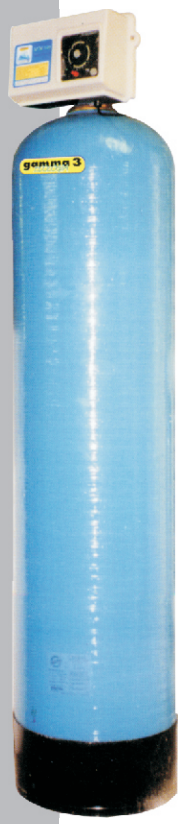
FILTERS TO REMOVE IRON AND MANGANESE

The deferrizers series DFTE, DFTE-p and QFTE are fully automatic systems whose filter bed is defined as a function of the overall characteristics of the water to be treated; usable materials as filter beds are the following:



Pirolusite. Is the common name for the mineral manganese dioxide. IS a mineral extraction with weight content of 40 to 85% of manganese dioxide. With the treatment of pyrolusite you can achieve a degree of iron removal in excess of 20 mg/l.
The pyrolusite is an oxidizing material with high specific gravity of about 4.0.
It can be used in two ways:- Along with the sand and anthracite, in varying percentages (Series QFTE), to combine the filtering power of the sand with the oxidizing properties of pyrolusite;- Using the 100% of pyrolusite (series DFTE) in an adequate filter for oxidation and filtration.No need for chemical regeneration.
No need for chemical regeneration. Requires backwashing better if with insufflation of air, for a correct operation of the filter.

Birm (Burgess Iron Removal Method). Birm is produced through the activation of manganese salts to saturation on a sand of aluminum silicates . Following the manganese ions are oxidized in the solid form with potassium permanganate . To ensure the functionality of the oxidant birm is necessary the presence of dissolved oxygen (DO) in the water to be treated and the alkalinity should be greater than twice the combined concentration of sulphates and chlorides. It may be necessary also be bubbled air to have a dissolved oxygen content that exceeds at least 15% of the iron content, especially if the water to be treated has a concentration of Fe > 3.0 mg / l .
Is the dissolved oxygen oxidizes the iron , while the Birm acts as a catalyst that enhances the reaction between oxygen, dissolved iron and manganese .4-5 mg/l."Birm can not be used for water containing H_2S or organic matter concentration > 4-5 mg / l. Chlorination reduces the efficiency of Birm and lowers considerably its catalytic properties .
For Birm is not necessary No chemical or regeneration.

The absolute non-toxicity and the particular characteristics of these iron removal, make it one of the most common treatment techniques in Europe and the United States. Moreover, thanks to the remarkable versatility of the pilot valves, it is possible to intervene on both the timing and flow of backwashing so as to adapt each plant to the specific water to be treated and the needs of the user.

MODELS of DFTE series

MODEL	filter bed	diameters E/U	electr. power.	dimensions
	lt	incs	V-AC	cm
DFTE 35	35	1"	220 - 24	88(h)x25(d)
DFTE 55	55	1"	220 - 24	165(h)x34(d)
DFTE 85	85	1"	220 - 24	195(h)x35(d)
DFTE 110	110	1"½	220 - 24	195(h)x40(d)

MODELS of DFTE-p series

MODEL	filter bed	diameters E/U	electr. power.	dimensions
DFTE-p 110	110	1"½	220 - 24	195(h)x40(d)
DFTE-p 150	150	1"½	220 - 24	195(h)x50(d)
DFTE-p 250	250	1"½	220 - 24	195(h)x55(d)

Larger systems or with different characteristics may be quoted on request