

ANALYTICAL TOOLS	METHOD	RANGE
TDS Meter	Instrumental	Upto 1900 ppm and upto 10 ppt
Conductivity Meter	Instrumental	Upto 1900 uS/cm and upto 19.9 mS/cm
pH Meter	Instrumental	0 - 14
Dip Slides - For analysis of total bacterial and E-Coli count	Slides	-
Cation Conductivity Column	Resin	-

## Experience the benefits with **INDION® EASYTEST**

TRADITIONAL WAY	EASYTEST WAY
Water sample has to be taken to the laboratory	Water sample can be tested on the spot, at site
Testing requires glassware, burretes, solutions	Testing is simple with easy-to-use outfits
Requires a trained chemist	Can be done by an operator
Time lag between sampling and result. Possibility of change in sample during storage	Results are quick; no possibility of change in sample during storage
Frequency of testing restricted	Testing can be done as frequently as desired
Accurate	Accurate within defined limits

**INDION® EASYTEST** Water Quality products are manufactured to stringent ISO 9001 standards and are readily available with our countrywide network of dealers and service companies.

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice.

**INDION** is the registered trademark of Ion Exchange (India) Ltd.

### ION EXCHANGE (INDIA) LTD.

#### Corporate Office

Ion House, Dr. E. Moses Road, Mahalaxmi, Mumbai - 400011  
Tel: +91 22 3047 2042 | E-mail: [ieil@ionexchange.co.in](mailto:ieil@ionexchange.co.in)

#### Regional and Branch Offices

- Bengaluru:** Tel: +91 88 2204 2888  
E-mail: [bngcro@ionexchange.co.in](mailto:bngcro@ionexchange.co.in)
- Bhubaneswar:** Tel: +91 674 326 9525 / 257 1491  
E-mail: [bbsr@ionexchange.co.in](mailto:bbsr@ionexchange.co.in)
- Chandigarh:** Tel: +91 172 274 5011  
E-mail: [delcro@ionexchange.co.in](mailto:delcro@ionexchange.co.in)
- Chennai:** Tel: +91 44 3910 2900  
E-mail: [checro@ionexchange.co.in](mailto:checro@ionexchange.co.in)
- Delhi:** Tel: +91 11 3354 5800  
E-mail: [delcro@ionexchange.co.in](mailto:delcro@ionexchange.co.in)
- Hyderabad:** Tel: +91 40 3066 3101 / 02 / 03  
E-mail: [hydcro@ionexchange.co.in](mailto:hydcro@ionexchange.co.in)
- Kolkata:** Tel: +91 33 3043 3400  
E-mail: [calcro@ionexchange.co.in](mailto:calcro@ionexchange.co.in)
- Lucknow:** Tel: +91 522 319 9911  
E-mail: [lko.general@ionexchange.co.in](mailto:lko.general@ionexchange.co.in)
- Vadodara:** Tel: +91 265 302 7489 / 90  
E-mail: [brdcro@ionexchange.co.in](mailto:brdcro@ionexchange.co.in)
- Vashi:** Tel: +91 22 2777 0000  
E-mail: [mumcro@ionexchange.co.in](mailto:mumcro@ionexchange.co.in)
- Visakhapatnam:** Tel: +91 891 324 6253  
E-mail: [sales.vizag@ionexchange.co.in](mailto:sales.vizag@ionexchange.co.in)

#### International Division

R-14, T.T.C MIDC, Thane - Belapur Road, Rabale, Navi Mumbai - 400 701 | Tel: +91 22 3913 2400  
E-mail: [export.sales@ionexchange.co.in](mailto:export.sales@ionexchange.co.in)

#### Overseas Offices

- Bahrain:** Tel: +973 77 27 8899  
E-mail: [iei.bahrain@ionexchange.com](mailto:iei.bahrain@ionexchange.com)
- Bangladesh:** Tel: +880 2 9820230-32  
E-mail: [mj.sheikh@ionexchange.co.in](mailto:mj.sheikh@ionexchange.co.in)
- Canada:** Tel: +1 905 915 5504  
E-mail: [malvin.kalsi@ionexchange.com](mailto:malvin.kalsi@ionexchange.com)
- East Africa:** Tel: +254-786649102, +254715739052  
E-mail: [maksudur.rahman@ionexchange.co.in](mailto:maksudur.rahman@ionexchange.co.in)
- Indonesia:** Tel: +62-21-89329088 / 89329053  
E-mail: [ionexchange@dnf.net.id](mailto:ionexchange@dnf.net.id)
- Oman:** Tel: +968-24697697 / +968-24696354  
E-mail: [info@ionexchange-oman.com](mailto:info@ionexchange-oman.com)
- Saudi Arabia:** Tel: +966 13 887 8888  
+966 580493568 / +966 503883288  
E-mail: [velan@ionexchange.co.in](mailto:velan@ionexchange.co.in)
- Singapore:** Tel: +65 66734361  
E-mail: [manocha.anil@ionexchange.co.in](mailto:manocha.anil@ionexchange.co.in)
- South Africa:** Tel: +27 11 4064060 / 4064000  
E-mail: [gourish.chakravorty@ionexchange.co.in](mailto:gourish.chakravorty@ionexchange.co.in)  
E-mail: [gourish@ionexchangesafic.co.za](mailto:gourish@ionexchangesafic.co.za)
- Tanzania:** Tel: +254786649102 / +255 757 833 461  
+255 687 884 244  
E-mail: [maksudur.rahman@ionexchange.co.in](mailto:maksudur.rahman@ionexchange.co.in)
- Thailand:** Tel: +66-2 246 7211  
E-mail: [gaurav.khullar@ionexchange.co.in](mailto:gaurav.khullar@ionexchange.co.in)
- UAE:** Tel: +9716 5261606, 5261909  
E-mail: [uaesales@ionexchange.com](mailto:uaesales@ionexchange.com)

Factories: Ankleshwar | Hosur | Patancheru | Rabale | Verna

All India Service and Dealer Network

[www.ionindia.com](http://www.ionindia.com)

C11682 - 09191.5K

**ION EXCHANGE**  
Refreshing the Planet



Regular analysis of water is essential for the maintenance of raw water, potable water boilers, cooling towers, softeners and demineralisers — vital to the operations of almost all process industries. Ion Exchange offers a complete range of INDION EASYTEST Water Quality Products — individual outfits, combination kits and refills to accomplish this task.

Conventional procedures for water analysis require elaborate laboratory set-up and qualified personnel. The INDION EASYTEST Water Quality Products replace analytical procedures such as titrimetric, colorimetric/spectrophotometric by simple drop test and standard colour comparison methods. These can be carried out by the operators themselves, making monitoring and preventive action very quick and convenient.

INDION EASYTEST is a simpler adaptation of classical chemical analysis methods mainly based on standard methods for examination of water and waste water.

## Combination Kit

**INDION® Cooling Water Analysis Kit:** It contains all important tests in a universally accepted range - pH, Calcium Hardness, Alkalinity, Chloride, Phosphate, Free Chlorine, Silica, Iron and Zinc.

**INDION® Boiler Water Analysis Kit:** It contains all important tests in a universally accepted range - pH, Total Hardness, Calcium Hardness, Phosphate, Chloride, DEHA, Hydrazine, Sulphite, Iron and Silica.

**INDION® Cation Conductivity Column:** The INDION CCC (Cation Conductivity Column) features a design to achieve optimum resin efficiency with superior performance at typical flow rates required by conductivity analysers. It is designed for water flow from top to bottom. Colour change of the resin will progress from top to bottom with use. When the colour changes completely, it is time to change the resin.

**NEW INDION® Water Potability Test Kit:** It measures the eight most important chemical parameters of drinking water within the range specified by the Bureau of Indian Standards - pH, Total Hardness, Alkalinity, Chloride, Fluoride, Chlorine, Iron and Nitrate.

**NEW INDION® RO water Test Kit:** It contains all important tests conducted in RO Feed water and reject - pH, Total hardness, Calcium hardness, Chloride, Silica, Sulphite, FRC and Iron.

**NEW INDION® Product Residual test kit:** It contains all important tests whose residual need to be maintained in Cooling water and boiler water - Zinc, Sulphite, Tannin, Ortho phosphate, FRC and DEHA.

**NEW INDION® E-coli test kit:** Water borne diseases like typhoid, cholera and diarrhoea are rampant due to faecal contamination of drinking water. This test kit helps to indicate the formation of sulphide and hence faecal contamination.



MODELS	TEST	METHOD	APPLICATION					
pH 4.5 - 9.0 BX	pH - pH of water indicates the intensity of acidic/basic nature. Low pH is corrosive to the system whereas high pH causes scaling.	Colorimetric	RW, BW, CW					
Hardness - 25 BX Hardness - 100 BX Hardness - 500 BX Hardness - 1000 BX	Total hardness - Calcium and magnesium can precipitate and cause scaling in boilers, cooling towers and heat exchangers in cooling systems.	Titrimetric	RO, Softener, Bore well, RW, BW, CW					
Calcium - 25 BX Calcium - 100 BX Calcium - 500 BX Calcium - 1000 BX	Calcium hardness - Calcium can precipitate and cause scaling in boilers, cooling towers and heat exchangers in cooling systems.	Titrimetric	RO, Softener, Bore well, RW, BW, CW					
Alkalinity - 25 BX Alkalinity - 100 BX Alkalinity - 500 BX Alkalinity - 1000 BX	Total alkalinity - Alkalinity measurement is important to maintain pH of boilers and cooling towers. It is primarily a function of bicarbonates, carbonates and hydroxides.	Titrimetric	RO, Softener, Bore well, RW, BW, CW					
Chloride - 25 BX Chloride - 100 BX Chloride - 2000 BX	Chloride - Excess chloride in water may lead to corrosion in boilers, cooling towers and heat exchangers in cooling systems. It also indicates the cycle of concentration in boilers and cooling towers under certain conditions.	Titrimetric	RO, Softener, Bore well, RW, BW, CW					
Fluoride - 2.5 BX	Fluoride - Its permissible limit in drinking water is 1 mg/l. Above this level it causes dental and skeletal fluorosis.	Colorimetric	PW					
Sulphite - 100 BX	Sulphite - Boiler feed water is treated with sulphite to control dissolved oxygen. Excess sulphite may lead to corrosion.	Titrimetric	BW					
Silica - 200 BX Silica - 80 BX Silica - 3 BX Silica - 0.25 BX	<table border="0"> <tr> <td>Silica - high range</td> <td rowspan="4">} Silica in water is undesirable for a number of industrial usages as it forms silicate scales, which are difficult to remove.</td> </tr> <tr> <td>Silica - medium range</td> </tr> <tr> <td>Silica - low range</td> </tr> <tr> <td>Silica - ultra low range</td> </tr> </table>	Silica - high range	} Silica in water is undesirable for a number of industrial usages as it forms silicate scales, which are difficult to remove.	Silica - medium range	Silica - low range	Silica - ultra low range	Colorimetric Colorimetric Colorimetric Colorimetric	RW, CW RW, CW BW DM, MB
Silica - high range	} Silica in water is undesirable for a number of industrial usages as it forms silicate scales, which are difficult to remove.							
Silica - medium range								
Silica - low range								
Silica - ultra low range								
Iron - 3.5 BX	Iron - Iron present in source water or from corrosion of steel can oxidise to form rust deposits within boilers, cooling towers and heat exchangers.	Colorimetric	RW, BW, CW					
FRC - 2 BX FRC - 4 BX	Free residual chlorine - For effective disinfection, a residual level of chlorine is required.	Titrimetric	CW					
Hypochlorite - 12.5 BX	Hypochlorite - Hypochlorites are highly dispersible disinfectants used in cooling towers which need regular monitoring.	Titrimetric	CW					
ClO <sub>2</sub> - 2 BX	Chlorine dioxide - Chlorine Dioxide is used as disinfectant, deodorant and oxidising agent in various operations. It is an important parameter to be monitored properly.	Titrimetric	CW					
Bromine - 2 BX	Bromine - Bromine is a disinfectant for alkaline water, but it is corrosive so proper monitoring is essential.	Titrimetric	CW					
Ortho phosphate - 10 BX Ortho phosphate - 50 BX	Ortho Phosphates - Ortho Phosphates are used for controlling corrosion in cooling system and pH elevation and softening in boiler water. Ortho phosphate residual is to be maintained in water.	Colorimetric	BW, CW					
Phosphonate - 5 BX	Phosphonate - Phosphonate acts as an antiscalant and corrosion inhibitor in various application, therefore its residuals are important to ensure proper corrosion and scale control.	Titrimetric	CW, BW					
Zinc - 5 BX	Zinc - Zinc is an important corrosion inhibitor in CW systems, therefore its residuals are important to ensure proper corrosion protection.	Titrimetric	CW					
Nitrite - 2500 BX Nitrite - 250 BX	<table border="0"> <tr> <td>Nitrite - high range</td> <td rowspan="2">} Nitrite is used in closed cooling systems for corrosion protection.</td> </tr> <tr> <td>Nitrite - low range</td> </tr> </table>	Nitrite - high range	} Nitrite is used in closed cooling systems for corrosion protection.	Nitrite - low range	Titrimetric Titrimetric	CW CW		
Nitrite - high range	} Nitrite is used in closed cooling systems for corrosion protection.							
Nitrite - low range								
Nitrate - 100 BX	Nitrate - Nitrates are used as corrosion inhibitors in closed cooling water systems where its concentration is monitored on a regular basis.	Colorimetric	CW					
DEHA - 0.35 BX	DEHA - DEHA is a volatile passivating oxygen scavenger. To ensure proper removal of oxygen, precise residual monitoring is essential.	Colorimetric	BW					
Hydrazine - 2 BX	Hydrazine - Hydrazine is a volatile oxygen scavenger for boilers. Its minimum concentration needs to be maintained to ensure complete oxygen removal.	Colorimetric	BW					
INDION 155	INDION 155 - This test kit helps to check the residual to ensure complete oxygen removal from the system.	Titrimetric	BW					

PW - Potable Water BW - Boiler Water CW - Cooling Water DM - Demineralisation MB - Mixed Bed RW - Raw Water