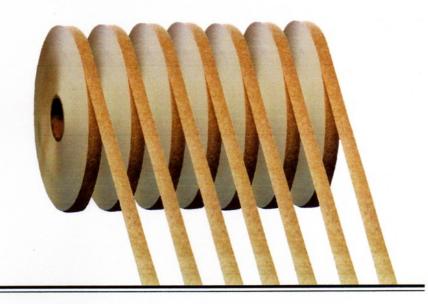


ELECTRICAL INSULATION PAPERS

INSULSTRETCH 42HCF, 32HCF, 22HCF
MAGNET WIRE INSULATION



CINDUS CORPORATION

TECHNICAL CREPED PRODUCTS DIVISION CINCINNATI.OHIO

Insulstretch 42HCF is a 3 mil, highly densified, thermally upgraded, creped/calendered electrical paper with 15–30 percent MD elongation. This grade exhibits very high tensile strength with precision thickness and density. This premium magnet wire insulation is well suited for high speeds and tensions in wire wrapping operations. After the wire is wrapped, this grade will give the maximum amount of protection for small radius bends in the coil winding process for single wire & CTC. Cindus grade 42HCF has proven to be a superior creped/calendered magnet wire insulation.

Insulstretch 32HCF is a 3 mil companion product to 42 HCF. This grade is a lower cost alternative that provides superior tear strength but reduced tensile strength. This grade also offers improved impulse characteristics because of higher density.

Insulstretch 22HCF is a 2 mil, highly densified, thermally upgraded, creped/calendered electrical paper with 15–30 percent elongation. This grade is offered to accommodate different insulation systems that call for space saving 2 mil thickness. This grade also supplies excellent mechanical and insulating characteristics comparable to 42HCF.

The densification process at Cindus Corporation can achieve densities well in excess of 1.0 to provide higher impulse strengths. Cindus can customize the above grades to varying densities by altering the finished thickness.

The thermal upgrading to 2% nitrogen is standard in all magnet wire grades.

Cindus manufactures a premium 3mil & 2mil low power factor paper, Thermostretch-125, that has 25% greater dielectric values for larger transformers.

MECHANICAL PROPERTIES:

	42HCF	32HCF	22HCF
Caliper (inches)	2.9 to 3.4	2.9 to 3.4	1.9 to 2.3
Elongation (percent)	20	20	20
Apparent Density (gms/cc	1.05	1.15	1.10
Tensile Strength (lbs/in)	45	35	35
Edge Tear (lbs-5/8"width)	25	20	15
Toughness, T.E.A. (lbs-ft/f	\mathfrak{A}^2) 35	30	30
Basis Weight (lbs/3000 ft2)	50	55	35
Moisture (Percent)	5.0	5.0	5.0