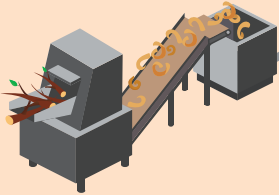


Value proposition

For companies which are looking to valorize their by-product streams, BPF offers first-rate facilities and a broad experience in processing various biomass sources. Unlike universities, research technology organizations and food research companies, BPF operates in an IP protected industrial setting to validate your company's business case and to develop the process at pilot scale.

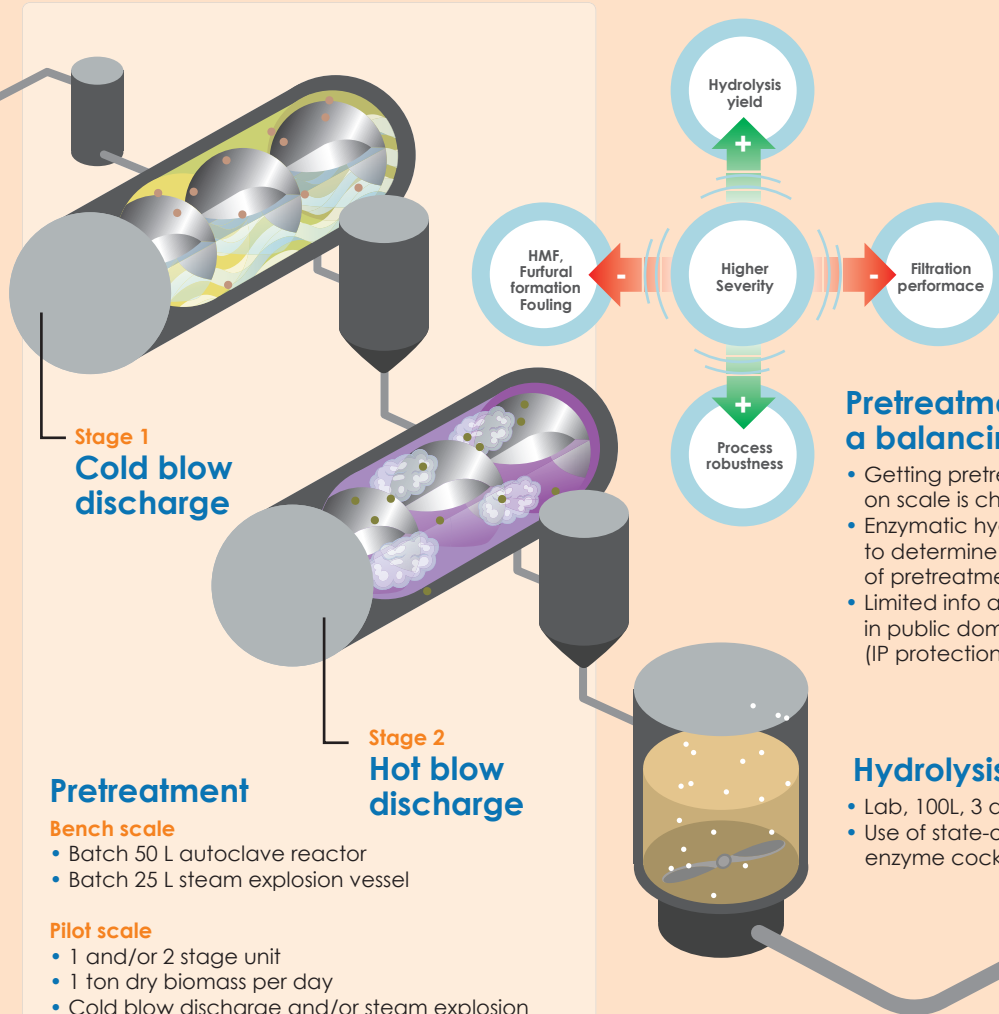
Feedstock



Size reduction

- Dry pretreatment section**
- Biomass handling
 - Knife mill

BIOMASSES WE VALORIZED:



Pretreatment

Bench scale

- Batch 50 L autoclave reactor
- Batch 25 L steam explosion vessel

Pilot scale

- 1 and/or 2 stage unit
- 1 ton dry biomass per day
- Cold blow discharge and/or steam explosion

Pretreatment is a balancing game

- Getting pretreatment to work on scale is challenging
- Enzymatic hydrolysis is key to determine efficiency of pretreatment
- Limited info available in public domain (IP protection)

Hydrolysis

- Lab, 100L, 3 and 9 m³
- Use of state-of-the-art enzyme cocktails

BPF's infographics

- 1 Impact of Bioprocess Pilot Facility 2012-2019
- 2 ✓ Unlock the potential of your biomass
- 3 Valorization of 1st and 2nd generation sugars
- 4 Benefits of piloting at BPF
- 5 Demonstration and pilot scale production at BPF
- 6 Benefits of Purification / Downstream Processing at BPF
- 7 Food and feed ingredients

BPF's customers come from all over the world:



420,000 hrs experience

270 Projects executed



15% Public Private Partnership projects
85% Commercial projects

Purification/DSP

- Various S/L separations
- Chromatography
- Evaporation
- Sterilization

Analytics

- HPLC (standard / customized)
- Biomass composition

BPF offers

- To kickstart your biomass valorization
- Hands-on and extensive experience
- Lab, pilot and industrial scale knowledge
- De-risking of your business
- Shortening of your time-to-market