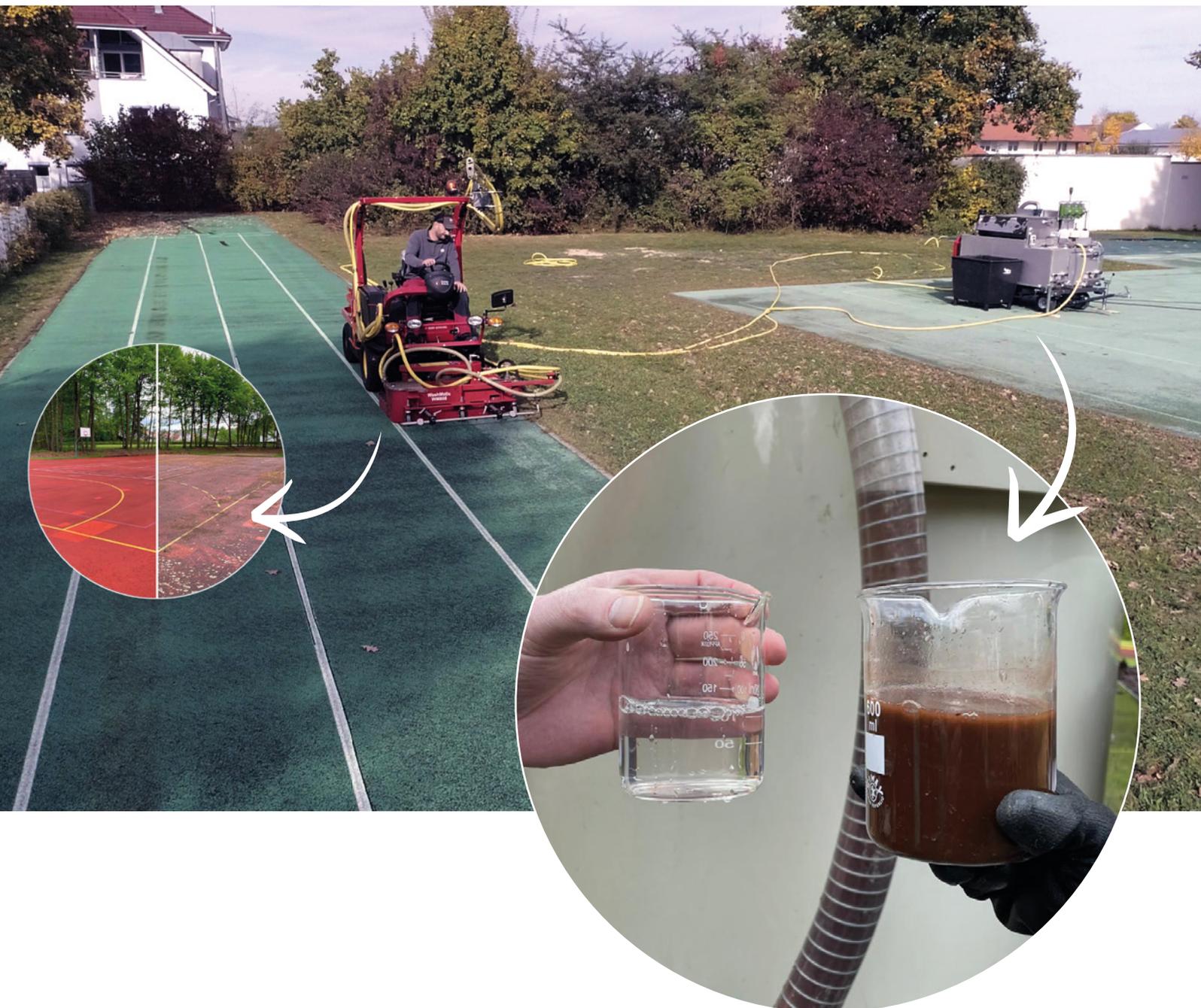


## THE CLEAR PROOF OF A SUSTAINABLE CONCEPT FOR CLEANING AND WASTE WATER TREATMENT ON SPORTS FACILITIES – **WASHMATIC WM800 AND CLEARMATIC CM1800 FROM SMG**

The WashMatic WM800 uses its patented high-pressure water process to clean synthetic sports surfaces such as unfilled artificial turf, running tracks, multi-purpose playing fields and similar surfaces. The SMG world first ClearMatic CM1800, a mobile treatment plant, thoroughly removes pollutants from the dirty water taken in by the WM800. Like metals and microplastics, these are almost completely bound in the concentrated sludge and the water is treated in such a way that it is returned crystal clear to the WM800 and used there again for cleaning.

During a field test in Ursberg (Bavaria), samples were taken from the cleaning process and wastewater treatment and analyzed in the laboratory. The convincing results of the new complete system far surpass all previously achieved values and are unsurpassed in the industry worldwide.





The following water quality was achieved after cleaning the synthetic sports surface:

- 99.0% LESS **TURBIDITY**
- 99.9% LESS **IRON**
- 96.2% LESS **AMMONIUM N**
- 99.9% LESS **ALUMINUM**
- 99.8% LESS **PHOSPHORUS**
- 99.5% LESS **CSB (ORGANIC)**
- 95.5% LESS **KW INDEX**



# COMPLETE LABORATORY TEST AFTER FIELD TEST IN URSBERG (BAVARIA)

RELEASE: 3rd February 2022

	Water analysis in general*		Analysis of microplastics**		Reduction	Target values / limit values Drinking water Excerpt or guideline values	Target values / limit values Waste water surface water (reference values)
	Input	Output	Input	Output			
Location of the sampling	Sports ground D-Ursberg	Sports ground D-Ursberg	Sports ground D-Ursberg	Sports ground D-Ursberg			
Wastewater type	Analysis result waste water - dirty water	Analysis result waste water - clear run	Analysis result waste water - dirty water	Analysis result waste water - clear run			
Date of the sampling	6/18/21	6/18/21	6/15/21	6/15/21			
pH	5,66	7,48	./.	./.		approx. 6,8-7,2	6,5-10
Guiding values in µS/cm	977,00	381,00	./.	./.	-61,0 %	Limit value according to the Drinking Water Ordinance: 2.790 µS/cm	locally different
Turbidity NTU	>800,00	11,00	./.	./.	-99,0 %	1,0 NTU	locally different
Fluorides mg/l	<0,5	<0,5	./.	./.		1,5 mg/l	50 mg/l
Nitrates mg/l	<0,08	<0,08	./.	./.		50 mg/l	50 mg/l
Iron mg/l	100,00	0,04	./.	./.	-99,9%	200 mg/l	3 mg/l
Ammonium-N mg/l	34,00	1,30	./.	./.	-96,2 %	0,5 mg/l	100 mg/l
Aluminum mg/l	44,00	0,02	./.	./.	-99,9%	0,2 mg/l	2-3 mg/l
Phosphorus mg/l	21,00	0,05	./.	./.	-99,8 %	6,7 mg/l	50 mg/l
CSB (Organic) mg/l	10.000,00	55,00	./.	./.	-99,5 %	150 mg/l	800 mg/l
KW-Index (detection limit <0,1 mg/l)	2,00	0,09	./.	./.	-95,5 %	20 mg/l	100 mg/l
Naphtalin µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Acenaphthylene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Acenaphthene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Fluor µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Phenanthrene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Anthracene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Fluoranthene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Pyrene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Benzo(a)anthracene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Chrysene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Benzo(b)fluoranthene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Benzo(k)fluoranthene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Benzo(a)pyrene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Dibenz(ah)anthracene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Benzo(ghi)perylene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
Indeno(1,2,3-cd)pyrene µg/l	./.	./.	<0,20	<0,20		EU regulations follow	EU regulations follow
PP (Polypropylene) µg/l	./.	./.	<50	<20		EU regulations follow	EU regulations follow
PE (Polyethylene) µg/l	./.	./.	<50	<20		EU regulations follow	EU regulations follow
PET (Polyethylene terephthalate) µg/l	./.	./.	<50	<20		EU regulations follow	EU regulations follow
PS (Polystyrene) µg/l	./.	./.	<50	<20		EU regulations follow	EU regulations follow
Total mass of microplastics µg/l	./.	./.	<50	<20		EU regulations follow	EU regulations follow
Weight for screening g	./.	./.	3,62	< detection limit		EU regulations follow	EU regulations follow
Fraction > 5,00mm Weight%	./.	./.	3,10	< detection limit		EU regulations follow	EU regulations follow
Fraction > 500 µm Weight%	./.	./.	0,00	< detection limit		EU regulations follow	EU regulations follow
Sieve residue Weight%	./.	./.	37,60	< detection limit		EU regulations follow	EU regulations follow

\* Research / Analysis No. AB2108164/SMALOE21-ab

\*\* Research / Analysis No. CAL-20-0978

## ► More information about the WM800 and CM1800:



WashMatic WM800



ClearMatic CM1800



WM800 + CM1800 product video

