## Certificate Energy- and CO₂-savings through the use of Amp Miser™ 2.0 belts

Additional statement: The Forbo Siegling GmbH online calculator serves as a theoretical realistic estimate of the savings possibilities and does not represent a binding result..

Registration no.

268660063

Certificate holder

Forbo Siegling GmbH Lilienthalstraße 6/8 30179 Hannover

TÜV Rheinland confirms that **Amp Miser™ 2.0 Energy Saving conveyor belts** from Forbo Siegling GmbH can realize significant energy and CO<sub>2</sub> savings compared to common standard conveyor belts in normal operation. It is equally confirmed that the Forbo Siegling GmbH online calculator available on the Internet calculates a theoretical savings potential in terms of costs, required kWh and CO2 savings compared to a standard belt. The result is applicable for a realistic estimation considering boundary conditions.

The validation of the friction values were proven and verified by a comparative laboratory test using standard belts and 6 belt types **Amp**Miser™ 2.0 over a defined period under permanent load: E 10/2 TX0/V5H

MT-AMP; E 10/2 TX0/V15 LG-AMP; E 10/2 TX0/V5H MT-SE-AMP; E 10/2

TX0/V15 LG-SE-AMP; RE 10/2 TX0/V5H MT-SE-AMP; RE 10/2 TX0/V15

LG-SE-AMP; black version in each case.

The verification of the friction values, the calculation method and the online calculator was carried out in the period 22.08.2022 - 13.02.2023 using various realistic scenarios.

The underlying formula of the online calculator assumes a usual horizontal conveyance. The respective quality, design and maintenance condition of all mechanical and electrical components of a real plant influence the total energy demand. In this respect, the displayed result is non-binding.

System used

Laboratory test bench of the company Forbo Siegling GmbH

EXCEL-based calculation with proven friction values;

Software version as of 13.02.2023; https://www.forbo.com/movement/de-de/etools/berechnungsprogramme/amp-misertm-rechner/px3q2f

Test basis

Comparative laboratory tests using standard tapes and 6 different **Amp Miser™ 2.0** tapes over a period of more than 200 h under permanent

defined load;

01.03.2023

Realistic inputs for various scenarios in the online calculator and in the underlying EXCEL spreadsheet.

Valid from

Valid until Changes in the calculation basis or technology affecting the certification

content require a new certification.

Nuremberg, 01.03.2023

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