

Why specify askarel transformers for schools?

So the same transformer can serve two generations.

Askarel fire-resistant transformers are built to deliver many years of trouble-free service—many have been in operation over 30 years. Maintenance is low, too. Askarel units are sealed—dust, corrosive vapors and atmospheric contamination can't get in.

Askarel units have lower power losses than comparable open dry-type transformers. School boards will realize a savings of as much as $600 per year on average size units.

You will get an extra margin of safety against power failure because askarel provides higher impulse strength and overload capacity.

Building costs are reduced when these units are specified. Not needed: costly vaults, fire walls or more expensive lightning arresters. (Chances are your building codes give fire-resistant askarel special consideration.)

And askarel is quieter than open dry-type units. You can install askarel units where you wish because they are sealed. They are designed with lower sound levels than open dry types.

Interested? Find out more about the advantages of askarel fire-resistant transformers from your transformer maker—or mail the coupon.

Monsanto

Monsanto Company
Functional Fluids Dept. 323
800 North Lindbergh Blvd.
St. Louis, Missouri 63166

Please send full information on the many advantages of askarel fire-resistant transformers.

Name_____

Company_____

Street_____

City_____ State_____ Zip_____

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DSW 273584

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A Look at Monsanto's Domestic Position in the Electrical Transformer Industry Based on Forecasted Electrical Power Needs

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Chemicals Advertising
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The size of the electrical power transformer market is directly related to electric generating capacity and the consumption of electrical energy. The frame of reference for analyzing this market must be in new transformer capacity added yearly (KVA--Kilovolt--ampere) and then converted to dollar sales realized by component suppliers such as Monsanto.

Today there are three types of transformers being marketed for distribution of electrical power. These are shown below with the share of market in KVA capacity held by each.

	Type	1966 Market Share	Primary Market
1.	Mineral Oil Filled	80%	Utility and Industrial
2.	Open Dry	12%	Commercial
3.	Askarel	8%	Commercial

The 8% share of market was arrived at as follows:

The 1966 askarel sales were 17.5 million pounds of material.
New Capacity added in 1966 was 70.5 million KVA.
In 1966 the average askarel transformer required 3.2 pounds of material per KVA.

Knowing the annual incremental additions of new transformer KVA capacity and the number of pounds of askarel used per KVA in askarel units manufactured, the market share is calculated as follows:

$$\frac{\text{Total lbs. askarel used (17.5 M)}}{\text{Lbs. of askarel/KVA}} \text{ equals askarel KVA's (5.4 M)}$$

$$\frac{\text{Askarel KVA's (5.4 M)}}{\text{Total new transformer KVA installed (70.5 M)}} \times 100 \text{ equals \% askarel market share (7.8\%)}$$

This approximate 8% share of the market represented $2.3 million in sales at 40% gross profit.

Similar calculations for oil were based on information from The National Power Survey of the Federal Power Commission, the 17th Annual Electrical Industry Forecast by McGraw-Hill for Electrical World Magazine and Construction Forecasts to 1975 by the F.W. Dodge Corp. These calculations attributed an 80% share of the total market to oil. The remaining 12% was allocated to the open dry type transformer.

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Since the utility and heavy industrial market served by the oil transformer is less subject to change than the commercial market, our efforts will be geared to capturing a greater share of the 20% available market being served by askarel and the open dry type.

The total potential market of new KVA capacity to be added through 1970 is as follows:

Year	KVA Capacity ($\overline{M}$)
1967	73
1968	76.5
1969	79
1970	81
Total KVA capacity to be added	309.5 $\overline{M}$

Projecting that oil will maintain its 80% share of the market, our increase will come from the 12% held by the open dry type. The total market shared by askarel and the open dry type will represent 62 million new KVA capacity added by the end of 1970. With this in mind, we can say that the 62 million KVA represents 100% of the available market to askarel through 1970. Therefore, our present 8% of the total market now represents 40% of the available market. By increasing our share of the total market by 2% or the available market by 10% by 1971, our sales objective of $3.6 million should be reached.

Provided the above per cent of increase is reached, askarel transformers will serve 32 million new KVA capacity added through 1970. The average askarel transformer will require approximately 3 lbs. of askarel per KVA, or a total of 96 million lbs. of material from 1967 through 1970. Indications are that pricing will not fluctuate drastically; the average price being approximately $0.13 per lb.

Monsanto's major customers and the 1966 dollar purchases are as follows:

Customer	Purchases	%
General Electric	$800,000	35
Westinghouse	548,000	24
I-T-E	328,000	14
Allis Chalmers	200,000	9

These four major customers represent approximately 82% of Monsanto's total transformer askarel sales. The remaining 12% was accounted for by many small transformer manufacturers. Indications are that 1967 sales will be as forecasted at $2.5 million with the same basic ratio of customers to per cent of sales.

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Marketing and Advertising

The objective of the marketing department is to increase askarel's share of available new KVA capacity being added each year from 40% to 50% by 1970. This is to be done at the expense of open dry type transformers in commercial building projects such as hospitals, shopping centers, apartment houses, schools, etc.

The basic advertising objective is to create a preference for askarel units over open dry types where the specifier has a choice.

Informally gathered data indicates a low level of knowledge of the benefits of askarel transformers on the part of transformer specifiers. The basic strategy is to communicate the benefits and advantages of askarel transformers over other types to individuals who specify the selection of transformer type. These groups include:

Electrical architects and engineers
Electrical consultants
Electrical contractors

New generations of personnel make up these groups, many never having been educated to the many advantages of askarel transformers. Over the past few years, very little advertising or promotion has been done for askarel. These benefits include:

Safety from fire (over oil)
Lower noise levels (over open dry)
Lower maintenance (over open dry)
Longer life, more durable
and less deterioration (over open dry)
Lower operating costs (over open dry)
Lower overall installation costs (over open dry)

To achieve these objectives, Organic marketing management has approved a total of $150,000 for a three-year askarel pull-through advertising and sales promotion program.

The Program - Phase I

An 18-month media advertising schedule is recommended for insertion in Electrical Construction and Maintenance and The Actual Specifying Engineer. Foote, Cone & Belding's media department informs us that these publications best cover the primary influences and many secondary influences such as captive employees of electrical firms.

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The first 12 months will feature one ad monthly in each book geared to educating the specifier to the benefits of askarel with strong visual tie-ins such as schools, hospitals, shopping centers; places where askarel transformers may be used. Follow-up ads will be of the case-history type featuring actual installations and the reasons why askarel units were used with each individual electrical system. Each ad will offer the specifier a copy of the complete askarel transformer story in brochure form.

The brochure will detail in depth the benefits askarel transformers offer over open dry types.

A five-time direct mail program will also be used to contact key influences on a more personal basis. Each piece will discuss one benefit of askarel with the brochure offer. The mailing lists are to be made up of approximately 9000 names furnished by electrical publications and a firm specializing in supplying lists of this nature.

Our major customers will be supplied with adequate supplies of ad pre-prints, brochures and direct mail pieces for merchandising to their customers and sales forces. We have been assured by the marketing departments of our customers that they will support the program.

The projected budget expenditures for this period is $75,000 ($60,000 prep and media, $15,000 promotion).

Plans for the second 18 month portion of the program will be formulated based on available results and play-back from the first 18 month period.

Monsanto's advertising research group is now conducting a benchmark study to determine the level of awareness of specifiers prior to beginning the program. Subscribers of Electrical Construction and Maintenance is the audience. After one year a second study will be made to determine any increase in awareness of the benefits of askarel compared to open dry types. A third study will be done at the end of the three-year program.

The Organic public relations department has been furnished lists of transformer purchases for their use in developing trade articles featuring unique electrical installations where askarel transformers have been installed.

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The advisability of our participating in trade shows such as the annual NECA Convention will be considered as these events present themselves.

The total program will be supplied to our ex-U.S. counterparts for their use if applicable.

Since it is possible to chart our participation in the available transformer market by using new KVA capacity added each year, we should be able to make an educated appraisal of the advertising program as related to market participation.

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