

## Mould construction with Sphere.core SBC

sphere.core SBC is perfectly suited to produce moulds with high stability and impact resistance. The advantages of using sphere.core SBC are fast mould production in polyester- or vinylester resin, no need to use special toolings and a reduced shrinkage in wet-in-wet lamination with a controlled exotherm. The mould will get an excellent surface, eliminating print-thru of frames and inserts, even after a long utilization of the mould. The high impact strength avoids damages by demoulding and impact. It is possible to laminate 3-dimensional, complicated shapes with small radii.

In the meantime moulds (for example boat decks) of more than 26 m length and thickness of 30mm are made of sphere.core SBC. Please find below some laminate proposals for mould construction with sphere.core SBC.

### small moulds (11 mm thickness)

Gelcoat

1 layer CSM 225 g/m<sup>2</sup> (curing)

2 layer CSM 450 g/m<sup>2</sup>

1 layer sphere.core SBC 6

2 layer CSM 450 g/m<sup>2</sup>

### medium-sized moulds (16 mm thickness)

Gelcoat

1 layer CSM 225 g/m<sup>2</sup> (curing)

2 layer CSM 450 g/m<sup>2</sup>

1 layer complex MX 600/CSM 450 g/m<sup>2</sup>

1 layer sphere.core SBC 10

2 layer complex MX 600/CSM 450 g/m<sup>2</sup>

### large moulds (23 mm thickness)

Gelcoat

1-2 layer CSM 225 g/m<sup>2</sup> (curing)

2 layer CSM 450 g/m<sup>2</sup>

1 layer complex MX600/CSM450 g/m<sup>2</sup>

1 layer sphere.core SBC 8

1 layer CSM 300 g/m<sup>2</sup>

1 layer sphere.core SBC 8

2 layer complex MX600/CSM450 g/m<sup>2</sup>

### our recommendation:

Place 1 layer sphere.core S 1mm after the first layer CSM 225g/m<sup>2</sup> in order to reach an excellent surface. This first layer should be produced by using vinylester- or polyester resin based on tetrahydrophthalic acid.

Regarding application details we refer to our DVD „Sphere.core SBC“.

