 the Vantage FC has gained an extra 125g per day in its daily gain figure and complemented this with a reduction of 0.31 in FCR.



**Consistent carcass quality.**

The Volante LW has increased its productivity by an extra piglet a litter and a similar improvement has been achieved by the Meidam.

All this adds up to a pig that is hard to beat with over 27 pigs reared per sow being



**Boar monitoring.**

achieved in the field and with this product then performing very well in terms of days to slaughter, FCR and meat quality.

This is all well and good but when one looks at many operations around the world introducing ACMC stock is a quantum leap forward.

This British company appreciate this and its technical resources at head office in the UK and locally based staff help customers to integrate the British breeder's genetics into their operations with a minimum of disruption.

This results in the maximum return possible from ACMC's superior genetics being harvested in the shortest time possible.

A good example of such co-operation is in Thailand where ACMC have worked hand in hand with Banglen Farms to create a new 500 sow nucleus unit for the Thai company.

The quality of the British breeding stock, especially in terms of prolificacy and carcass quality, was a key aspect of Banglen's deci-

sion to work with the British company but the technical support that the company offered was also second to none.

This includes the installation of ACMC's PigCom Windows based pig management program, which greatly supports day to day management of the stock in Thailand, but also provides data to the breeder's UK technical department for genetic evaluation.

Similar projects have been successfully completed elsewhere in Asia and in Eastern Europe.

ACMC may be 'the new kid on the block', but with their roots in the famous NPD stock of the 1970s and 80s, surely they can not be ignored, especially since their quality genetics is now being coupled to a technical and recording resource that is second to none.

The resulting 'partnership' has to be seriously considered by anyone thinking of becoming a significant player in the pig sector of the future. ■