

# TITLE: SERVICE LIFE OF MOULDS

# **KEY WORDS OF ASSIGNMENT:**

- Wear pattern
- Fatigue
- Service life extension

SUMMER APPRENTICESHIP ☐ MASTER THESIS ☑

WORK/SCHOOL APPRENTICESHIP ☐ PROJECT ☑

# **CONTENT OF ASSIGNMENT (POSSIBLY ILLUSTRATED WITH PICTURES/DRAWINGS):**

The moulds are located at the top of the casting machine and provide the initial cooling of the steel. The plates that form the sheet are subject to high fluctuating temperatures, thermal stresses and abrasive effects. The aim of the research is to identify the different phenomena, determine the influencing factors and, based on this, determine possible improvements, implement and evaluate them.

# **OBJECTIVES:**

- Defining areas of concern during maintenance
- Defining points for improvement
- Defining wear phenomena

#### **EXPECTED COMPETENCES (KEY WORDS):**

- ✓ Modeling (CFD and FEM)
- ✓ Analyze independently

# **NUMBER OF STUDENTS:**

1 of 2

TARGET GROUP: BACHELOR/MASTER/ ... & SPECIALIZATION(S):

Master in engineering

#### **LOCATION:**

ArcelorMittal Gent

#### **PROMOTORS:**

Industrial : Stijn Droessaert

Academic : /

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