


```

                                blockMeshDict
(-0.353553  0.353553 -0.5)      //Vertex-16
(-2.0       2.0       -0.5)      //Vertex-17
(-0.707107  2.0       -0.5)      //Vertex-18
( 0.5       0.0       0.5)      //Vertex-19 <- Vertex-0
( 1.0       0.0       0.5)      //Vertex-20 <- Vertex-1
( 2.0       0.0       0.5)      //Vertex-21 <- Vertex-2
( 2.0       0.707107  0.5)      //Vertex-22 <- Vertex-3
( 0.707107  0.707107  0.5)      //Vertex-23 <- Vertex-4
( 0.353553  0.353553  0.5)      //Vertex-24 <- Vertex-5
( 2.0       2.0       0.5)      //Vertex-25 <- Vertex-6
( 0.707107  2.0       0.5)      //Vertex-26 <- Vertex-7
( 0.0       2.0       0.5)      //Vertex-27 <- Vertex-8
( 0.0       1.0       0.5)      //Vertex-28 <- Vertex-9
( 0.0       0.5       0.5)      //Vertex-29 <- Vertex-10
(-0.5       0.0       0.5)      //Vertex-30 <- Vertex-11
(-1.0       0.0       0.5)      //Vertex-31 <- Vertex-12
(-2.0       0.0       0.5)      //Vertex-32 <- Vertex-13
(-2.0       0.707107  0.5)      //Vertex-33 <- Vertex-14
(-0.707107  0.707107  0.5)      //Vertex-34 <- Vertex-15
(-0.353553  0.353553  0.5)      //Vertex-35 <- Vertex-16
(-2.0       2.0       0.5)      //Vertex-36 <- Vertex-17
(-0.707107  2.0       0.5)      //Vertex-37 <- Vertex-18
);

blocks
(
  //Block-0
  hex (5 4 9 10 24 23 28 29)
    (10 10 1)
    // specifies number of cells in x-, y- and z-direction
    simpleGrading (0.5 1 1)
    // Ratio of last and first cell sizes in the 3 directions

  //Block-1
  hex (0 1 4 5 19 20 23 24) (10 10 1) simpleGrading (0.5 1 1)

  //Block-2
  hex (1 2 3 4 20 21 22 23) (20 10 1) simpleGrading (1 1 1)

  //Block-3
  hex (4 3 6 7 23 22 25 26) (20 20 1) simpleGrading (1 1 1)

  //Block-4
  hex (9 4 7 8 28 23 26 27) (10 20 1) simpleGrading (1 1 1)

  //Block-5
  hex (15 16 10 9 34 35 29 28) (10 10 1) simpleGrading (2 1 1)

  //Block-6
  hex (12 11 16 15 31 30 35 34) (10 10 1) simpleGrading (2 1 1)

  //Block-7
  hex (13 12 15 14 32 31 34 33) (20 10 1) simpleGrading (1 1 1)

  //Block-8
  hex (14 15 18 17 33 34 37 36) (20 20 1) simpleGrading (1 1 1)

  //Block-9
  hex (15 9 8 18 34 28 27 37) (10 20 1) simpleGrading (1 1 1)
)

```

);

edges

```
(
  arc 0 5 (0.469846 0.171010 -0.5)
  arc 5 10 (0.171010 0.469846 -0.5)
  arc 1 4 (0.939693 0.342020 -0.5)
  arc 4 9 (0.342020 0.939693 -0.5)
  arc 19 24 (0.469846 0.171010 0.5)
  arc 24 29 (0.171010 0.469846 0.5)
  arc 20 23 (0.939693 0.342020 0.5)
  arc 23 28 (0.342020 0.939693 0.5)
  arc 11 16 (-0.469846 0.171010 -0.5)
  arc 16 10 (-0.171010 0.469846 -0.5)
  arc 12 15 (-0.939693 0.342020 -0.5)
  arc 15 9 (-0.342020 0.939693 -0.5)
  arc 30 35 (-0.469846 0.171010 0.5)
  arc 35 29 (-0.171010 0.469846 0.5)
  arc 31 34 (-0.939693 0.342020 0.5)
  arc 34 28 (-0.342020 0.939693 0.5)

```

);

patches

```
(
  symmetryPlane down
  (
    (0 1 20 19)
    (1 2 21 20)
    (12 11 30 31)
    (13 12 31 32)
  )
  patch right
  (
    (2 3 22 21)
    (3 6 25 22)
  )
  symmetryPlane up
  (
    (7 8 27 26)
    (6 7 26 25)
    (8 18 37 27)
    (18 17 36 37)
  )
  patch left
  (
    (14 13 32 33)
    (17 14 33 36)
  )
  symmetryPlane cylinder
  (
    (10 5 24 29)
    (5 0 19 24)
    (16 10 29 35)
    (11 16 35 30)
  )

```

);

mergePatchPairs

(

blockMeshDict

);

// ***** //