We offer different kinds of

STANDARD TEST METHODS

DROP MELTING POINT

The melting point provides information on the solid-liquid phase-transition

The melting point is the temperature at which a sample subject to a load will detach itself from an enclosed ring mold. The results give a temperature which allows the wax to be forced from a shell without exerting sufficient force to cause shell cracking.

CONGEALING POINT

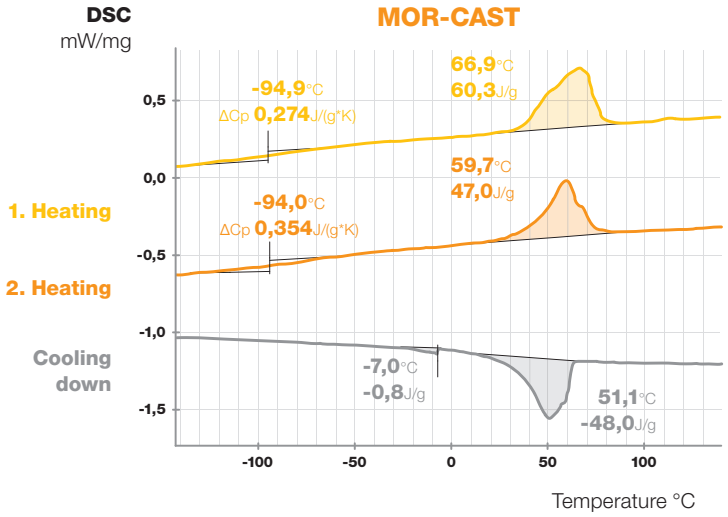
The congealing point provides information on the liquid-solid phase-transition

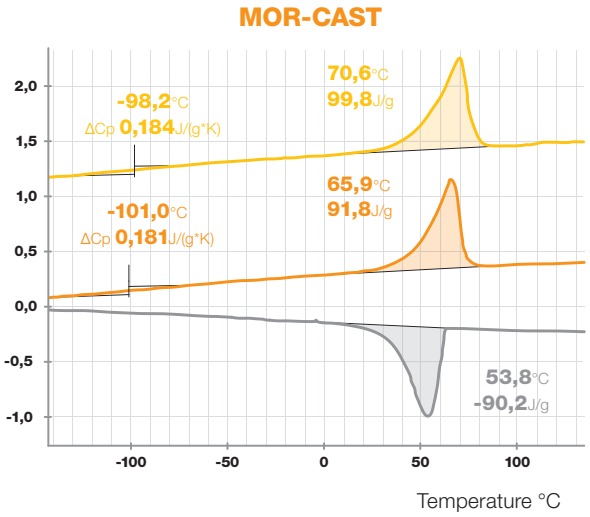
The congealing point is the temperature at which molten wax, when allowed to cool, ceases to flow. The results give a variation in temperature and a picture of what is happening to the wax. Most important: It gives a guide to temperatures required in the injection machine tank and the injection temperature itself.

DIFFERENTIAL SCANNING CALORIMETRY

Controlling heat flow during the solidification and melting stages of a casting process is very important. Therefore varieties in wax behaviour with changes in the thermal conductivity of the medium can be modelled via DSC analysis.

It is used to detect material changes and to look at solid shrinkage, crystallization of a wax, cloud points and rheometry which can provide a fingerprint for visco-elastic strength, flow, solidification and resistance to deformation.





Ash testing:

It represents the percentage of non-combustible solids contained in the compound. Low ash contents are a certainty for our investment casting waxes. Our laboratories rigorously test every lot to ensure residual ash levels meet our specifications.

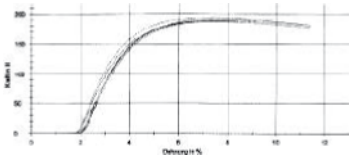
PARTICLE SIZE DISTRIBUTION TESTING

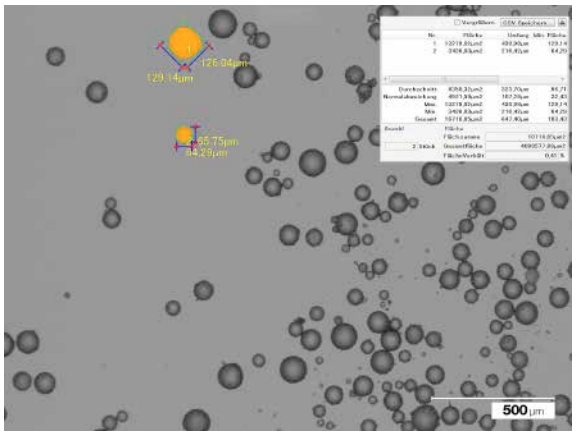
The PSD of a filler has a major impact on wax performance, especially surface finish, viscosity and dewaxability.

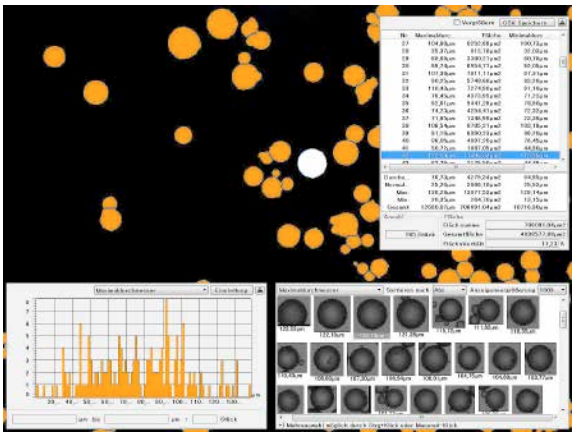
Today many waxes contain solid fillers that enable enhanced dimensional control. We know the degree to which a filler's particle-size distribution impacts the wax rheology. For this reason we use a particle-size analyzer for filler characterization.

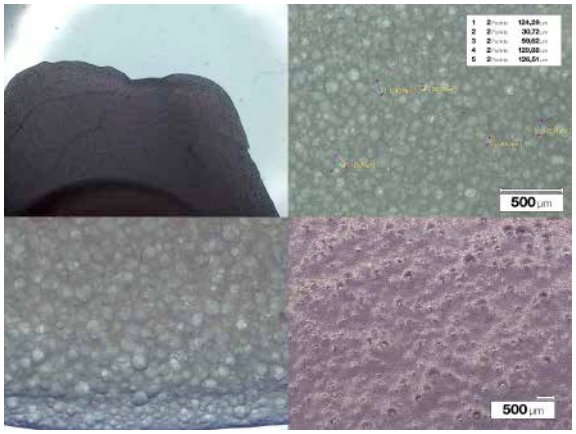
3-POINT BENDING FLEXURAL TEST

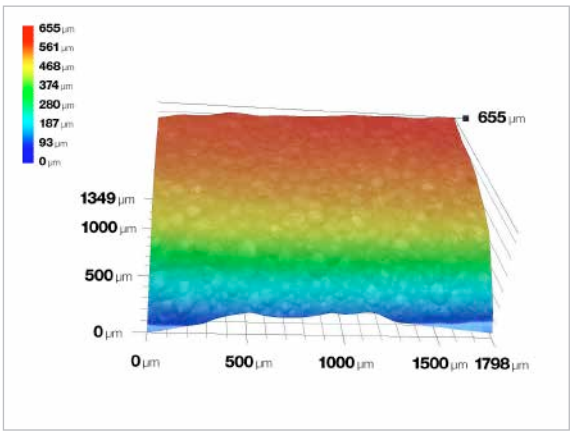
According to **ISO 178** it provides values for the modulus of elasticity in bending, flexural strain and the flexural stress-strain response of the material, flexural stress.









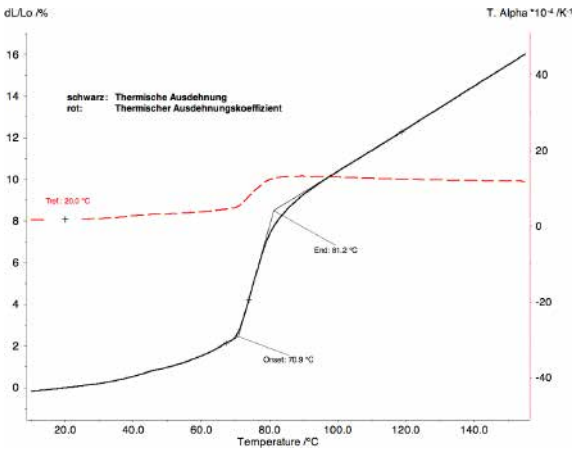


DIMENSIONAL PERFORMANCE TESTING

DPT shows the effect of wax temperature and injection pressure. We have a wide variety of tooling in order to simulate many of the daily foundry activities.

DYNAMIC MECHANICAL ANALYSIS

DMA measures ‚free' wax expansion and contraction whilst exerting minimal force on the sample.



PRODUCT FORMS:

Form of delivery: reconstituted pattern / reclaimed runner wax

- either pellets / slabs / cartouches
- In 25 kilo bags
- In 500 kilo 'Big Bags'

Packaging:

- EU-Pallets, PE foil