

Not a lot of people know this

With every load of raw material delivered to the mill, the guys on intake make a point of standing on the gantry just above the lorry body when the sheet is lifted. They develop a nose for raw materials and knows that the magic moment is just then, as the smells accumulated during the journey are released from under the tarpaulin.

Even if the load is only slightly below par, they can smell it. But if they miss that moment, the opportunity has gone. So if their noses twitch with concern, the incoming load is held up for a few minutes while samples are taken and analysed in the laboratory across the yard.

The results determine whether the load is rejected or accepted, so potential manufacturing problems are eliminated at source.

Better animal performance

Now you could be forgiven for thinking this is just an obscure aspect of making feeds, but it does mean greater consistency in the finished feeds and ultimately better animal performance.

With exactly the same aims as this further along the manufacturing process is something called an expander, which few feeds firms apart from HST still operate.

This is a cylindrical body containing a rotating corkscrew that moves the feed ingredients along the barrel, which is an

increasingly tight fit along its length (from left to right in the illustration).

As a result, the mix is gradually compressed to huge pressures, typically 35 – 40 bar (500 – 600 psi), which generates high temperatures and cooks the mixture through, thereby improving its digestibility and nutritional value. As it exits this stage, the consistency is like a moist soft biscuit/crumble, ideally suited to the pelleting presses that come next.

As soon as the pellets are formed, they're fat spray coated and cooled, before dropping gently into two-tonne tote boxes in which they're stored in the warehouse until dispatch.

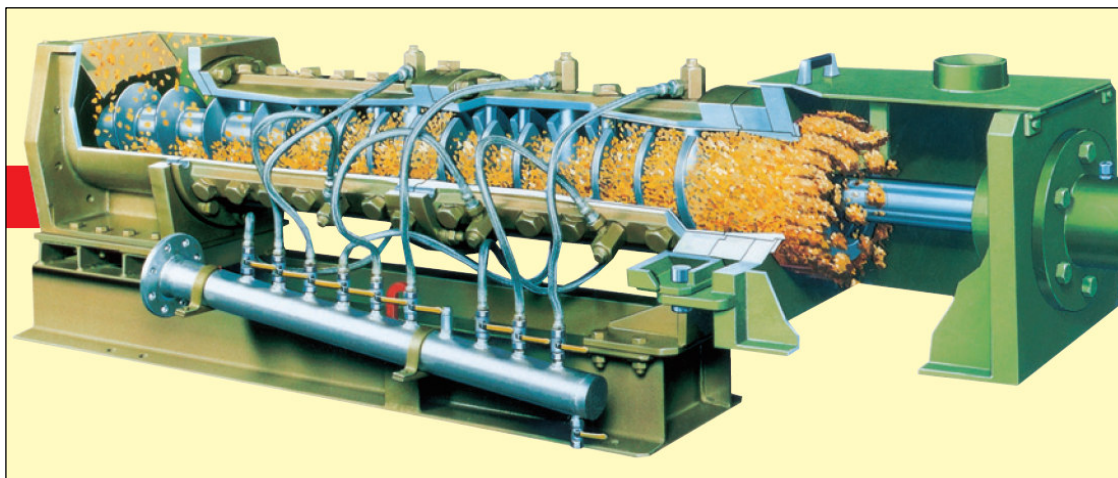
Better quality pellets

Ensuring they are cool before going into storage means better quality pellets, which flow easily out of bins, down chutes and through augers, without becoming mealy or dusty.

This is why, despite the high energy costs of running an expander, HST still has two of them – one per manufacturing line.

How about coming to see for yourself? During the winter, mill tours are put on regularly for farmer groups.

If you're interested, contact Helen Wainwright at the mill on 01270 506818 or helen.wainwright@hstfeeds.co.uk for details.



As the raw material mix moves along the expander's corkscrew barrel (from left to right in the diagram) it is compressed to a very high pressure (500psi+) and heated to high temperature. This cooks the ingredients and improves the digestibility in the finished feed.