# **PMP** *PARSIZE* **P**LUS

# Additional Modules for the Basic Software Package PMP ParSize

## **LINKING DISTRIBUTION DATA**

The program supports the link of a particle size distribution with

- an independent coarse- or fine particle fraction
- a second particle size distribution comprising an adjacent particle range
- a second particle size distribution, where the separation proportion between both distributions is known.

The evaluations allow a free choice of the linking particle size. In the case of overlapping of both distributions (case 2) the link goodness to be expected can be considered for defining the linking particle size. The resulting course of the curve is displayed for a visual verification of the link.





#### **KINDS OF QUANTITY**

The PMP standard description of a particle size distribution uses the mass/volume relation  $Q_3(x)$ . The data can be converted into their equivalents expressed by the alternate quantities

- number Q<sub>0</sub>(x) and
- surface Q<sub>2</sub>(x)

Characteristic values and functions will be adapted according to the chosen kind of quantity and displayed in views or tables.

#### **STATISTICS**

Multiple measurements can be evaluated by statistical methods using the module **PMP STATISTICS**. Mean value- and tests procedures allow conclusions regarding the measuring accuracy or product comparison respectively.

Mean value- and dispersion data can be displayed clearly in common PMP diagrams.



#### **PSD SYNTHESIS**

The input of two arbitrary fineness characteristics

- particle size x\* and corresponding value Q\*(x\*)
- mean particle size
- volume related specific surface
- parameters of the assumed distribution function

is sufficient for constructing the entire particle size distribution to a selected material object with respect to the corresponding particle size sequence via distribution functions

- RRSB function (Weibull distribution)
- Log-normal distribution
- GGS power function

### **MIXING FORMULA**

The PMP module **Mix** can be applied to calculate the best ratio for mixing different initial materials in order to comply with demands of a given nominal particle size distribution. This evaluation can be applied to multiple combinations of the initial materials being available in order to obtain the best solution from the economic point of view (costs).



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