

## UK Flour Millers RECOMMENDED CODE OF PRACTICE FOR FLOUR MILL INTAKE

This recommended Code of Practice describes how millers expect suppliers to provide grain at intake and the checks and tests that will be undertaken to comply with contractual obligations and food safety requirements. Milling companies do not have to use this CoP and may tailor it to fit individual commercial constraints.

### 1. Before delivery

Target	Guidance
<p>1.1 The wheat buyer for each milling business will have provided the supplier with the terms and conditions on which the contract is made. As far as possible, the basic contract should not be varied during the harvest year.</p>	<p>The AIC Grain/Pulses no.1/12 contract provides a good 'base' contract. Specific quality criteria will be agreed at the time of purchase, as will any special terms or conditions to be inserted.</p> <p>Where millers use their own form of contract, the general terms and conditions should be communicated annually to suppliers before new crop trading begins.</p>
<p>1.2 Grain is a foodstuff and should be stored in appropriately controlled conditions before milling to minimise the risk of infestation, contamination and deterioration in quality. Grain should arrive at the mill site having been correctly stored and, if necessary, suitably dried, and fit for food manufacture.</p>	<p>HGCA Grain Storage Guide for Cereals and Oilseeds, 3<sup>rd</sup> Edition (2011).</p>
<p>1.3 Millers only purchase grain grown within a recognised assurance scheme. Where imported grain is sourced, care is taken to ensure that it meets similar standards.</p>	<p>There are three principal assurance Schemes: Red Tractor Combinable Crops and Sugar Beet Assurance Scheme, Scottish Quality Crops, and for commercial stores the Trade Assurance Scheme for Combinable Crops (TASCC). Third party auditing of procedures provide buyers with greater confidence in suppliers' procedures, but spot checks will also be carried out from time-to-time.</p>

**2. At Intake**

Target	Guidance
<p>2.1 Vehicles and trailers carrying grain to flour mills must be suitable for the transport of food products. Hauliers should provide a fully completed Combinable Crops Passport with each load. Failure to provide this will lead to rejection of the load.</p>	
<p>2.2 Millers may specify certain materials which should never be carried in trailers used to deliver grain to mills (as defined in the TASC Code of Practice Haulage Exclusion List and the Haulage Contaminant Sensitive List). These will be referred to in the millers' contracted terms.</p>	<p>Cleaning regimes for trailers, exclusions and sensitive loads are listed in the TASC Code of Practice for Haulage. There is also a similar code of practice for the GAFTA GTAS scheme.</p>
<p>2.3 Suppliers should be able to demonstrate compliance by providing auditable records for trailers. A check of the TASC Code of Practice trailer identification should be made.</p>	<p>As per the TASC Code of Practice for Road Haulage of Combinable Crops and Animal Feed, identification will be displayed on both sides and on the rear of the trailer and be clearly visible from a distance.</p>
<p>2.4 Vehicles and trailers carrying grain to flour mills must have sheeting systems operable from ground or near ground level in a safe fashion; operators must be able to demonstrate effective cleaning of the trailer and sheet so that the risk of contamination from other products is controlled.</p>	
<p>2.5 All drivers should be made aware of the health and safety requirements of the site.</p>	<p>Most UK millers produce an information sheet for drivers/hauliers. This will either be provided upon entry to site, at intake or communicated to suppliers when contracts are agreed. Suppliers are expected to communicate these to their hauliers.</p>

### 3. Sampling and testing

Most mills test at intake for screenings, the presence of ergot, moisture, specific weight, Hagberg Falling Number, protein levels and hardness.

Rapid testing for mycotoxins is likely to be done at the start of each new harvest season and on randomly selected loads as part of a 'due diligence' process. The frequency of mycotoxin testing will vary from year-to-year and within different businesses.

Samples shall not contain anything which renders the wheat unfit for milling e.g. insect infestations, odours or taints, moulds, damaged, sprouted, heat-damaged, shrivelled, pink or green grains etc.

	Target	Method	Reference Method
<b>Sampling</b>	A recognised sampling system should be used to produce samples which are as representative as possible.	At intake this will generally be done using a mechanised spear that collects a minimum of 8 samples per 29 tonne bulk or 3 samples for lorries of 15 tonnes or less.	ISO 24333:2009 or any amendments to it. HGCA Grain Sampling Guide 2013 (p 14-15) provides more information.
<b>Ergot sclerotia</b>	Currently most mills reject on the presence of ergot sclerotia.  A Codex specification for wheat has a maximum level of 0.05% mass/mass (m/m). An EU regulation may be introduced in 2015 setting a maximum level of 0.05% m/m (0.5g/kg) for all cereals.	A weighed sample of 1kg should be visually examined for whole or broken sclerotia bodies. These should be weighed and recorded as a percentage.	CCAT method 30
<b>Gluten Washing</b>	Where gluten washing is carried out the washed gluten should be present, cohesive and of light colour. Bread wheats will be extensible and elastic, whilst biscuit wheats will be extensible.		BS EN ISO 21415:2008 CCAT Method 13 and CCAT Procedure no. 04p

	Target	Method	Reference Method
<b>Hagberg Falling Number (HFN)</b>	The minimum acceptable contracted level is 250 seconds for bread-making (Group 1) wheat and 180 seconds for biscuit (Group 3) types. However, specified contractual limits may vary between milling companies.		BS EN ISO 3093:2009  CCAT Method 06
<b>Hardness</b>	At least 300 individual grains should be measured.		Most laboratories use an NIR instrument, calibrated to an SKCS system (CCAT method 22).
<b>Moisture</b>	The maximum acceptable contracted level is generally 15%.  This may be varied immediately following wet harvests.		Samples should be tested using equipment referenced to BS EN ISO 712:2009.
<b>Mycotoxins</b>	All grain must be below either the legal maximum or a contracted maximum for mycotoxins regulated by EU legislation e.g. deoxynivalenol (DON), zearalenone (ZON), Ochratoxin A (OTA) and T2/HT2.	Methodology according to test apparatus provider.	There is no reference method but confirmatory testing using HPLC equipment can be used.  Different systems may be used and the manufacturer's guidelines should be followed. As a guide, minimum of 300 grams of wheat should be sampled and ground for each test. Ensure test is suitable for the product.
<b>Protein</b>	Specified contractual minimum levels are usually 13% for bread-making (Group 1) varieties and 10.7% for biscuit (Group 3) types.		DD CEN ISO/TS 16634-2:2009  CCAT Method 19
<b>Screenings and Admixture</b>	The maximum level normally acceptable is a combined level of 3% for both screenings and admixture, although some mills work to a lower level.	Visual examination of a sieved sample plus weighing of what is found.	CCAT method 26

	Target	Method	Reference Method
<b>Specific Weight</b>	The minimum specific weight normally acceptable is 76kg/hl for bread-making (Group 1) wheat, and 74kg/hl for biscuit (Group 3) wheat.		BS EN ISO 7971-3:2009  CCAT Method 20
<b>Varietal Purity</b>	Normally a maximum of one grain in 50 may be other than the specified variety.	Where electrophoresis is carried out, at least 50 grains should be examined.	

Some wheat is bought on a 'supplier assured' basis and therefore is expected to arrive at the mill pre-tested with results provided at intake.

Details of reference methods are available in the Appendix.

#### 4. Monitoring

As part of a due diligence programme, millers will often use samples taken at the time of delivery for further testing such as for mycotoxins, pesticide residues, microbiological contamination, heavy metals etc.

Prior to this, further information relating to the production and pre-delivery handling of the grain may be requested from suppliers.

#### 5. Rejections and non-conformances

Where loads fail to meet contractual specifications or are rejected for other reasons the following procedures should be followed:

##### 5.1 Contact with Supplier

In some cases, although a delivery may not meet full contractual specification, it may still be accepted but with a claim for quality. In this instance, the supplier should be contacted and given the opportunity to either accept the claim or re-route the vehicle. Claims, once agreed, will be final. A record of the discussion/agreement should be kept and should include the name of the person confirming the agreement on behalf of the supplier. There is no obligation for the miller to accept loads outside the contractual limits.

## 5.2 Sampling in disputes

Where agreement to accept a claim or re-route the vehicle is not reached, or where the testing result at intake is not accepted by the supplier, the following procedure should be followed:

- (a) A sample of at least 3.0kg will be taken and split three ways for sealing, if possible in the presence of the driver.
- (b) One sample will be made available to the supplier. The second sample will be used for the testing purposes of the miller. The third sample will be retained by the miller until the results are determined, or for a maximum of thirty days.
- (c) In the event of continuing dispute, the third sample will be submitted to an independent analyst to whose results both parties agree to be bound.

## 5.3 Procedures for reporting to Assurance bodies

Only rejections relating to food safety or a breach of a 'standard' should be reported to the relevant assurance body. Contractual breaches (such as low protein or high moisture levels) should not be reported.

Assurance scheme	Actions
<b>Red Tractor (RT) Combinable Crops Assurance Scheme</b>	<p>For rejected loads, a completed RT Delivery Point Rejection (DPR) form should be sent with a copy of the grain passport to:</p> <ol style="list-style-type: none"> <li>1. The Certification Body (NSF-CMi Certification: <a href="mailto:cropsuk@nsf.org">cropsuk@nsf.org</a>/ PAI Ltd: <a href="mailto:paienquiries@kiwa.co.uk">paienquiries@kiwa.co.uk</a>/ SAI Global Assurance Services Ltd: <a href="mailto:agrifood@saiglobal.com">agrifood@saiglobal.com</a>/ SFQC Ltd; <a href="mailto:sqc@sfqc.co.uk">sqc@sfqc.co.uk</a> )</li> <li>2. The Red Tractor Secretariat (<a href="mailto:crops@redtractorassurance.org.uk">crops@redtractorassurance.org.uk</a>)</li> <li>3. UK Flour Millers: <a href="mailto:joebrennan@ukflourmillers.org">joebrennan@ukflourmillers.org</a></li> </ol>
<b>Scottish Quality Crops</b>	<p>The matter should be detailed on an SQC complaints slip and sent to the grower or merchant. The grower will record the matter in a complaints register and take corrective action. This complaints register will be reviewed annually during the SQC audit. A copy of the letter should also be sent to SFQC Ltd; <a href="mailto:sqc@sfqc.co.uk">sqc@sfqc.co.uk</a></p> <p>UK Flour Millers welcomes copies of all complaints correspondence so that a record of issues can be kept and follow-up action can be considered. Please send to <a href="mailto:joebrennan@ukflourmillers.org">joebrennan@ukflourmillers.org</a></p>
<b>TASCC</b>	<p>For a general complaint about a TASCC registered supplier, a letter should be sent to PAI Ltd (certification body for TASCC ) at <a href="mailto:paienquiries@kiwa.co.uk">paienquiries@kiwa.co.uk</a></p> <p>UK Flour Millers welcomes copies of all complaints correspondence so that a record of issues can be kept and follow-up action can be considered. Please send to <a href="mailto:joebrennan@ukflourmillers.org">joebrennan@ukflourmillers.org</a></p>

## Appendix

All CCAT methods are described in the 'Manual of methods for wheat and flour testing' (4th Ed) 2010 available to purchase from Campden BRI. Other methods are available as described below.

ISO 24333:2009 – available to purchase on [www.iso.org](http://www.iso.org)

BSEN ISO 712:2009 – available to purchase on <http://shop.bsigroup.com/>

BS EN ISO 7971-3:2009 – available to purchase on <http://shop.bsigroup.com/>

DD CEN ISO/TS 16634-2:2009 - <http://shop.bsigroup.com/>

BS EN ISO 3093:2009 – available to purchase on <http://shop.bsigroup.com/>

BS EN ISO 21415:2008 - <http://shop.bsigroup.com/>