Traser-O-Meter (TOM)
Cooling Tower and Boiler Systems Monitoring & CONTROL

Part I

-By Deepak Chopra
Traser-O-Meter (TOM) are commonly used in I-SOFT dosing control systems for Cooling Tower and Boiler System applications.

Traser™ dyes are added to the I-SOFT formulations and their levels provide an indication as to whether the I-SOFT dosing is in the desired range. Traser-O-Meters can also be used for tracking product quality through a distribution system to ensure dilution does not occur. Using Traser-O-Meter for Cooling Towers, Boilers, Heat Exchangers, Reverse Osmosis and Many Other Applications.
To Monitor and Control Industrial Processes
It is the easiest way to improve Quality and Service
Increase efficiency and reduce operating costs

Product Highlights (I-TOM):

- TOM Inline meter is low cost
- Accurate In-Line measurement of I-SOFT
- Compact package for easy system integration
- Install into your process flow with a PVC Tee
- 4-20 mA output allows integration with existing control units
- Rugged solid state design for 24x7 operation with simple maintenance

TOM NEVER GET TIRED!
**I-TOM** is a registered trade name of Watch® Water Technologies. This Intelligent Traser-O-Meter is a low cost, compact design for optical measurement of **OPTI-TRASER™** Dosing chemicals.

**I-TOM** is designed for monitoring and/or controlling the precision dosing of I-SOFT in all Cooling Towers, Chillers, Heat Exchangers, Boilers, Heating systems and Reverse Osmosis applications. Integration of **I-TOM** into your application/automation system enables absolute correct dosing of chemicals to be implemented and confirmed. The **I-TOM** comes in a durable rugged package to work as a 24x7 Device providing maximum performance, minimum maintenance and solid state reliability.
## Technical Data

*(to request more information click here)*

### I-TOM Performance Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic Range</td>
<td>&lt; 1 to 300 ppb typical for PTSA</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>&lt; 1 to 100 ppb typical for fluorescein</td>
</tr>
<tr>
<td></td>
<td>&lt; 1 ppb typical</td>
</tr>
</tbody>
</table>

### I-TOM Operation Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Draw</td>
<td>0.96 W @ 12 VDC (1.2 W maximum)</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>8-30 VDC</td>
</tr>
<tr>
<td>Signal Output</td>
<td>4-20 mA</td>
</tr>
<tr>
<td>Warm up time</td>
<td>5 seconds</td>
</tr>
</tbody>
</table>

### I-TOM Physical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>PVC – Type I, machined plastic</td>
</tr>
<tr>
<td>Weight:</td>
<td>95 g (3.35 ounces)</td>
</tr>
<tr>
<td>Length:</td>
<td>15.04 cm (5.92 inches)</td>
</tr>
<tr>
<td>Housing Diameter:</td>
<td>2.67 cm (1.05 inches)</td>
</tr>
<tr>
<td>Maximum Diameter:</td>
<td>3.91 cm (1.54 inches)</td>
</tr>
<tr>
<td>Temperature:</td>
<td>0 – 50 °C (32 - 122 °F)</td>
</tr>
</tbody>
</table>

### Mounting Tee Physical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>PVC – Type I, molded plastic</td>
</tr>
<tr>
<td>Dynamic Pressure:</td>
<td>7 bar (100 psi)</td>
</tr>
<tr>
<td>Threading (NPT):</td>
<td>2.54 cm (1 inch)</td>
</tr>
<tr>
<td>Length:</td>
<td>8.74 cm (3.44 inches)</td>
</tr>
</tbody>
</table>
TOM is a Low Cost Service Guy!

Product Highlights (Hi-TOM):

- **Hi-TOM** is Dustproof and Watertight
- It comes in a highly durable case
- Small size easily fits in a shirt or jacket’s pocket
- Operates on 4 AAA batteries for >1000 measurements per set
- Dual channel allow for quick toggling between two applications
- Single-point plus blank calibration
- 12 bit resolutions (high precision)
- 5 seconds warm up
- Low maintenance field Traser-O-Meter

**TOM is the BEST FRIEND for all Operators!**
Handheld Intelligent Traser-O-Meter (Hi-TOM)

The perfect tool for fast system verification!

**Hi-TOM** is a registered trade name of Watch® Water Technologies. Handheld Traser-O-Meter is a small, lightweight, highly durable offline measuring device that is ideal for **Quick Measurements** in the Water Treatment field. Dual channel capability enables measurement for Cooling Towers, Chillers, Boilers, Heat Exchangers, Heating Systems and Reverse Osmosis applications. Watch® Hi-TOM is simple to operate.

**Technical Data (Hi-TOM)**

**Linear Range:**
- 0-400 ppb typical for fluorescein
- 0-1000 ppb typical for PTSA

**Sensitivity:**
- <1ppb typical for fluorescein and PTSA

**Temperature:** 5° - 40ºC (41° - 104ºF)

**Warm-up Time:** 5 seconds

**Case:** IP 67 standard; dustproof/waterproof

**Power:** 4 AAA batteries

**Light Source:** LED

**Detector:** Photodiode

**Weight:** 0.4 kg ; 13.9 oz

**Size:** 4.45 cm x 8.9 cm x 18.4 cm

1.75”x 3.5”x 7.25”

(to request more information click here)
Cooling Tower Installation

Typical Cooling Water Circulation installation

Dosing Chemicals:
- OPTI-TRASER-ISOFT OB
- OPTI-TRASER-ISOFT NB
Typical Boiler Water Circulation installation (continuous sampling)
The Perfect Watch® formulas for

Superior Value = Increased Sales and Profitability

Watch® Water Technology makes the 21st century water treatment products available to our business partners. The experience of our 35 years of history started with making chemicals for water treatment industry, our relationships with our supplies, and our understanding of your needs in SUPERIOR TECHNOLOGY OPTIONS.

Coming Next: Presentation on OPTI-INSTANT-ISOFT (Part II)

Thanks for reading!