

Bachelor's/ Master's/ Semester Thesis

Market Analysis for High-Gradient Magnetic Separation

Keywords: BioTech | Downstream | Magnetic Separation | Market Analysis

Project Description

High-Gradient Magnetic Separation (HGMS) technology has significant potential in various industrial and biotechnological applications. This technology offers efficient separation processes, which are crucial for producing high-purity biological products and for the production of Magnetic Nanoparticles (MNPs). Given the rising demand for advanced separation techniques and the increasing applications of HGMS, there is a pressing need to assess the market readiness and scalability of this technology. This master's thesis aims to provide comprehensive insights into the market potential and technological readiness of HGMS, supporting the strategic goals of a start-up looking to innovate in this space.

The thesis will encompass a detailed market analysis of HGMS technology, focusing on its applications in biological products and MNP production. The study will evaluate the current market trends, technological advancements, competitive landscape, and regulatory environment. Furthermore, it will assess the technology readiness level (TRL) and explore strategies for scaling up from a pilot plant to full industrial production.

The primary objective of this master's thesis is to provide a strategic market analysis that includes evaluating the technology readiness and scalability of HGMS. This analysis will inform the start-up's decisions on market entry, product development, and business strategy.

Profile

- Bachelor or master student in engineering, business administration, or related studies
- Structured and independent work
- Motivation to work as a team
- **Start date:** flexible

Tasks

1. Market Research & Analysis
 - Data collection methods, secondary research, interviews, surveys, and focus groups
 2. Technological and Regulatory Trends
 - Investigate latest technological advancements
 - Regulatory requirements and their implications for market entry.
- Market

HGMS Principle

