

BRC REGULATIONS PERTAINING TO METAL DETECTION
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4.10.3	Metal detectors and X-ray equipment
4.10.3.1	<p>Metal detection equipment shall be in place unless risk assessment demonstrates that this does not improve the protection of final products from metal contamination. Where metal detectors are not used justification shall be documented. The absence of metal detection would only normally be based on the use of an alternative, more effective method of protection (e.g. use of X-ray, fine sieves or filtration of products).</p>
4.10.3.2	<p>The metal detector or X-ray equipment shall incorporate one of the following:</p> <ul style="list-style-type: none"> • an automatic rejection device, for continuous in-line systems, which shall either divert contaminated product out of the product flow or to a secure unit accessible only to authorised personnel • a belt stop system with an alarm where the product cannot be automatically rejected (e.g. for very large packs) • in-line detectors which identify the location of the contaminant to allow effective segregation of the affected product..
4.10.3.3	<p>The site shall establish and implement documented procedures for the operation and testing of the metal detection or X-ray equipment. This shall include as a minimum:</p> <ul style="list-style-type: none"> • responsibilities for the testing of equipment • the operating effectiveness and sensitivity of the equipment and any variation to this for particular products • the methods and frequency of checking the detector recording of the results of checks.
4.10.3.4	<p>Metal detector checking procedures shall be based on good practice and shall as a minimum include the following:</p> <ul style="list-style-type: none"> • Use of test pieces incorporating a sphere of metal of a known diameter selected on the basis of risk. • The test pieces shall be marked with the size and type of test material contained. • Tests carried out using separate test pieces containing ferrous metal, stainless steel and typically non-ferrous metal, unless the product is within a foil container where ferrous only may be applicable. • A test that both the detection and rejection mechanisms are working effectively under normal working conditions. • Checks that test the memory/reset function of the metal detector by passing successive test packs through the unit at typical line operating speed. • Checks of failsafe systems fitted to the detection and rejection systems. <p>In addition, where metal detectors are incorporated on conveyors, the test piece shall be passed as close as possible to the centre of the metal detector aperture and wherever possible be carried out by inserting the test piece within a clearly identified sample pack of the food being produced at the time of the test.</p> <p>Where in-line metal detectors are used the test piece shall be placed in the product flow wherever this is possible and the correct timing of the rejection system to remove identified contamination shall be validated.</p>
4.10.3.5	<p>The site shall establish and implement corrective action and reporting procedures in the event of the testing procedure identifying any failure of the foreign-body detector. Action shall include a combination of isolation, quarantining and re-inspection of all product produced since the last successful test.</p>