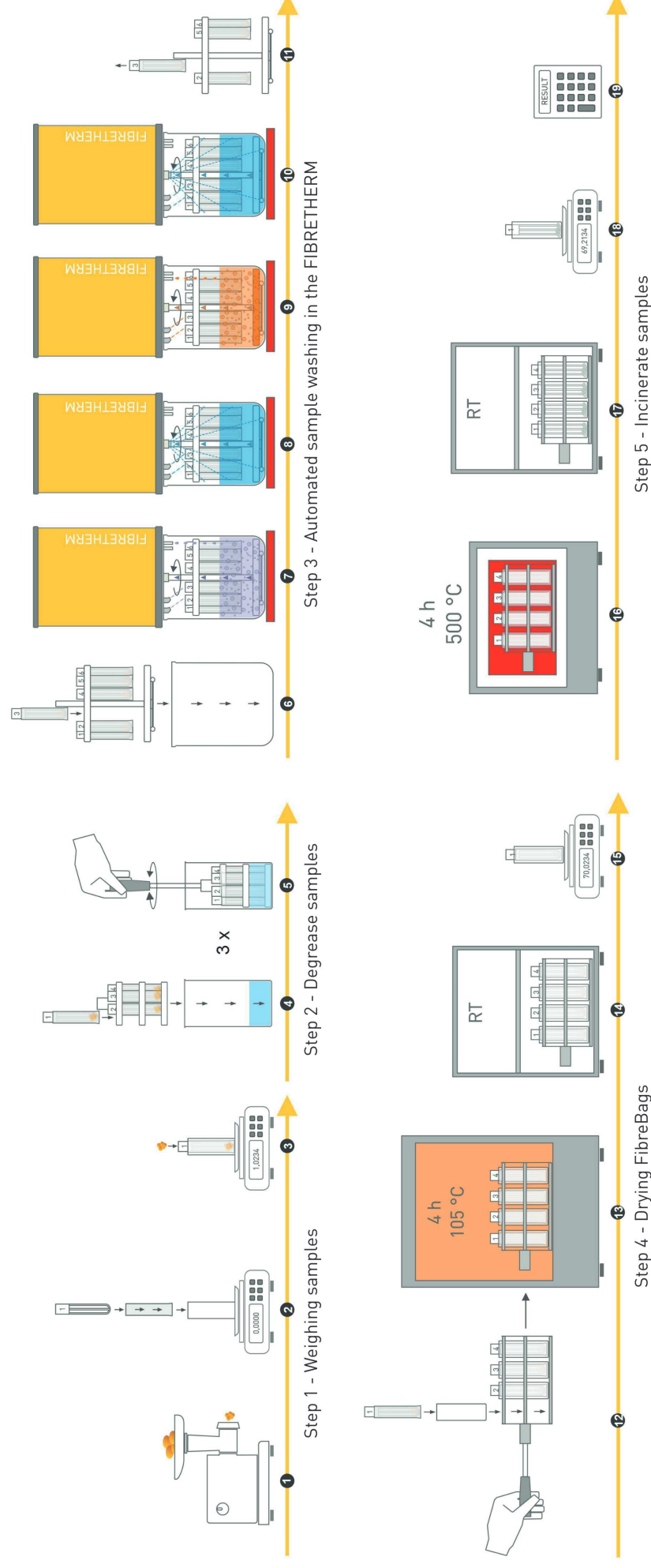


Automated fibre analysis using FIBRE THERM



1. Grinding and homogenising sample
2. Place the glass spacer (No. 10-0124) into a FibreBag RF for crude fibre determination (No. 10-0128) and then place it in a crucible (No. 13-0048). Then tare the balance.
3. Weigh approximately 1 g of the sample into FibreBag.
4. If the fat content of the sample exceeds 5%, degreasing is recommended; from 10 % onwards, degreasing must be carried out. For the samples to be degreased, place them into the carousel of the degreasing module (No. 13-0045). Then add approx. 100 ml of petroleum ether 40/60 to a beaker.
5. The sample carousel is immersed in petroleum ether. Degrease the sample by rotating the carousel and moving it up and down. This step is carried out a total of three

- times, always using fresh solvent. Then let it dry in the fume cupboard for about 2 minutes.
6. The glass spacer with FibreBags are placed in the reaction vessel, which is then inserted into the FIBRE THERM 10-0143) prevents excessive foaming.
7. The reaction vessel is placed on the FIBRE THERM hotplate and the method is started.
- Dissolution step 1:** Addition of sulphuric acid $c(\text{H}_2\text{SO}_4) = 0.13 \text{ mol/l}$.
- 8. Washing step 1:** Acid-free washing with water.
- 9. Dissolution step 2:** Add potassium hydroxide solution $c(\text{KOH}) = 0.23 \text{ mol/l}$ and boil.
- 10. Washing step 2:** Alkali-free washing with water

11. Once the method is complete, transfer the glass spacer with the FibreBags back into the crucibles.
12. Place the crucibles containing the FibreBags into the incineration module.
13. Then place them in the drying oven at 103°C for 4 hours or leave them to dry overnight.
14. Cool to room temperature (constant mass)
15. Weigh the sample
16. Place the ashing module in the muffle furnace and incinerate the sample at 500°C for 4 hours.
17. Cool down to room temperature (constant mass)
18. Weigh the crucibles
19. Calculation