

CROWELL __ A BRIGHTER DISTRIBUTOR FUTURE

It takes originality and creativity to make an impact in the tough packaging materials market. Here's an impressive development story showing what The Crowell Corporation is doing to build a meaningful future for itself and its distributors.

The Crowell Corporation of Newport, Delaware is one of the leading firms in the gumming industry. Crowell manufactures a full range of gummed paper and reinforced sealing tapes for both manual and automatic taping applications. Recognizing that gummed sealing tapes have evolved to a commodity status, Crowell management decided to launch a development program to perfect additional and more profitable products to sell to its network of paper distributors.

The first logical approach was to consider the manufacture of pressure-sensitive carton sealing tapes to participate in a market which seemed to show some growth potential. While this was technically feasible, it soon developed that the pressure-sensitive carton sealing tape field became immediately crowded with a vast number of producers and profitability was limited because of the highly competitive pricing structure. Another option available to Crowell was to engineer case sealing equipment for either gummed or pressure sensitive carton sealing tapes, but this, too, was a field already oversaturated

with competition.

Crowell's objective therefore was to develop a product which could help create a meaningful future for Crowell and its distributors. The optimum parameters for the development program included product uniqueness with patent opportunities, a significant market potential, a reasonable level of profitability for manufacturer and distributor, a product concept which would have system selling application and preferably a development which was still within the total field of packaging.

After a significant period of research and development, The Crowell Corporation worked out an agreement with the DuPont Company whereby Crowell would have exclusive rights within a defined geographic area to laminate various substrates to the microfoam material produced by DuPont. As a basic laminator, Crowell experimented with various substrates such as kraft and liner board to produce a remarkable allpurpose padded packaging material called CRO-NEL® which has unlimited uses. In addition Crowell perfected the ability to coat laminated microfoam with a cohesive cold seal to produce a complete self-contained packaging system. With the cohesive coating, it was now possible to form padded, waterproof pouches which required no additional materials or sources of energy to complete the

package.

CRO-NEL features one of the most impressive arrays of packaging advantages ever developed for a single packaging material or family of packaging materials. CRO-NEL is padded and its cushioning has a memory which permits its return to its original form after impact. CRO-NEL can be supplied with a cohesive (self-seal) or a pressure-sensitive adhesive coating. The product can be supplied reinforced with a tough fiberglass scrim. Cohesively coated CRO-NEL is pilferproof. The seal cannot be opened without signs of tampering. CRO-NEL provides thermal insulation and is used for the shipment of such critical items as blood and blood plasma. The product is extremely lightweight, highly advantageous for shipping and mailing purposes. CRO-NEL is non-corrosive, and waterproof. To develop vapor resistance, Crowell includes a foil sheet in the laminated structure. CRO-NEL can be produced with a grease resistance substrate in packaging circumstances where this property is required. Regular CRO-NEL has a high measure of grease resistance even without treatment. CRO-NEL is abrasion resistant and when cohesively coated has an extremely high coefficient of friction. The product is also dust and lint free and tarnish resistant. When cohesively coated, CRO-NEL is also antistatic, a property of extreme importance to the electronics industry. CRO-NEL will not support the growth of mildew or fungus and can be used to form discreet packages. The product has already been approved by all methods of transportation and a new military specification covering CRO-NEL will be issued shortly.

In order to take advantage of the system selling concept, The Crowell Corporation designed the CRO-NEL PACKER Machine.

The CRO-NEL PACKER automatically forms cohesive coated CRO-NEL into economical, padded, waterproof pouches to replace preformed bags, envelopes and boxes and other means of packaging. Since CRO-NEL in either manual or automatic application requires no additional material or outside sources of energy, important savings in labor, materials and energy are possible for a wide range of packaging applications. Because of the energy saving potential alone, it is expected that the new packaging system will have an important impact on packaging technology.

The Crowell Corporation has established a comprehensive distributor franchise policy for the sale and marketing of CRO-NEL and the CRO-NEL PACKER Machine and the entire effort is backed by an extensive mill-support sales promotional program.

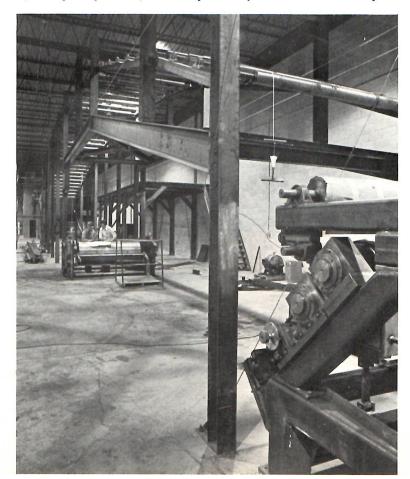
In order to prepare for the new program, Crowell was obliged to undertake a number of important plant expansion programs including the expansion of its plant manufacturing and warehouse facilities, the purchase of special new slitting machines and the construction of a huge new high speed coater which measures well over 100 feet in length. Because of its machine building capability, Crowell builds most of the production machinery used in its own plant including the massive new coater. The coater will augment Crowell production capabilities and will provide the increased capacity to process the growing volume of CRO-NEL.

A number of photographs taken at The Crowell plant appear on the following pages. They show the high level of activity at this busy company.



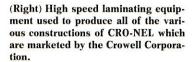
(Above), The Crowell Corporation has designed the CRO-NEL® PACKER—an exceptionally versatile pouch packaging machine designed for cold seal packaging applications.

(Below), Shows massive new high speed coater in finishing stages of completion. The new 72" coater, built inplant by Crowell, will have a productivity rate in excess of 1000 ft. per minute.



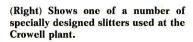


(Left) Overall view of one manufacturing section of the Crowell plant where products are laminated and coated.





(Left) Glass fibres feeding from banks of pirns form the tough fibreglass scrim used in the lamination of reinforced tape, reinforced papers and reinforced CRO-NEL.





(Left) Illustrates portion of plant used for the storage of finished goods inventory.



Shows small section of massive warehouse area set aside for the storage of incoming raw materials.



Shows portion of extensive inplant testing laboratory. Device shown is used for routine quality control testing of adhesive properties of gummed tapes.



(Right) Shows special conference room used for training and orientation programs for distributor personnel, customers of distributors and Crowell sales personnel.