POLLUTION

letters

Comments on Disposal of PVC Scrap

...We recognize that the burning of plastics, or any material for that matter, in a small plant incinerator is a problem. The addition of limestone will reduce the amount of HCl, that will be evolved. However, it will however make burning more difficult and will increase the weight of the ash to be hauled to the landfill. . . Currently...the most satisfactory technique is that of a properly supervised landfill operation. Incineration of plastic materials as part of municipal refuse is also satisfactory and perhaps a question and answer technique on this subject (below) would be a way of letting you know how we view this.

What is the current level of PVC in municipal refuse? A survey made by the Battelle Memorial Institute in 1966 showed that the total amount of plastic disposed of in municipal refuse was 3-¼ billion pounds or about 1.5 % of the total amount of refuse generated. The current level (1970) of plastic materials in municipal refuse is estimated to be 2%. This level is expected to reach 3% by 1976. About one-third of the total plastics in municipal refuse is PVC.

Does this level of plastics in municipal refuse cause any problems? This same survey by Battelle showed very few references to problems created by plastics in municipal waste. It was felt that because plastics make up such a small portion of municipal wastes, their effects on disposal systems could not be measured.

What are the combustion products from HCl? An extensive study of the combustion products from PVC was completed in 1969. This study was made at the School of Public Health at the University of Michigan under a Public Health Service Research Grant (HEW). In general, this research showed that HCl, carbon monoxide and carbon dioxide were the major combustion products. Under conditions of incomplete combustion, small amounts of hydrocarbons are also produced. In this same study, it was also shown that phosgene and chlorine are not present in the combustion study from PVC.

How much does PVC in municipal refuse contribute to our total air pollution problem? The current level of PVC in municipal refuse is not sufficient to create any air pollution problems. A study was made of this problem by the Royal Academy of Engineering Science in Sweden. It was their conclusion that the amount of pollution due to the burning of PVC was only 0.05% of the total air pollution problem in 1968. We are, nevertheless, much concerned about this small amount and are currently directing our research efforts toward the elimination of all air pollution that might occur from burning PVC.

D. L. Kent
Technical Sales Mgr.
B. F. Goodrich Chemical Co.
Cleveland, Ohio

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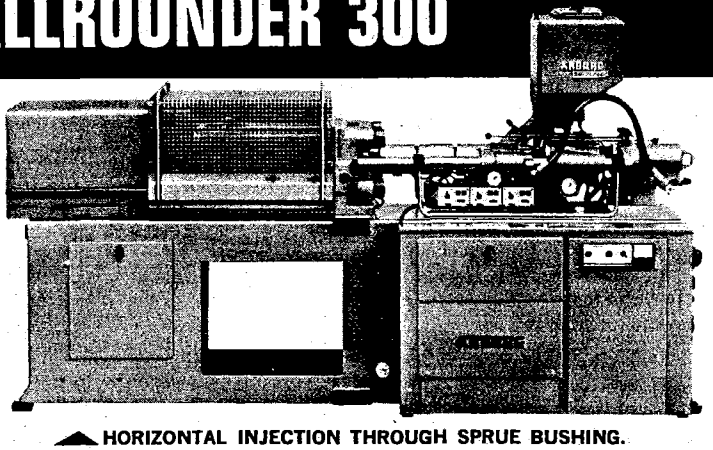
In-Line Hydraulic Screw Drive with Automatic Torque Compensator to give constant screw speed at any speed setting.



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STANDARD FEATURES:

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- Adjustable back pressure and holding pressure on screw.
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- Automatic central lubrication with broken line alarm.
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- Mechanical safety bar.
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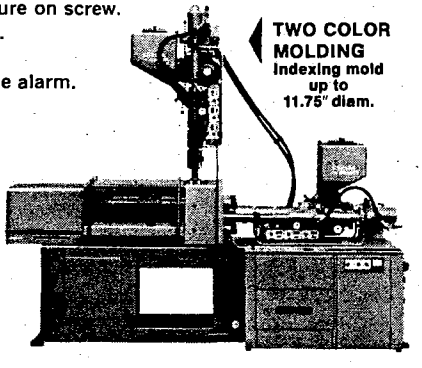

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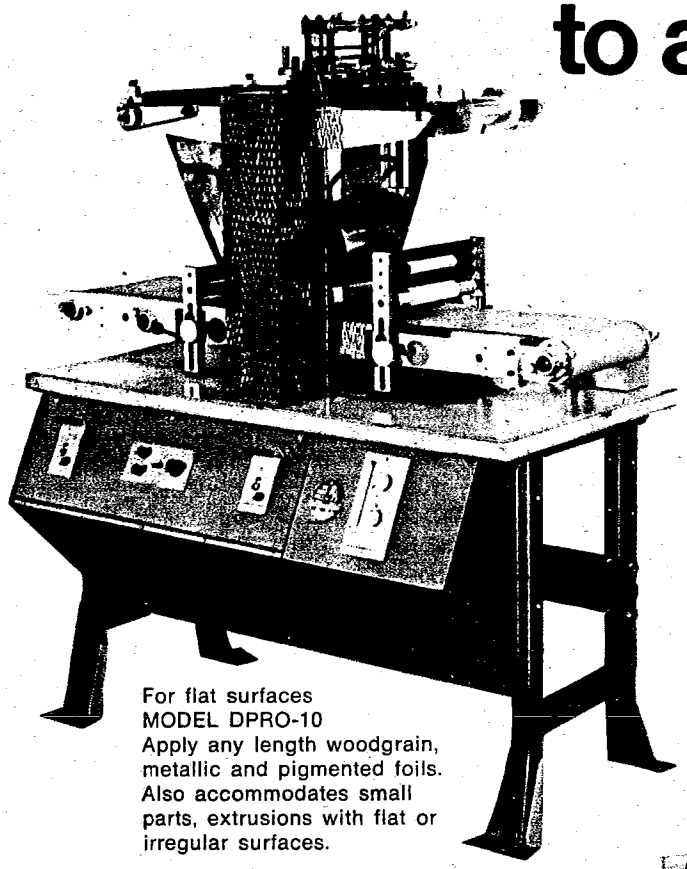

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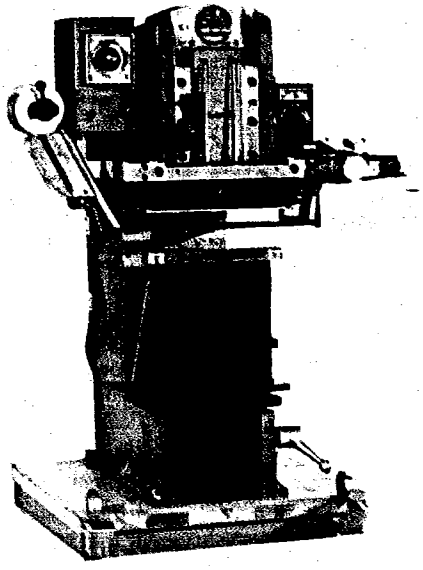

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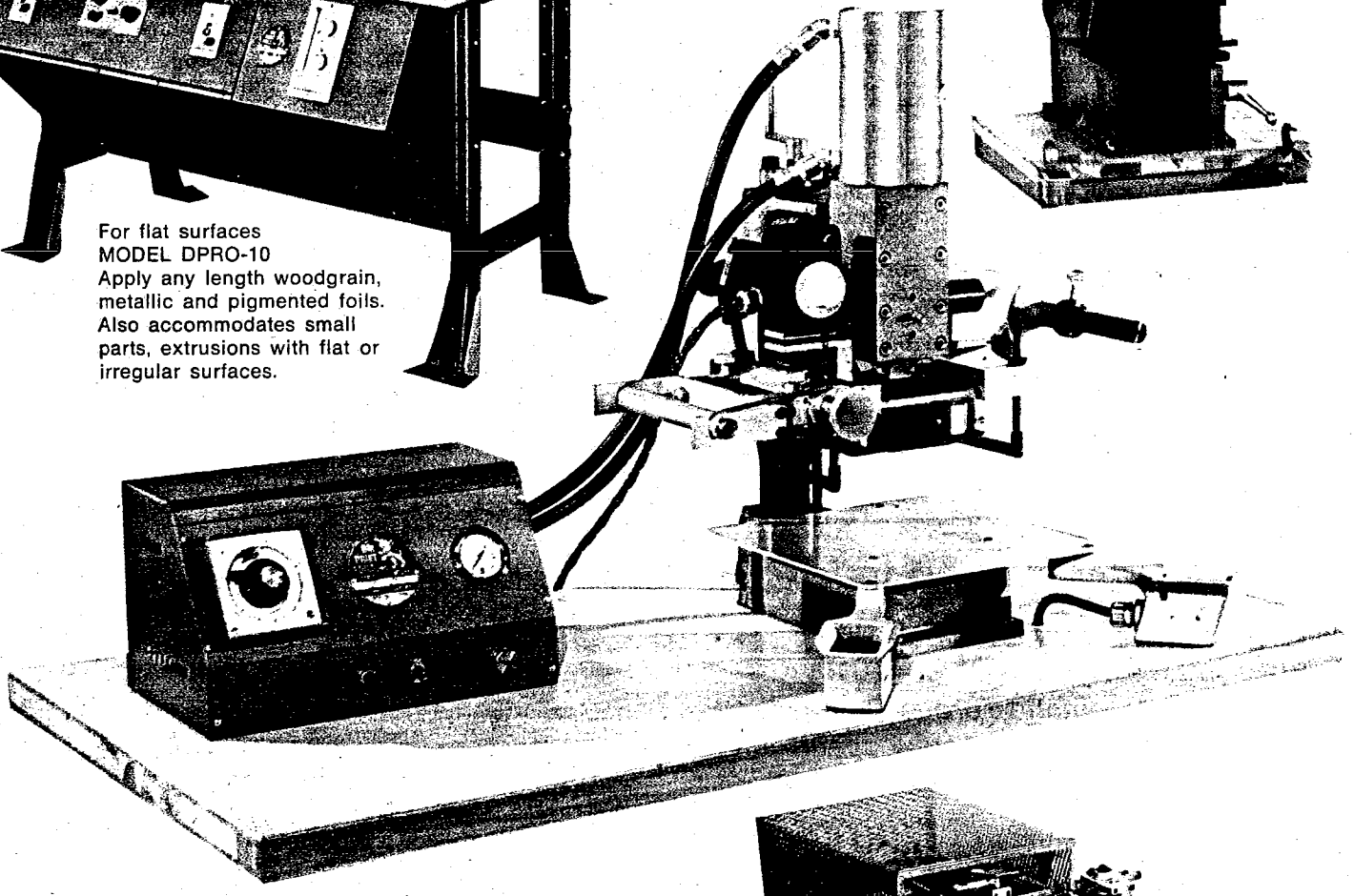

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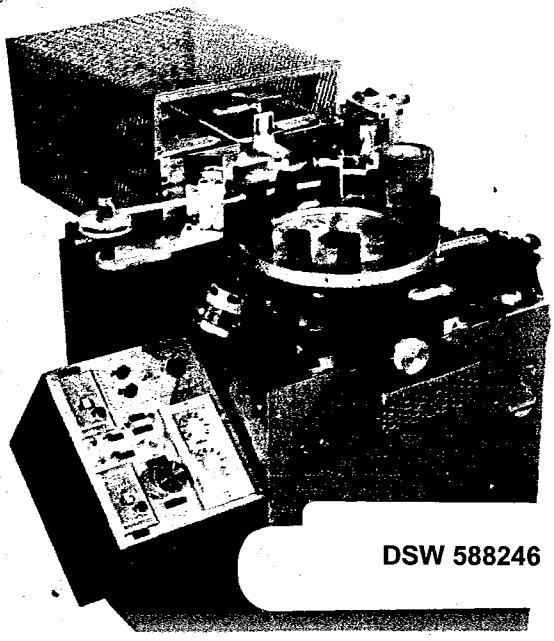

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