

## Thesis

### Mechanical optimization of baler

**Company: Nättraby Verktygs AB**

[www.nva.se](http://www.nva.se)



#### **Extent**

Masterlevel (20 weeks), suitable for one or two students working together.

#### **Field of study**

Mechanical engineer or equivalent qualification.

#### **Planned start and duration**

Spring or summer 2013

#### **Task**

##### **Background**

By using a baler to compress various recycling fractions, you reduce the volume of the handled material by up to 90%. But to do this as efficiently as possible, the baler should be placed close to the source - so all processing is reduced, also internal. Which requires that the machine is compact and has a quiet operation.

Nättraby Verktygs AB in Ronneby develops and manufactures balers in close cooperation with its end users, which has given the company an ability to build up a unique knowledge and experience of compression and recycling of different materials. Nättraby Verktyg's balers are mechanical operated by using a screw drive unit, resulting in both quiet and environmentally friendly operation, without the risk of leakage of hydraulic oil.

It's also very important that the balers are simple to use, as they offer a very cost effective step towards sorting and recycling. Nättraby Verktyg's broad product range offers a very good possibility for finding the best solution.

For more info about the product see: [www.nva.se](http://www.nva.se) and also an animated product description on <http://nva.se/Default.aspx?PagId=390>

## Objective for project

Based on the need to become more cost efficient and service friendly, Nättraby Verktygs AB is now planning to start a project to examine if, and how the existing machine design and use of materials can be further developed. We therefore think that the project should incorporate a combination of (for example) mechanical calculations, market research and practical tests from the perspective of:

- Cost of production, modularization and Production
- Ease of use, functional design and operating cost
- Life, service interval and maintenance cost

The project aims, through literature studies, mechanical calculations, simulations and problem solving to create one or more suggestions for improvement/product development of existing machinery, materials and production techniques.

## Location

Ronneby. Work is possible to partially implement at distance.

## Language

Swedish or English.

## Expenses

It is possible to discuss these issues in each case.

## Please contact

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## Application

Register your interest by sending your CV, cover letter, course list and references to the contact person at Cefur: [martina.lindgren@ronneby.se](mailto:martina.lindgren@ronneby.se)  
Application and selection is ongoing.