

## Our competence

One of the essential tasks of the Department of Polymer Engineering and Science Leoben is application oriented research. The close cooperation with industrial partners allows the direct implementation of scientific results into industrial practice.

With our longterm experience in the area of compounding and material development we are capable of solving different tasks in these fields.

We work closely together with all departments of the Montanuniversität Leoben and with the Polymer Competence Center Leoben (PCCL). Therefore, we can offer our customers the best support for questions in processing, testing and analytical problems.



## Services

- Production of (highly) filled polymer compounds from small to semi-industrial scale
- Development of materials with tailor-made property profiles
- Mechanical, thermal and rheological characterization of polymer compounds
- On- and in-line quality monitoring of compounding processes using NIR-spectroscopy

## Contact

**Ass.Prof. Dr. Thomas Lucyshyn**  
Head of Compounding  
Polymer Processing  
+43 3842 402 3510  
thomas.lucyshyn@unileoben.ac.at  
www.kunststofftechnik.at



- Fast order processing
- Comprehensive services
- Modern equipment
- Many years of experience



## Contact

Department Polymer Engineering and Science Leoben  
at Montanuniversität Leoben  
Chair of Polymer Processing

Otto Glöckel-Straße 2, 8700 Leoben, Austria  
+43 3842 402 3503  
kv@unileoben.ac.at  
www.kunststofftechnik.at

## Polymer Engineering and Science Leoben



## Compounding

www.kunststofftechnik.at



## Our services

### Compounding

Production of tailor-made compounds and masterbatches with different filler contents and filler or additive combinations.

### Material development

Development of polymer compounds starting from preliminary tests with small batches up to semi-industrial production.

### Material data measurement

Comprehensive characterization of compound materials e.g. mechanical, rheological, thermal as well as barrier properties.

### Process development

Support in the process development for the production of (highly) filled polymer compounds as well as in the introduction of in-line and on-line measurement methods for quality monitoring.

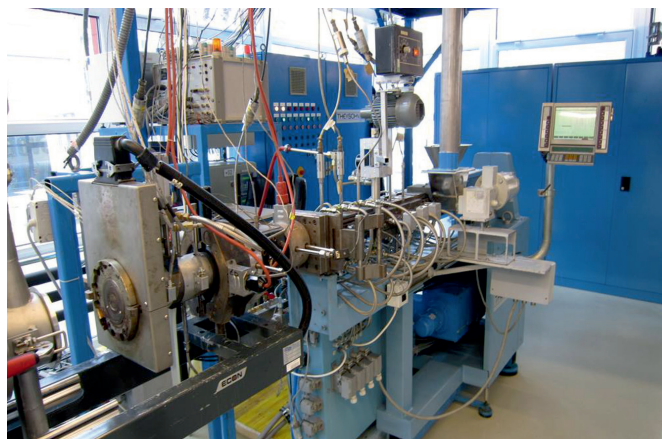
## Services

- Compounding
- Material development
- Material data measurement
- Process development
- Up-scaling
- Quality monitoring
- Life-cycle analysis and recycling

## Our equipment

### Compounder line 1

- Gravimetric quadruple feeding station (Brabender)
- Twin screw compounder (Theysohn TSK30)
- Gear pump (Maag)
- Continuous screen changer (ECON)
- Underwater pelletizer (ECON)



### Compounder line 2

- Gravimetric quadruple feeding station (KTRON)
- Twin screw compounder (Werner & Pfleiderer)
- Cooling bath with strand pelletizer (Werner & Pfleiderer)



## Our equipment

### Injection molding compounder

- Gravimetric quadruple feeding station (Brabender)
- 27 mm/ 44 to 52 D twin screw compounder (Leistritz)
- 1800 kN fully electric injection molding machine (Engel)
- 3-way valve (ECON)
- Gear pump (ECON)
- Continuous screen changer (ECON)
- Underwater pelletizer (ECON)



### Supplemental compounding equipment

- In-line NIR spectrometer (i-Red)
- On-line Rheotens (Göttfert)
- Vacuum degassing
- Belt haul off with strand pelletizer for line 2

### Small batches, sample and specimen production

- Twin screw extruder with water bath and strand pelletizer (Brabender Rheocord)
- Lab kneader (Haake Rheomix)
- Lab vacuum press (Dr. Collin)