

In IBS Precision Engineering you will recognise a leading innovator in high-grade precision engineering, constantly challenged to push back frontiers. From our offices in Europe and agents around the world, we serve the world market with both standard and customised metrology solutions and engineering services that excel in accuracy and efficiency. For our customers this will ultimately result in a better product quality, an increased productivity and reduced costs.

IBS Precision Engineering is involved in special measuring machines, non-contact measuring systems, machine tool calibration & inspection systems and air bearings.

We currently have an open position for:

Graduation project: Contact free cleaning

The objective is the development of local and full area non-contact cleaning tools addressing particle contamination down to 100 nm. The cleaning method should:

- Be cross contamination free
- Induce no damage to underlying layers
- Induce no unwanted changes of the surface energy of the substrate

The task of this study is the removal of particle contamination with a non-contact method. Surfaces to be investigated are foils and glass. You will start with the cleaning of rigid substrates, since those substrates are easier to handle and to clean. In a second step we will be working with foil on carrier to demonstrate the cleaning efficiency on films while still benefitting from the easy handling of rigid substrates. In the final step you will translate the cleaning techniques to flexible substrates.

The technology is based on air bearings which should enable for full area effective cleaning. The narrow air bearing gap will result in very high local speeds of the applied medium, giving the system exceptional cleaning properties. Different air bearing systems (orifice restricted, porous media) have to be modeled and analyzed. A prototype has to be designed and build first for rigid substrates. In the second part of the project a system has to be realized for flexible substrates.

Interested in joining our enthusiastic team of highly qualified professionals? Please send your application and CV to dr. H.A.M. Spaan. E-mail: spaan@ibspe.com.

