**Table 6**.

*Summary of input parameters and results from iSALE-2D numerical parameter study. The layer thickness was H ≅ 12.5 mm.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter varied** | **Upper layer** | **Bottom layer** | **Constants** | ***Din/Dout*** | ***Dout/H*** |
| Control case | *ρ0 = 2.65* g/cm3  *ɸ* = 40%  *f* = 0.50  χ = 0.5  A = 36 GPa | *ρ0B = 7.8* g/cm3  *ɸB* = 44%  *fB* = 0.65  χB = 0.8  AB = 128 GPa | - | 0.79 | 21.84 |
| Density, *ρ* | *ρ0* = 1.8 g/cm3 | *ρ0B = 4.65* g/cm3 | *ɸ* = *ɸB* = 44%  *f* = *fB* = 0.65  χ = χB = 0.8  *A* = *AB* = 36 GPa | 0.82 | 22.81 |
| Porosity, *ɸ* | *ɸ = 50%* | *ɸB = 0%* | *ρ0*=*ρ0B* = *2.65* g/cm3  *f* = *fB* = 0.65  χ = χB = 0.8  A = AB = 36 GPa | 0.86 | 25.54 |
| Friction, *f* | *f = 0.4* | *fB = 1.0* | *ρ0*=*ρ0B* = *2.65* g/cm3  *ɸ* = *ɸB* = 44%  χ = χB = 0.8  A = AB = 36 GPa | 0.75 | 21.20 |
| Sound speed ratio, χ | χ = 0.3 | χB = 1.0 | *ρ0* = *ρ0B* = *2.65* g/cm3  *ɸ* = *ɸB* = 44%  *f* = *fB* = 0.65  A = AB = 36 GPa | 0.90 | 27.67 |
| Bulk modulus, *A* | A = 1 GPa | AB = 36 GPa | *ρ0*=*ρ0B* = *2.65* g/cm3  *ɸ* = *ɸB* = 44%  *f* = *fB* = 0.65  χ = χB = 0.8 | 0.90 | 27.13 |