



ArpaxX

PUSH UP THE HEAT

ArpaxX - PUSH UP THE HEAT

Nothing is so good that it can not be further improved and optimized. The ArpaxX series brings Dr. D. Müller GmbH a completely new generation of premium Aramid Paper on the market that sets technology standards in all respects, from manufacturing to customer use.

Aramid paper and boards are essential materials in building modern insulation systems in electrical engineering, due to the outstanding physical properties of the all-rounder in insulation techniques, used for example in electric motors and generators (slot insulation, ground insulation and phase insulation), and in transformers (layer insulation, moldings, spacers, cylinders, end rings, moldings, etc.) and many other fields of electrical engineering. In particular, with the high temperature resistance of the material, it is thanks, if used extensively, that with the use of ArpaxX papers and boards the life of electrical appliances is increased significantly and the premature failure rate can be reduced to an absolute minimum.

High flexibility with „adjustable“ dielectric strength and a wider range of paper and board thicknesses

This new product line of Dr. D. Müller GmbH is developed and produced in Germany. The production process is characterized

by high flexibility, and depending on the requirement, the optimal composition of fibers and binders can be calculated through a specially developed mathematical-physical model with the dielectric strength set to the individual customer requirements.

Also ArpaxX sets new standards, whereby a much wider range of individual paper and board thicknesses can be realized. Thus, the minimum Aramid paper thickness is 0.025 mm, while the possible maximum thickness of calendered aramid boards of 50 mm is an increase equal to five times when measured against the previous standard.

The ArpaxX series is also characterized by a heat resistance of up to 275 ° C, a maximum dielectric strength of 40kV/mm, maximum heat shrinkage at 1.0 percent, and a thermal conductivity of 0.25 W / mk. Special papers can be manufactured with a dielectric strength of up to 80 kV / mm. UL-File: E345942

Quality „Made in Germany“ - also for environmental reasons

To improve the quality of the material, the production process was also optimized. It succeeded in developing ArpaxX to reduce, contamination by foreign substances, nodules, and air entrapment to an absolute minimum, which has significantly improved the homogeneity of the aramid paper with all the related positive benefits that follow.

By producing in Germany, the usual high standards apply here in terms of sustainability and environmental protection. For the sake of the environment, special emphasis was placed on a closed water cycle in the production process. Since the calendering is carried out purely by mechanical means and avoids aggressive industrial adhesives, ArpaxX products are fully recyclable. The specially developed mathematical and physical model for calculating the individual fiber-binder ratio also leads to significant material and cost optimization.

These are the three types in the ArpaxX Aramid Paper series:

ArpaxX L

The aramid paper is specially designed for the production of laminates, which are used in the insulation of motors, transformers and generators. The product can be of the calendered variety in thicknesses of 0.05 - 0.08 - 0.13 - 0.18 mm. Availability in

the uncalendered version is in thicknesses of 0.13 and 0.18 mm.

ArpaxX N

Papers and boards from ArpaxX N can be used directly as surface insulation in all known application areas. Their use extends across AC and DC motors up to large generators in power plant technology, where it can be used in wet and dry transformers and chokes.

The calendered version is available in rolls of thickness 0.025, 0.040, 0.050, 0.080, 0.130, 0.180, 0.250, 0.300, 0.380, 0.450, 0.510, 0.610, 0.630, 0.650, 0.760 mm. Uncalendered we offer rolls in thicknesses of 0.130 mm, 0.180 mm, 0.250 mm, 0.380 and 0.580 mm.

As a low-density, the board's thicknesses are 1 - 4 mm, as a medium-density 1 - 10 mm and as a high density 1 - 20 mm, each made in 0.5 mm increments.

ArpaxX S

For papers and boards in this category, there is no specification - for that you decide. In ArpaxX S are paper and boards, which are developed by us for special applications. Thus, for example papers are produced which have the same thickness with a 50 percent higher dielectric strength than ArpaxX N.

These special compositions are suitable for your individual scalable properties, ideal for use in wind power generators, for drives in the field of electric vehicles and the manufacture of honeycomb materials in vehicle and aircraft construction.

More information:

Dr. D. Müller GmbH
Zeppelinring 18
D-26197 Ahlhorn
Germany

Tel.: + 49 (0) 44 35 - 97 10 10

Fax: + 49 (0) 44 35 - 97 10 11

info@mueller-ahlhorn.com

www.mueller-ahlhorn.com
