**ROCHESTER MANUFACTURING CORPORATION**

Rochester Manufacturing Corporation (RMC) was considering moving some of its production from traditional, numerically controlled machines to a flexible machining system (FMS). Its traditional numerical control machines have been operating in a high-variety, low-volume, intermittent manner. Machine utilization, as near as it can determine, is hovering around 10%. The machine tool salespeople and a consulting firm want to put the machines together in an FMS. They believe that a $3,000,000 expenditure on machinery and the transfer machines will handle about 30% of RMC's work. The firm has not yet entered all its parts into a comprehensive group technology system, but believes that the 30% is a good estimate. This 30% fits very nicely into a "family." A reduction, because of higher utilization, should take place in the number of pieces of machinery. The firm should be able to go from fifteen to about four machines and personnel should go from fifteen to perhaps as low as three. Similarly, floor space reduction will go from 20,000 feet to about 6,000. Output of orders should also improve with this family of parts being processed in 1 to 2 days rather than 7 to 10. Inventory reduction is estimated to yield a one-time $750,000 savings, and annual labor savings should be in the neighborhood of $300,000. Although the projections all look very positive, an analysis of the project's return on the investment showed it to be between 10% and 15% per year. The company has traditionally had an expectation that projects should yield well over 15% and have payback periods of substantially less than 5 years.