Institute of Environmental Engineering
Polish Academy of Sciences
41-819 Zabrze, M. Skłodowskiej-Curie 34
Phone: +48 32 271 64 81, +48 32 271 70 40
Fax: +48 32 271 74 70
e-mail: office@ipis.zabrze.pl

COUNTERPART TEST METHODS

Method of gravimetric measurement of filter mass, accordant with EN 12341:2014

On the basis of tests regarding research project no. C2-001/2020/NP-I, concerning an automatic weighing system, the RB 2.4Y.F, manufactured by Radwag Wagi Elektroniczne Witold Lewandowski, it has been concluded that the method of automatic measurement of filter mass, used in the RB 2.4Y.F system, is a method equivalent to a manual method recommended by EN 12341:2014 standard ,,Ambient air. Standard gravimetric measurement method for the determination of the PM10 or PM2,5 mass concentration of suspended particulate matter".

The said test methods are equivalent in terms of filter mass measurement and filter conditioning prior to and past exposition, and in consequence in terms of method of calculation of concentration of particulate matter PM2.5 and PM10, specified by EN 12341:2014 standard ,,Ambient air. Standard gravimetric measurement method for the determination of the PM10 or PM2,5 mass concentration of suspended particulate matter". The RB 2.4Y.F automatic weighing system is presented in Annex 1.

Instytut Podstaw Inżynierii Środowiska
Polskiej Akademii Nauk
ul. M. Skłodowskiej-Curie 34
41-819 Zabrze
tel. 32 271-64-81, sekr. 32 271-70-40
fax 32 271-74-70, NIP 648-000-67-20

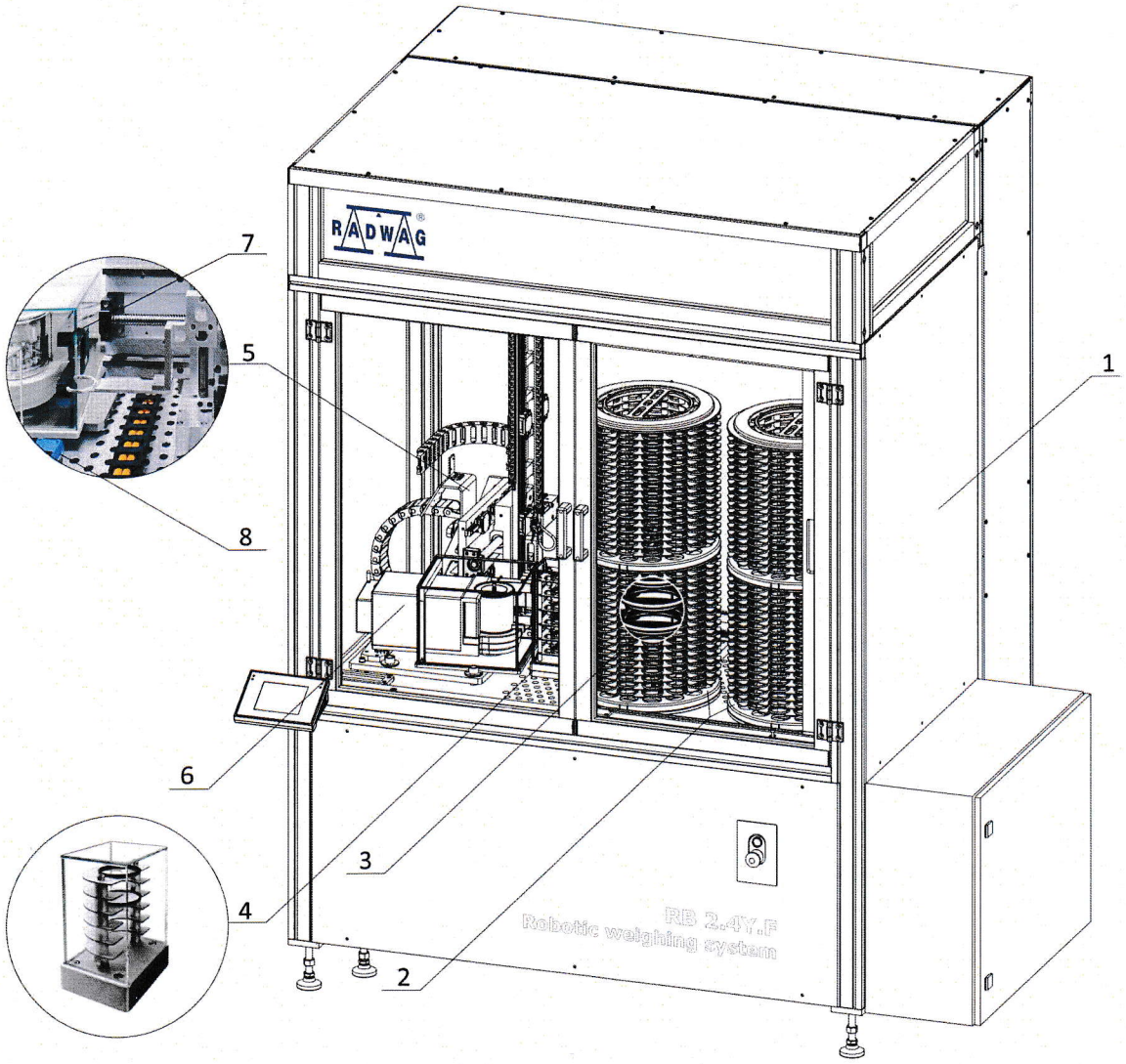
Date of issue of the certificate January 12, 2021

Institute of Environmental Engineering
Polish Academy of Sciences

The stated equivalence concerns the measuring device construction of which is presented in Figure 1. Any modifications of the construction require retesting, aiming to check the equivalence again if the modifications are significant with regard to carried out analysis accuracy (i.e. they concern mass measurement system, systems for maintenance of ambient conditions).

Annex 1

Construction of the RB 2.4Y.F robotic measuring system



Key:

1 Housing
2 Filter magazine
3 Filter cassette
4 Reference magazine
5 Robotic system
6 Microbalance
7 Ionizer
8 QR code reader

Instytut Podstaw Inżynierii Środowiska
Polskiej Akademii Nauk
ul. M. Skłodowskiej-Curie 34
41-819 Zabrze
tel. 32 271-64-81, sekr. 32 271-70-40
fax 32 271-74-70, NIP 648-000-67-20

Date of issue of the certificate January 12, 2021

Institute of Environmental Engineering
Polish Academy of Sciences