

## A MECHANICAL/ELECTROHYDRAULIC APPROACH TO COMPACTING

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### ABSTRACT

A new mechanical/electrohydraulic press has been developed by CINCINNATI INCORPORATED to provide for the needs of complex part compaction. It combines the speed and accuracy of a mechanical with the controllability of a hydraulic press. This paper will review what is required to produce complex parts and the mechanical/electrohydraulic press approach. It will focus on how this new technology provides proper motion and accuracy required to produce complex large multi-level P/M parts.

### INTRODUCTION

Just-In-Time Manufacturing, Statistical Process Control, Life-of-the-Part Contracts, Increased Part Complexity, and Competitive Part Pricing are all contributing to the demand for compacting presses capable of:

- \* Improved Part Making Motion
- \* Expanded Part Complexity
- \* Increased Part Quality
- \* Minimum Part to Part Changeover

The demand for higher densities and improved part quality has required improved control over the compacting function. Recent advances in computer control design have made it possible to combine various technologies into one machine. One example is the Mechanical/Electrohydraulic Compacting Press. (See Figure 1.)

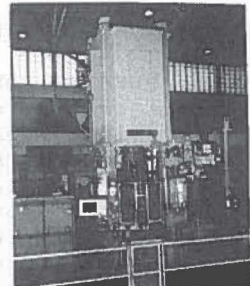


Figure 1.