Campos OBLIGATORIOS / NAHITAEZ bete beharreko eremuak

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**Título del TFG/TFM / GAL/MALaren izenburua:** Production and maintenance optimization at the AS S.L.U. manufacturing plant in Beriain

**Autor (Apellidos, Nombre) / Egilea (Deiturak, izena):** Cano Berry, Mikel

**Director / Zuzendaria:** Jesus María Pintor Borobia  
**Codirector, si existe / Zuzendarikidea, halakorik badago:**  
**UPNA / NUP ☒**  
**Otro (Indicar) / Beste bat (Jarri):**

**Abstract (Resumen de 100-250 palabras)/ Abstract (Laburpena 100-250 hitzetan):**

The goal of this end-of-degree project is the optimization of the manufacturing and maintenance processes at the AS S.L.U. production plant in Beriain. In order to achieve this, changes have been made in the maintenance plan. A new maintenance plan management program has been designed and introduced into the company. This program will lead to the revision and optimization of the preventive maintenance procedures.

Preventive maintenance plans have been designed for those machines that lacked of one.

A plasma cutting robot work cell has been designed and implemented in the plant. All required tooling for a correct operation has been designed and manufactured.

A new universal verification tool has also been designed and manufactured in order to decrease time losses and stored tooling in the manufacturing plant.

A plastic and paper waste recycling plan has been implemented in the plant and a waste management service has been contracted.

**Materias o Palabras Clave (máximo 5) / Gaiak edo hitz gakoak (gehienez 5):**

Maintenance, preventive, optimization, production, tooling