Association of Professional Engineers

of the

Province of Manitoba

Certificate of Engineering Achievement

to

VERSATILE FARM EQUIPMENT OPERATIONS FORD NEW HOLLAND OF CANADA LTD.

The 1992 Certificate of Engineering Achievement is awarded to Versatile Farm Equipment Operations, Ford New Holland of Canada Ltd. for its pioneering and innovative efforts in the conception, development and versatile application of the Bidirectional TM agricultural tractor.

Good agricultural methods and practices are the cornerstones to producing food to sustain life on Earth. Canadians, and particularly the people of Western Canada, are well known for their innovative and industrious ways to develop agricultural machinery and practices suitable for application regionally, nationally, and internationally. The success of Versatile is testimony to this fact.

Versatile, which was first established in 1947 in Winnipeg (and then known as Hydraulic Engineering Co. Ltd.), began as a short line manufacturer of augers and field sprayers. As markets expanded from Western Canada to the American Midwest, so did the product lines to include swathers, combines and four-wheel-drive tractors.

The agricultural industry's need for bigger, more economical and more efficient power units led to Versatile's development (including concept, design, engineering, test and manufacture) of an articulated mass-produced four-wheel-drive tractor - a world first in 1966.

All stages of the Bidirectional TM tractor's development were carried out by Manitobans in the 1970's. First produced in Winnipeg and Fargo, North Dakota in 1976, the Bidirectional TM was a revolutionary innovation in agricultural tractors. The tractor can operate in a push or pull mode, the operator's console rotates to eliminate "over-the-shoulder" operation, and the tractor features flexibility in attachments for tillage, spraying, harvesting and materials handling. The Bidirectional TM tractor can be used on the farmstead year round as a prime mover or in utility applications.

Of the more than 40,000 Versatile tractors sold around the world since 1966, over 8,000 have been Bidirectional $^{\text{TM}}$.

In 1984, the Bidirectional TM tractor was honoured with both Design Canada and Premier's Awards. In 1991, it was recognized as one of the American Society of Agricultural Engineers' TOP 50 Outstanding Innovations in Agricultural Engineering.

Acceptance of the Versatile four-wheel-drive tractors in general has been worldwide. They are in use on all continents where agriculture is practised. The Bidirectional TM tractors are particularly popular in North America.

The Bidirectional ™ tractor is a key element to the continued success of Versatile; which is Canada's only remaining manufacturer of agricultural tractors.