FineLux

Dry-running detector for five-roll chocolate refiners types SFG, SFL, SFLN, SFLE, SFLA

The new FineLux solution for preventing dry running of the rolls replaces the previous models SET, SEL, and SELA.

The rolls are the heart of every five-roll chocolate refiner, and only their perfect condition will ensure maximum throughput capacities for a required product fineness. Traces of burning caused by dry running of the rolls must therefore be prevented at all cost, since they reduce the service life of the rolls to a significant extent and will result in poor roll coverage with product.

FineLux is the best possible response to meeting the related needs in terms of reliability and ruggedness, based on years of experience and know-how of Buhler.

The modularity of the concept allows the system to be applied on all machine generations. Minimum contamination of the optics and easy settings for all product recipes are two of the many benefits offered by FineLux.

«The FineLux dry-running detector will effectively protect your rolls.»

Added value

- Rugged and reliable: All types of recipes – from white to dark chocolate – can be processed with one single setting.
- High availability: Minimized contamination thanks to the large clearance between the probe and the roll (up to 200 mm).
- Easy to clean thanks to protective pipe that can be screwed off.
- Easy setting of the parameters.
- Modular concept: Evaluation in the control system (with PLC) or in a separate evaluation unit.
- GMP-compliant holder: Cables are protected.
- Easy maintenance: The optical sensor is easy to exchange.
The FineLux solution is made up of three assemblies:

a) FineLux probe: New type of probe with green light for optimal detection of all chocolate types.

b) The new probe housing is fastened to the machine frame panel and is distinguished by its large distance from the roll (up to 200 mm). To allow cleaning of the optics, the protective pipe can be screwed off manually.

In the case of certain versions of older-generation refiners, the probe holder is fastened to the roll gap guard for space reasons (70 mm from the roll, as with SELA).

c) FineLux evaluation unit: Integrated in the PLC or available as separate control unit.

The following variants result from the different machine designs:

<table>
<thead>
<tr>
<th>Machine type L (mm)</th>
<th>Probe</th>
<th>Housing</th>
<th>Evaluation unit in PLC</th>
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<tbody>
<tr>
<td>SFLA</td>
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<td>SFLE</td>
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<td>SFL 1800/2500</td>
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<td>SFL 1300</td>
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<td>SFG</td>
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<td>Conversion to PLC (*)</td>
<td>------ see machine types -------</td>
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<td>Replacement of SELA (**)</td>
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(*) Basically, the control system of the dry-running detector will be integrated in the machine control system.

(**) Special case: conversion of machines already equipped with a SELA solution (SFLA, SFLE, SFLN & various rebuilds): If the probe type is converted to FineLux, also the FineLux evaluation unit will have to be modified.

**Time requirement**

Approx. 1 day per refiner