

Ikarus::LinearElastic
::calculateScalarImpl

Ikarus::NonLinearElastic
::calculateScalarImpl

Ikarus::KirchhoffLoveShell
::calculateScalarImpl

Ikarus::Volume::calculate
ScalarImpl

```
graph LR; A[Ikarus::LinearElastic::calculateScalarImpl] --> D[Ikarus::Volume::calculateScalarImpl]; B[Ikarus::NonLinearElastic::calculateScalarImpl] --> D; C[Ikarus::KirchhoffLoveShell::calculateScalarImpl] --> D;
```

The diagram illustrates a design pattern where three different material models (LinearElastic, NonLinearElastic, and KirchhoffLoveShell) share a common implementation for calculating scalar values. Each model's `calculateScalarImpl` method is shown in a white box on the left. Arrows from these boxes point to a single gray box on the right, which represents the `Ikarus::Volume::calculateScalarImpl` method. This suggests that the volume calculation is a shared operation that can be implemented by any of the three material models.