

COMPUTER AUTOMATED PROCESS FOR ANALYSING AND INTERPRETING ENGINEERING DRAWINGS

ABSTRACT

The present invention is a computer automated process for, analysing and interpreting engineering drawings in a digital format. The process is the recognition of symbols and graphics in any type of engineering drawings followed by an analysis of the relationship between the symbols and the graphical elements in the drawing to provide a meaningful interpretation of the drawings. The interpretation of the drawings can be carried out in a variety of ways including quantitative analysis of the drawings and/or 3 dimensional reconstruction of the drawings.

The process requires a computer which has a central processing unit which is operatively coupled to a storage means, a memory means, an input means and an output means. The storage means can be used to store templates of the various different symbols which will be encountered in the drawings and the predetermined algorithms to identify and recognise the graphical elements in the drawings. The storage means can also be used to store any other data or information that will be required in the analysis and interpretation of the drawings.

The analysis of the drawings is carried out in accordance with a set of predefined algorithms which require the central processing unit to analyse and interpret the symbols, graphical and textual data, which is in digital format, from the drawing and process that information to determine the relationship between the symbols, graphical elements and textual data.

No Figure