Electromagnetic screen EEM(50Hz-1MHz)-01

DESCRIPTION

Electromagnetic screen EEM (50Hz-1MHz)-01 is a composite material based on magnetic materials recovered from roasted pyrite, obtained as compact bricks which assures the protection at electromagnetic fields of low frequency and for electromagnetic fields of radiofrequency. It is used as building material in high risk areas of exposure at low frequency and radiofrequency electromagnetic fields.

TECHNICAL CHARACTERISTICS:

Characteristic	Values	UM
Aspect	Rectangular compact plate	-
Apparent density	2.3.....2.9	g/cm^3
Cold resistance (freezing)	After five cycles of freeze – thawing do not appear surface fissure	-
Shock resistance	Nu prezinta fisuri	-
Compression strength	Min. 3.5	daN/cm^2
Extension resistance by bending	Min. 0.6	daN/cm^2
Relative permeability (μ_r) in the frequency range 100 kHz ... 1 MHz	$1.5 \pm 20\%$	-
Conductivity in the frequency range 100 kHz ... 1 MHz	$1.5 \pm 20\%$	S/m
Attenuation of electromagnetic waves depending on frequency: 100 kHz 500 kHz 600 kHz 700 kHz 800 kHz 900 kHz 1 MHz	 $700 \pm 30\%$ $1.7 \times 10^3 \pm 30\%$ $1.9 \times 10^3 \pm 30\%$ $2 \times 10^3 \pm 30\%$ $2.2 \times 10^3 \pm 30\%$ $2.4 \times 10^3 \pm 30\%$ $2.5 \times 10^3 \pm 30\%$	Np/m

Electromagnetic screen for protection in the field of microwaves 800 - 10000 MHz

DESCRIPTION

New protection systems obtained by recovering of ferromagnetic materials from industrial wastes.

TECHNICALE CHARACTERISTICS

Frequency [MHz]			[Sm^{-1}]	[m]	Attenuation [dB]
1292	5.02	2.39	0.56	1.79	32.9
1529	4.09	3.7	0.69	1.45	30.6
2096	9.23	1.29	1.7	0.595	38.8
2498	4.67	2.05	3.03	0.33	42.11

USERS:

Companies with activities in electromagnetic field conditions.

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Relative permeability (,) in the frequency range 100 kHz ... 1 MHz	1.5 ± 20%	-
Conductivity in the frequency range 100 kHz ... 1 MHz	1.5 ± 20%	S/m
Attenuation of electromagnetic waves depending on frequency: 100 kHz 500 kHz 600 kHz 700 kHz 800 kHz 900 kHz 1 MHz	 700 ± 30% $1.7 \times 10^3 \pm 30\%$ $1.9 \times 10^3 \pm 30\%$ $2 \times 10^3 \pm 30\%$ $2.2 \times 10^3 \pm 30\%$ $2.4 \times 10^3 \pm 30\%$ $2.5 \times 10^3 \pm 30\%$	Np/m