

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ ١

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ ٢

الرَّحْمَنِ الرَّحِيمِ ٣ مَلِكِ يَوْمِ الدِّينِ ٤

إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ ٥ أَهْدِنَا

الصِّرَاطَ الْمُسْتَقِيمَ ٦ صِرَاطَ الَّذِينَ أَنْعَمْتَ

عَلَيْهِمْ غَيْرِ الْمَغْضُوبِ عَلَيْهِمْ

وَلَا الضَّالِّينَ ٧

# ABSTRACT

This research presented a new method for the mass production of a high quality, low cost, sheet metal products using a die, press and transferring mechanism.

The research presented a definition of the tool (die), its design, its parts and the types which differ as per the products and operations concerned.

The researcher selected the progressive die used for mass production, for more elaborated studies because it combines a number of die design and function in one frame. The researcher also discusses the maximum use of raw material (strip layout).

One of the Yarmouk Industrial Complex products formally produced by five individual dies. Anew one progressive die was designed for this product, using the well known package (VISI 15) software dedicated for sheet metal products die and mould design.

مستخلص

قدم هذا البحث طريقة جديدة للإنتاج الكمي لمنتجات الصفائح المعدنية ذات الجودة العالية والأقل تكلفة باستخدام القالب والمكبس كآلية تحريرية للقالب.

قدم البحث تعريف لهذه الأداة (القالب) وكيفية تصميمه وأجزاء ووظائفه وأنواعه التي تختلف باختلاف المنتجات والعمليات، ثم اختار الباحث نوع واحد من هذه الأنواع وهو قالب الإنتاج الكمي التقدمي المستمر (Progressive Die) لدراسة بتوسع أكثر لأنه يضم مجموعة من القوالب في طرق تصميمها ووظائفها في إطار واحد وتعرض البحث لإمكانية الاستفادة القصوى من المادة الخام strip layout .

أختير منتج من مجمع اليرموك الصناعي كان ينتج بواسطة خمسة قوالب مفردة وصمم قالب واحد Progressive die لإنتاج المنتج وتم ذلك باستخدام البرنامج الحاسوبي (Visi 15) المتخصص لتصميم القوالب.

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