# Pellet durability

Many animal feed compounders test the durability of their pelleted rations. This is because it is important to strike a balance between the pellets being too hard and thus difficult to eat, or too weak, in which case the feed became dusty and much was wasted. Pelleting is also an energy hungry process. Testing allows control of energy costs.

Borregaard's John Payne, who developed the original Holmen pellet tester more than twenty years ago and TekPro's Technical Director, Dave Catchpole, together developed the New Holmen range of machines. Then called the 'Lignotester', as they were marketed almost exclusively to those using lignin based pellet binders. The New Holmen range does however meet the needs of all pellet durability testing.

# Pellet testing

The New Holmen tester uses a 100g sample with a test cycle of two minutes or less. Using blown air to degrade the pellets being tested simulates what happens when pellets are blown from lorry to store and from store to trough, or augered to furnace.

Pellet durability index =

Weight of pellets after testing Weight of pellets before testing (100g)

### New Holmen pellet durability tester

The TekPro New Holmen range of testers offer clear advantages over earlier methods. For example they are:

- Smaller Occupies less lab space
- Faster Test cycle of just 30 seconds
- Simpler Dust and fines are blown out, you weigh what's left

#### Applications

The TekPro New Holmen pellet testers can measure the durability of any pelleted material, for example:

- Animal feed
- Wood pellets
- Oilseed residues
- Horticultural products







#### Our Values

- The company has a dynamic philosophy based on a heritage of quality and reliability and aims to:
- Innovate develop and build systems that satisfy the present and future needs of the industry
- Listen give customers excellent service through a network of carefully selected distributors
- Adapt to the ever changing pressures of consumer demand • **Care** – for those on whom success depends, suppliers, staff, customers
- Add value develop products that help you improve quality and profitability.

Holmen pellet testers are manufactured and distributed under licence to Borregaard UK Ltd



TekPro Ltd, Willow Park, North Walsham, Norfolk NR28 0BD UK **Tel** +44 (0) 1692 403403 • **Fax** +44 (0) 1692 404955 Email info@tekpro.com • Web www.tekpro.com

Developing, making and marketing technology

The New Holmen range of pellet durability testers

nnovatio simplicity

focus







Developing, making and marketing technology

#### TekPro New Holmen portable

The TekPro range of New Holmen pellet testers are a quick and convenient way of monitoring pellet durability. Measuring pellet durability enables expensive binding agents to be included at the optimum rate and energy costs to be minimised. You can also guarantee customer satisfaction, providing consistently durable products, whatever their make-up.

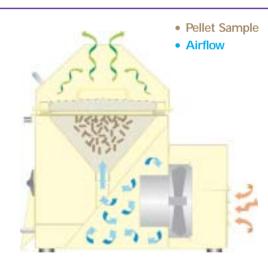
The New Holmen portable is versatile and affordable, designed for bench top testing in your laboratory. It can be easily moved from site to site if required. The sample cascades in an air stream, which causes the pellets to collide with each other and the perforated hard surfaces within the test chamber. Weigh the pellets after testing and you have the pellet durability index.

Height - 450mm (closed) 580mm (open)

- Length 300mm
- Width 300mm
- Weight 18.5kg

Benefits

- Portable Can be easily moved between testing sites
- Clean Virtually no dust escapes in operation
- Fast Second test cycles 30, 60 and 90
- Economical Sample size of just 100g
- Simple Pellet durability index is the weight of pellets after testing
- Voltage stabiliser ensures consistent test results
- Air pressure automatically adjusted





#### TekPro New Holmen automatic

The New Holmen automatic pellet durability tester is designed for busy mill laboratories where frequent batch tests are the norm. This machine, as its name suggests, once set up, will calculate the 'pellet durability index' without user intervention.

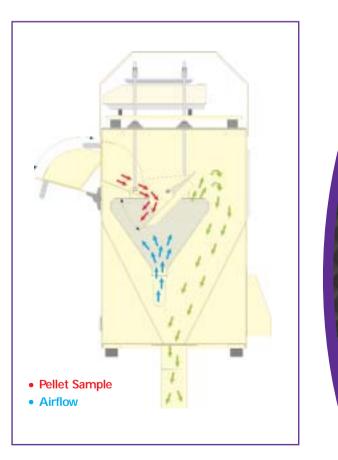
Operating on the same principle as the manual machine, the automatic contains an integral weigher. After the timed test cycle, the sample is automatically weighed and the pellet durability Index displayed on an LCD readout. An optional printer can make operation even simpler.

Height - 7250mm Length - 360mm

Width - 440mm

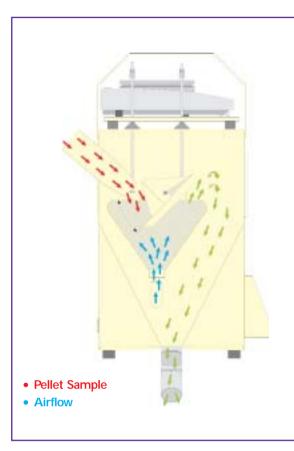
Weight - 36kg

- Benefits
- Free standing Does not take up valuable bench space
- Automatic weighing Once the sample has been added, the pellet durability Index is determined for you
- LCD display Shows the test result
- Optional printer Provides a record of test results
- Simple Pellet durability Index is the weight of pellets after test
- Voltage stabiliser ensures consistent test results
- Air pressure automatically adjusted



TekPro New Holmen on-line







This is arguably the most sophisticated pellet durability tester available today. The machine provides fully automated sampling when installed inplant, close to the pelleting die. The on-line machine automatically collects, cools, weighs, tests then re-weighs pellet samples. Pellet durability Index values can be fed every four minutes to the mill control room, enabling optimum binder dosage and a tight control on the quality of long product runs. Alternatively, the tester can be connected straight to the pelleting operator. The machine returns the test sample to the product flow.

Height - 7250mm Length - 360mm Width - 440mm Weight - 36kg

Benefits

- Fully automatic Can be fitted close to the pelleting die
- **Programmable** Controlling the pelleting process
- Low waste Material returned to product flow after sampling
- Low maintenance Efficient and reliable
- Voltage stabiliser ensures consistent test results
- Air pressure automatically adjusted