



**Accelerated  
Weathering  
Instrument  
BANDOL WHEEL®  
532**

**Optional for  
„dry“  
weathering cycles  
  
or  
  
„wet/dry“  
weathering cycles**

**with  
exceptionally large  
exposition surface**



testing equipment for quality management

**ERICHSEN**  
since 1910

**Technical Description**

**PrEN 16472  
NF T 51-195-5  
ISO 4892-1**

**Photo-ageing instrument  
for acceleration of  
natural weathering**

## Purpose and Application

**BANDOL WHEEL® 532** is a reliable accelerated weathering instrument in a compact design for acceleration of natural weathering.

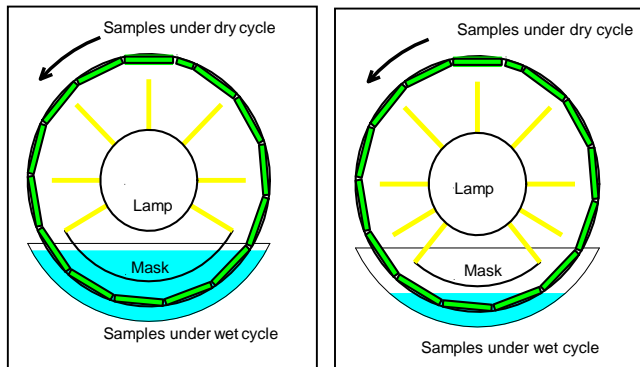
## Design and Function

**BANDOL WHEEL® 532/I** – designed for "Dry" weathering cycles, has been developed for the simulation of purely dry climates, to reproduce the photo oxidation process without influence of water.

**BANDOL WHEEL® H 532/II** is the „Wet / Dry“ version and is based on the classical version of the equipment in which an immersion phase of the samples has been added.

To achieve this, a tank has been installed in the lower part of the test chamber. The regulation of the solution's level in this tank allows to adjust the proportion between „Wet or Dry“ cycles from a very precise, sure and reproducible way.

To complete the weathering cycle, a mask can be added in the equipment which permits the **introduction of obscurity phases** without switching off the light source (increase of the lamp lifetime).



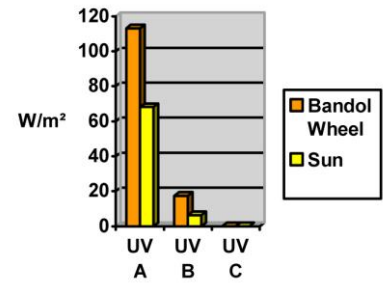
The average temperature homogeneity and radiation over each exposed sample are ensured by the rotation of the rack around the horizontal axis. This leads to optimal test reproducibility and reliability.

An advantage is the exceptionally large exposition surface (more than 100 samples of 1 cm width) in relation to its size.

The BANDOL WHEEL® System, together with the regulation of the temperature by a micro-controller, allows to obtain results that classical instrument can not achieve.

A mean pressure mercury lamp, whose bulb is enclosed in a borosilicate shell, was selected as the light source. The main advantages are: excellent efficiency of UV radiation (3 times more than Xenon lamps); negligible emission of UV C; balance UV A-UV B similar to the global radiation on the Earth surface; long lifetime and a very weak altering of the spectrum during the lifetime of the lamp.

The samples get a nominal UV radiation level corresponding to about "2 suns". This permits an important acceleration in weathering that, at the same time, still correlates with natural weathering.



## Technical Data

Dimensions (WxHxD) approx. 590 x 470 x 410 mm

Weight, net 532/I approx. 30 kg  
532/II approx. 32 kg

Power supply 230 VAC, 50 Hz, single phase, 6 A fuse

Power consumption max. 500 W

Solution consumption (532/II) approx. 2 l/day

Light source 400 W air cooled mercury discharge lamp

Temperature 532/I 55 °C - 80 °C  
532/II 45 °C - 80 °C

Exposure area up to 1272 cm<sup>2</sup>

Order Information	
Ord.-No.	Product Description
0532.01.51	<b>Accelerated Weathering Instrument BANDOL WHEEL® 532/I</b> for "dry" weathering cycles
0532.02.51	<b>Accelerated Weathering Instrument BANDOL WHEEL® H 532/II</b> for "wet or dry" weathering cycles
The scope of supply includes: 1 main cable 1 manual	

The right of technical modifications is reserved.  
Group 21- TBE 532 – VIII/2015