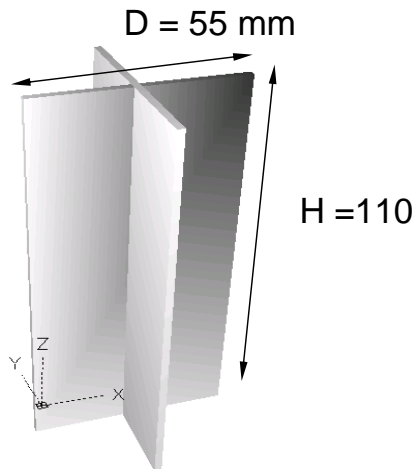


Vane in this problem



gwt = 0 m (assumed)



The profile seems to be mostly homogeneous but I still divided it into 4 layers to calculate the in situ effective vertical stress
Data in *italic*

| | | Depth | [m] | <i>5.1</i> | <i>8</i> | <i>11.1</i> | <i>14.2</i> |
|------------|----------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>D =</i> | <i>0.055 m</i> | <i>wn</i> | [%] | <i>78.1</i> | <i>83.27</i> | <i>84.72</i> | <i>74.53</i> |
| <i>H =</i> | <i>0.110 m</i> | <i>LL</i> | [%] | <i>99</i> | <i>95.2</i> | <i>93.8</i> | <i>83.9</i> |
| | | <i>PL</i> | [%] | <i>45.2</i> | <i>44.7</i> | <i>39.4</i> | <i>31.2</i> |
| | | <i>G_s</i> | [] | <i>2.66</i> | <i>2.72</i> | <i>2.7</i> | <i>2.69</i> |
| | | | Rotation [°] | Torque [N-m] | Torque [N-m] | Torque [N-m] | Torque [N-m] |
| | | | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> |
| | | | <i>0.2</i> | <i>1.8</i> | <i>3.2</i> | <i>4.7</i> | <i>5.7</i> |
| | | | <i>0.5</i> | <i>3.5</i> | <i>6.3</i> | <i>9.5</i> | <i>11.4</i> |
| | | | <i>0.7</i> | <i>5.4</i> | <i>9.7</i> | <i>14.5</i> | <i>17.4</i> |
| | | | <i>1.0</i> | <i>6.9</i> | <i>12.5</i> | <i>18.6</i> | <i>22.3</i> |
| | | | <i>1.2</i> | <i>8.4</i> | <i>15.1</i> | <i>22.7</i> | <i>27.2</i> |
| | | | <i>1.5</i> | <i>9.6</i> | <i>18.2</i> | <i>25.9</i> | <i>31.1</i> |
| | | | <i>1.7</i> | <i>11.5</i> | <i>20.7</i> | <i>31.1</i> | <i>37.4</i> |
| | | | <i>2.0</i> | <i>13.1</i> | <i>22.6</i> | <i>35.4</i> | <i>42.5</i> |
| | | | <i>2.4</i> | <i>13.8</i> | <i>23.9</i> | <i>37.1</i> | <i>44.6</i> |
| | | | <i>3.6</i> | <i>12.2</i> | <i>24.8</i> | <i>33.0</i> | <i>44.8</i> |
| | | | <i>4.7</i> | <i>9.8</i> | <i>19.4</i> | <i>26.3</i> | <i>38.4</i> |
| | | | <i>6.5</i> | <i>8.1</i> | <i>14.6</i> | <i>21.8</i> | <i>26.2</i> |