# MWX Oxygen-Based Ozone Generator Data

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Ozone Production (gO3/h)</th>
<th>Ozone Concentration (gO3/Nm³)</th>
<th>Ozone Gas Flow (Nm³/h)</th>
<th>Cooling Water Flow (l/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWX-3.0</td>
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<td>159</td>
<td>20</td>
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<td>5,291</td>
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</tr>
</tbody>
</table>

* Ozone generation system with different capacities available upon request.
* Standard specifications of the main power supply are 480V/3φ/50Hz, 3000W.
* Ozone concentration of the feed gas is assumed to be 16% or higher, with negligible hydrocarbons & dewpoint of less than -40°C.

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Information in this catalog is subject to change without notice

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**METAWATER Co., Ltd.**

BEYOND ENGINEERING

Ozone Generation System

MWX Series
Ozone Treatment—An Environmental Alternative
METAWATER Ozone Generation System

- 40 years experience & Proven Track Record
- Ultra reliable & high quality & State-of-the-art advanced technology
- Easy to operate & maintain
- Low operating & maintenance cost
- Designed for safe operation
- Proven post-startup support & services

**Principle of Ozone Generation**

High voltage Alternating Current (A.C.) is applied to two electrodes creating a silent discharge; such high voltage discharge converts oxygen into ozone molecules.

**STEP 1**
Oxygen (O₂) gas passes between two electrodes under a high voltage environment.

**STEP 2**
Under high voltage condition, oxygen molecules are converted into oxygen radicals (single O₁).

**STEP 3**
Oxygen radicals (O₁) react with another Oxygen molecule to form ozone.

METAWATER continues to adopt the long proven Micro Gap™ glass-lined dielectric core technology for our ozone generating equipment. The enhancement made over 20 years ago to include doubling cooling (for inner high voltage electrode cooling) remains unchanged. Recent enhancement to the Micro Gap™ core technology includes a further reduction in discharge gap resulting in power savings. Modification to the existing doubling cooling inlet and outlet arrangement provides uniform forced water cooling of each high voltage electrode ensuring longevity of dielectric assembly.

**Configuration of Micro Gap™ Ozone Dielectric Assembly**

[Images of ozone generation process and equipment]