

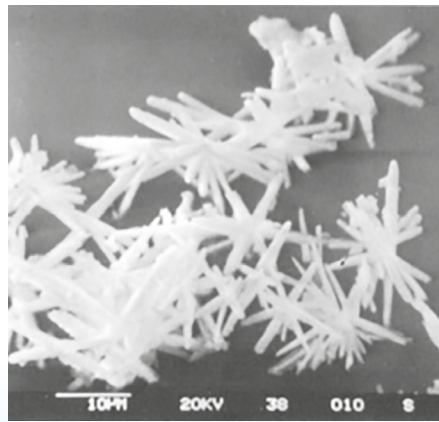
ELECTRONIC ANTI-SCALE DEVICES

FUNCTIONING PRINCIPLE

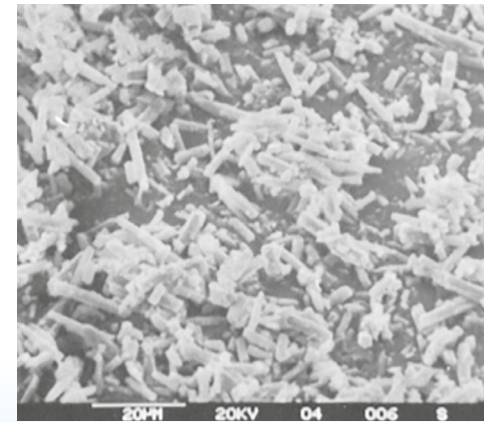
Electrostatic anti-scale treatment occurs when hard water passes through an electrostatic field expressly created by a control unit. Such electrostatic field will not cause any physical or chemical variation to the water, but it breaks salt ion bonds (calcium and magnesium) and it prevents the ion sedimentation.

SEDIMENTATION

The sedimentation in boilers, kettles, pipes, etc. is composed by small, interlaced and scalene-shaped crystals that form a thick and hard crust. The electrostatic field modifies the precipitation form from a scalene to a diamond-shaped. Therefore, the bonding strength between the crystals falls, preventing the sedimentation.



Before treatment.



After treatment.

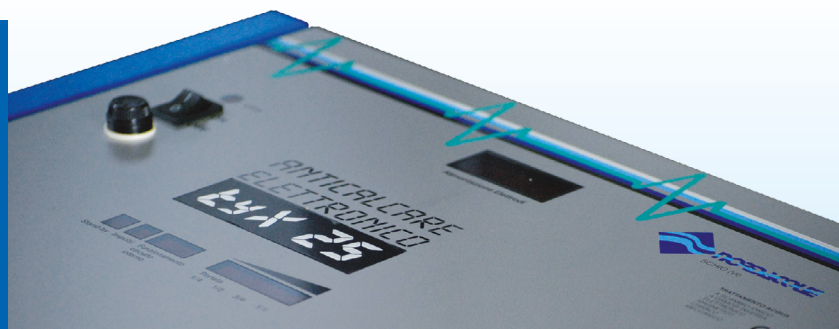
APPLICABILITY

- **Hot and cold water distribution networks** (domestic and industrial use)
- **Refrigerating equipment**
- **Water cooling systems**
- **Washing devices**
i.e. dishwasher, bottle washer
- **Boilers for hot water production** (for domestic and industrial systems)
- **Thermal water**
- **Swimming pools**

ADVANTAGES OF ELECTRONIC TREATMENT COMPARED TO IONIC EXCHANGE (softening)

- **No water mutation**
physical and chemical features of water remain unchanged
- **No consumption of chemical products**
the electrostatic treatment is a physical process (not chemical) affecting dissolved scale in water; therefore, nothing will be added or removed
- **No discharge**
no regeneration or chemical washes required
- **No maintenance**
the only maintenance work is an annual electrode cleaning, where the electrostatic field takes place
- **Descaler action**
on pre-existing sedimentations

TyX and FTyX antiscala devices are efficient and solid systems. Minimum maintenance required. Internal and external piping system made of stainless AISI 316; Electronic display;



Antiscale devices mod. TyX



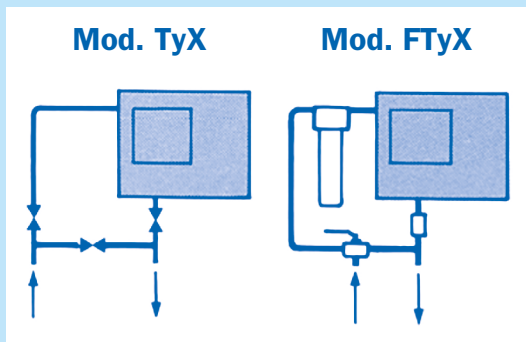
Antiscale devices mod. FTyX



TECHNICAL DATA ANTISCALE DEVICES TyX and FTyX

Maximum pressure	7 ate	Max. conductivity rate	3000µS/cm
Test pressure	10 ate	Ph rate	5 ÷ 12
Maximum temperature	60 °C	Chloride rate max.	1200 mg/l
Power supply	220V / 50Hz	Iron rate max.	2,5 mg/l
Nominal power	20 W	Maximum water hardness	75 °F

INSTALLATION



The **TyX electronic antiscale device** must be installed on the wall or on vertical brackets. It must be protected from the cold and from heat sources and it must be provided with a by-pass to ensure the electrode cleaning (in the **FTyX series** there is no need of external by-pass because it is already provided); In the FTyX 25 and 30 series, an air vent is already provided on the top side of the filter. When antiscale device TyX is electrically connected, it displays the **energetic absorption** to maintain the electrostatic field. The device is provided with a heat indicator and a warning light, which warns the user about the electrode maintenance (recommended once a year).

MODEL	Head max lt/h	Load loss (Ate)	Bindings	Sizes (cm)	Sizes FTyX series (cm)	Weight (kg)	Weight FTyX series (kg)
TyX 20	3	0,25	¾"	36x30x14	62x53x15	8,5	11
TyX 25	4	0,25	1"	36x30x14	62x53x15	8,5	11
TyX 30	6,5	0,25	1" 1/4	36x30x14	62x53x15	9,5	14
TyX 35	9	0,2	1" 1/2	53x42x18	92x67x18	16	30
TyX 50	16	0,2	2"	53x42x18	92x67x18	18	32
TyX 65	22	0,15	DN 65	Control unit 31x24x13 Receiver 80x10		26	55
TyX 80	30	0,15	DN 80	Control unit 31x24x13 Receiver 95x12,5		18	70