

Maximum allowable loads for a given span length:

GS insPIRe® CH100

module: 1000/1140 mm

|   |     |    |    |
|---|-----|----|----|
| External cladding thickness [mm]:               | 0,5 |    |    |
| Internal cladding thickness [mm]:               | 0,4 |    |    |
| Outdoor temperature (summer/winter) [°C]:       | 55  | 65 | 80 |
| Indoor temperature (summer/winter) [°C]:        | -20 |    |    |
| Minimum width of end support [mm]:              | 40  |    |    |
| Minimum width of the intermediate support [mm]: | 60  |    |    |

|  |        |
|--|--------|
| The minimum number of the screws on the end support :          | 3      |
| The minimum number of the screws on the intermediate support : | 3      |
| Core material :  | PIR    |
| Cladding steel grade:  | S220GD |
| Ultimate limit state (compare design loads)                    | ULS    |
| Serviceability limit state (compare characteristic loads)      | SLS    |

| Static diagram     | Colour group | Criterion | Maximum evenly distributed load [kN/m <sup>2</sup> ] |       |      |      |      |      |      |      |      |      |      |      |
|--------------------|--------------|-----------|--|-------|------|------|------|------|------|------|------|------|------|------|
|                    |              |           | Axial span of supports [m]                           |       |      |      |      |      |      |      |      |      |      |      |
|                    |              |           | 1,5  | 2,0   | 2,5  | 3,0  | 3,5  | 4,0  | 4,5  | 5,0  | 5,5  | 6,0  | 6,5  |      |
| Single-span system | I            | ULS       | pressure   | 5,78  | 4,33 | 3,47 | 2,89 | 2,48 | 2,17 | 1,93 | 1,73 | 1,58 | 1,33 | 1,13 |
|                    |              |           | suction  | 10,36 | 6,40 | 4,10 | 2,85 | 2,09 | 1,60 | 1,26 | 1,02 | 0,85 | 0,71 | 0,61 |
|                    |              | SLS L/100 | pressure   | 11,59 | 7,43 | 5,00 | 3,47 | 2,46 | 1,78 | 1,31 | 0,98 | 0,74 | 0,57 | 0,44 |
|                    |              |           | suction  | 11,90 | 7,71 | 5,24 | 3,68 | 2,64 | 1,94 | 1,45 | 1,10 | 0,84 | 0,66 | 0,52 |
|                    |              | SLS L/150 | pressure   | 7,30  | 4,58 | 3,01 | 2,03 | 1,40 | 0,98 | 0,69 | 0,49 | 0,36 | 0,26 | 0,18 |
|                    |              |           | suction  | 7,62  | 4,86 | 3,25 | 2,24 | 1,58 | 1,13 | 0,83 | 0,61 | 0,46 | 0,35 | 0,26 |
|                    | SLS L/200    | pressure  | 5,16   | 3,16  | 2,01 | 1,31 | 0,87 | 0,58 | 0,38 | 0,25 | 0,16 | 0,10 | -    |      |
|                    |              | suction   | 5,48   | 3,44  | 2,26 | 1,52 | 1,05 | 0,73 | 0,52 | 0,37 | 0,27 | 0,19 | 0,14 |      |
|                    | II           | ULS       | pressure   | 5,78  | 4,33 | 3,47 | 2,89 | 2,48 | 2,17 | 1,93 | 1,73 | 1,58 | 1,33 | 1,13 |
|                    |              |           | suction  | 10,36 | 6,40 | 4,10 | 2,85 | 2,09 | 1,60 | 1,26 | 1,02 | 0,85 | 0,71 | 0,61 |
|                    |              | SLS L/100 | pressure   | 11,59 | 7,43 | 5,00 | 3,47 | 2,46 | 1,78 | 1,31 | 0,98 | 0,74 | 0,57 | 0,44 |
|                    |              |           | suction  | 11,59 | 7,43 | 5,00 | 3,47 | 2,46 | 1,78 | 1,31 | 0,98 | 0,74 | 0,57 | 0,44 |
|                    |              | SLS L/150 | pressure   | 7,30  | 4,58 | 3,01 | 2,03 | 1,40 | 0,98 | 0,69 | 0,49 | 0,36 | 0,26 | 0,18 |
|                    |              |           | suction  | 7,30  | 4,58 | 3,01 | 2,03 | 1,40 | 0,98 | 0,69 | 0,49 | 0,36 | 0,26 | 0,18 |
|                    | SLS L/200    | pressure  | 5,16   | 3,16  | 2,01 | 1,31 | 0,87 | 0,58 | 0,38 | 0,25 | 0,16 | 0,10 | -    |      |
|                    |              | suction   | 5,16   | 3,16  | 2,01 | 1,31 | 0,87 | 0,58 | 0,38 | 0,25 | 0,16 | 0,10 | -    |      |
|                    | III          | ULS       | pressure   | 5,78  | 4,33 | 3,47 | 2,89 | 2,48 | 2,17 | 1,93 | 1,73 | 1,58 | 1,33 | 1,13 |
|                    |              |           | suction  | 10,36 | 6,40 | 4,10 | 2,85 | 2,09 | 1,60 | 1,26 | 1,02 | 0,85 | 0,71 | 0,61 |
|                    |              | SLS L/100 | pressure   | 11,59 | 7,43 | 5,00 | 3,47 | 2,46 | 1,78 | 1,31 | 0,98 | 0,74 | 0,57 | 0,44 |
|                    |              |           | suction  | 11,11 | 7,01 | 4,63 | 3,15 | 2,19 | 1,54 | 1,11 | 0,80 | 0,58 | 0,43 | 0,32 |
|                    |              | SLS L/150 | pressure   | 7,30  | 4,58 | 3,01 | 2,03 | 1,40 | 0,98 | 0,69 | 0,49 | 0,36 | 0,26 | 0,18 |
|                    |              |           | suction  | 6,83  | 4,16 | 2,64 | 1,71 | 1,12 | 0,74 | 0,49 | 0,32 | 0,20 | 0,12 | -    |
|                    | SLS L/200    | pressure  | 5,16   | 3,16  | 2,01 | 1,31 | 0,87 | 0,58 | 0,38 | 0,25 | 0,16 | 0,10 | -    |      |
|                    |              | suction   | 4,69   | 2,74  | 1,65 | 0,99 | 0,59 | 0,34 | 0,18 | -    | -    | -    | -    |      |

|                   |           |           |          |       |      |      |      |      |      |      |      |      |      |      |
|-------------------|-----------|-----------|----------|-------|------|------|------|------|------|------|------|------|------|------|
| Multi-span system | I         | ULS       | pressure | 4,05  | 2,95 | 2,30 | 1,89 | 1,35 | 0,99 | 0,76 | 0,60 | 0,49 | 0,40 | 0,34 |
|                   |           |           | suction  | 4,14  | 3,11 | 2,49 | 1,77 | 1,25 | 0,93 | 0,72 | 0,57 | 0,46 | 0,38 | 0,32 |
|                   |           | SLS L/100 | pressure | 12,45 | 8,58 | 6,30 | 4,74 | 3,63 | 2,83 | 2,23 | 1,78 | 1,44 | 1,17 | 0,96 |
|                   |           |           | suction  | 12,68 | 8,76 | 6,45 | 4,86 | 3,75 | 2,93 | 2,32 | 1,85 | 1,51 | 1,23 | 1,02 |
|                   |           | SLS L/150 | pressure | 7,98  | 5,46 | 4,00 | 2,98 | 2,26 | 1,75 | 1,37 | 1,08 | 0,86 | 0,70 | 0,56 |
|                   |           |           | suction  | 8,22  | 5,65 | 4,15 | 3,12 | 2,38 | 1,85 | 1,45 | 1,16 | 0,94 | 0,75 | 0,62 |
|                   | SLS L/200 | pressure  | 5,75     | 3,91  | 2,85 | 2,11 | 1,59 | 1,22 | 0,94 | 0,74 | 0,58 | 0,46 | 0,37 |      |
|                   |           | suction   | 5,98     | 4,10  | 3,00 | 2,24 | 1,70 | 1,31 | 1,03 | 0,81 | 0,65 | 0,52 | 0,43 |      |
|                   | II        | ULS       | pressure | 4,05  | 2,95 | 2,30 | 1,89 | 1,35 | 0,99 | 0,76 | 0,60 | 0,49 | 0,40 | 0,34 |
|                   |           |           | suction  | 4,14  | 3,11 | 2,32 | 1,48 | 1,02 | 0,74 | 0,56 | 0,44 | 0,35 | 0,29 | 0,24 |
|                   |           | SLS L/100 | pressure | 12,45 | 8,58 | 6,30 | 4,74 | 3,63 | 2,83 | 2,23 | 1,78 | 1,44 | 1,17 | 0,96 |
|                   |           |           | suction  | 12,45 | 8,58 | 6,30 | 4,74 | 3,63 | 2,83 | 2,23 | 1,78 | 1,44 | 1,17 | 0,96 |
|                   |           | SLS L/150 | pressure | 7,98  | 5,46 | 4,00 | 2,98 | 2,26 | 1,75 | 1,37 | 1,08 | 0,86 | 0,70 | 0,56 |
|                   |           |           | suction  | 7,98  | 5,46 | 4,00 | 2,98 | 2,26 | 1,75 | 1,37 | 1,08 | 0,86 | 0,70 | 0,56 |
|                   | SLS L/200 | pressure  | 5,75     | 3,91  | 2,85 | 2,11 | 1,59 | 1,22 | 0,94 | 0,74 | 0,58 | 0,46 | 0,37 |      |
|                   |           | suction   | 5,75     | 3,91  | 2,85 | 2,11 | 1,59 | 1,22 | 0,94 | 0,74 | 0,58 | 0,46 | 0,37 |      |
|                   | III       | ULS       | pressure | 4,05  | 2,95 | 2,30 | 1,89 | 1,35 | 0,99 | 0,76 | 0,60 | 0,49 | 0,40 | 0,34 |
|                   |           |           | suction  | 4,14  | 3,11 | 1,76 | 1,04 | 0,67 | 0,46 | 0,33 | 0,25 | 0,19 | 0,15 | 0,12 |
|                   |           | SLS L/100 | pressure | 12,45 | 8,58 | 6,30 | 4,74 | 3,63 | 2,83 | 2,23 | 1,78 | 1,44 | 1,17 | 0,96 |
|                   |           |           | suction  | 12,09 | 8,29 | 6,07 | 4,55 | 3,45 | 2,67 | 2,10 | 1,66 | 1,33 | 1,07 | 0,87 |
|                   |           | SLS L/150 | pressure | 7,98  | 5,46 | 4,00 | 2,98 | 2,26 | 1,75 | 1,37 | 1,08 | 0,86 | 0,70 | 0,56 |
|                   |           |           | suction  | 7,63  | 5,18 | 3,76 | 2,79 | 2,10 | 1,60 | 1,24 | 0,96 | 0,76 | 0,60 | 0,48 |
|                   | SLS L/200 | pressure  | 5,75     | 3,91  | 2,85 | 2,11 | 1,59 | 1,22 | 0,94 | 0,74 | 0,58 | 0,46 | 0,37 |      |
|                   |           | suction   | 5,39     | 3,63  | 2,62 | 1,92 | 1,42 | 1,06 | 0,81 | 0,62 | 0,47 | 0,36 | 0,28 |      |

|                   |             |   |
|-------------------|-------------|---|
| I colour group:   | very bright | RAL: 1015, 7035, 9002, 9010, 9016             |
| II colour group:  | bright      | RAL: 5012, 9006, 6011                         |
| III colour group: | dark        | RAL: 3000, 5010, 6029, 7016, 7024, 8017, 9007 |

In the case of dark colors, the total length of the board is limited. Details available from our sales representatives.

For other values of the internal temperature, thickness and material lining, etc., Please contact us to perform separate calculations.

Maximum allowable loads for a given span length:

GS insPIRe® CH120

module: 1000/1140 mm

|   |     |    |    |
|---|-----|----|----|
| External cladding thickness [mm]:               | 0,5 |    |    |
| Internal cladding thickness [mm]:               | 0,4 |    |    |
| Outdoor temperature (summer/winter) [°C]:       | 55  | 65 | 80 |
| Indoor temperature (summer/winter) [°C]:        | -20 |    |    |
| Minimum width of end support [mm]:              | 40  |    |    |
| Minimum width of the intermediate support [mm]: | 60  |    |    |

|  |        |
|--|--------|
| The minimum number of the screws on the end support :          | 3      |
| The minimum number of the screws on the intermediate support : | 3      |
| Core material :  | PIR    |
| Cladding steel grade:  | S220GD |
| Ultimate limit state (compare design loads)                    | ULS    |
| Serviceability limit state (compare characteristic loads)      | SLS    |

| Static diagram     | Colour group | Criterion | Maximum evenly distributed load [kN/m <sup>2</sup> ] |       |      |      |      |      |      |      |      |      |      |      |
|--------------------|--------------|-----------|--|-------|------|------|------|------|------|------|------|------|------|------|
|                    |              |           | Axial span of supports [m]                           |       |      |      |      |      |      |      |      |      |      |      |
|                    |              |           | 1,5  | 2,0   | 2,5  | 3,0  | 3,5  | 4,0  | 4,5  | 5,0  | 5,5  | 6,0  | 6,5  |      |
| Single-span system | I            | ULS       | pressure   | 6,22  | 4,67 | 3,73 | 3,11 | 2,67 | 2,33 | 2,07 | 1,87 | 1,70 | 1,56 | 1,36 |
|                    |              |           | suction  | 10,36 | 7,68 | 4,91 | 3,42 | 2,50 | 1,92 | 1,52 | 1,23 | 1,02 | 0,86 | 0,73 |
|                    |              | SLS L/100 | pressure   | 14,59 | 9,57 | 6,59 | 4,68 | 3,40 | 2,51 | 1,89 | 1,44 | 1,11 | 0,86 | 0,68 |
|                    |              |           | suction  | 14,91 | 9,86 | 6,85 | 4,91 | 3,60 | 2,69 | 2,04 | 1,57 | 1,23 | 0,97 | 0,77 |
|                    |              | SLS L/150 | pressure   | 9,29  | 5,99 | 4,05 | 2,82 | 2,00 | 1,44 | 1,05 | 0,78 | 0,58 | 0,44 | 0,33 |
|                    |              |           | suction  | 9,62  | 6,28 | 4,31 | 3,04 | 2,20 | 1,62 | 1,21 | 0,91 | 0,70 | 0,54 | 0,42 |
|                    | SLS L/200    | pressure  | 6,65   | 4,20  | 2,78 | 1,88 | 1,30 | 0,91 | 0,64 | 0,45 | 0,32 | 0,22 | 0,15 |      |
|                    |              | suction   | 6,97   | 4,49  | 3,04 | 2,11 | 1,50 | 1,08 | 0,79 | 0,58 | 0,44 | 0,33 | 0,25 |      |
|                    | II           | ULS       | pressure   | 6,22  | 4,67 | 3,73 | 3,11 | 2,67 | 2,33 | 2,07 | 1,87 | 1,70 | 1,56 | 1,36 |
|                    |              |           | suction  | 10,36 | 7,68 | 4,91 | 3,42 | 2,50 | 1,92 | 1,52 | 1,23 | 1,02 | 0,86 | 0,73 |
|                    |              | SLS L/100 | pressure   | 14,59 | 9,57 | 6,59 | 4,68 | 3,40 | 2,51 | 1,89 | 1,44 | 1,11 | 0,86 | 0,68 |
|                    |              |           | suction  | 14,59 | 9,57 | 6,59 | 4,68 | 3,40 | 2,51 | 1,89 | 1,44 | 1,11 | 0,86 | 0,68 |
|                    |              | SLS L/150 | pressure   | 9,29  | 5,99 | 4,05 | 2,82 | 2,00 | 1,44 | 1,05 | 0,78 | 0,58 | 0,44 | 0,33 |
|                    |              |           | suction  | 9,29  | 5,99 | 4,05 | 2,82 | 2,00 | 1,44 | 1,05 | 0,78 | 0,58 | 0,44 | 0,33 |
|                    | SLS L/200    | pressure  | 6,65   | 4,20  | 2,78 | 1,88 | 1,30 | 0,91 | 0,64 | 0,45 | 0,32 | 0,22 | 0,15 |      |
|                    |              | suction   | 6,65   | 4,20  | 2,78 | 1,88 | 1,30 | 0,91 | 0,64 | 0,45 | 0,32 | 0,22 | 0,15 |      |
|                    | III          | ULS       | pressure   | 6,22  | 4,67 | 3,73 | 3,11 | 2,67 | 2,33 | 2,07 | 1,87 | 1,70 | 1,56 | 1,36 |
|                    |              |           | suction  | 10,36 | 7,68 | 4,91 | 3,42 | 2,50 | 1,92 | 1,52 | 1,23 | 1,02 | 0,86 | 0,73 |
|                    |              | SLS L/100 | pressure   | 14,59 | 9,57 | 6,59 | 4,68 | 3,40 | 2,51 | 1,89 | 1,44 | 1,11 | 0,86 | 0,68 |
|                    |              |           | suction  | 14,10 | 9,13 | 6,20 | 4,34 | 3,10 | 2,25 | 1,66 | 1,23 | 0,93 | 0,71 | 0,54 |
|                    |              | SLS L/150 | pressure   | 9,29  | 5,99 | 4,05 | 2,82 | 2,00 | 1,44 | 1,05 | 0,78 | 0,58 | 0,44 | 0,33 |
|                    |              |           | suction  | 8,81  | 5,55 | 3,66 | 2,47 | 1,70 | 1,18 | 0,82 | 0,58 | 0,40 | 0,28 | 0,19 |
|                    | SLS L/200    | pressure  | 6,65   | 4,20  | 2,78 | 1,88 | 1,30 | 0,91 | 0,64 | 0,45 | 0,32 | 0,22 | 0,15 |      |
|                    |              | suction   | 6,16   | 3,76  | 2,39 | 1,54 | 1,00 | 0,64 | 0,41 | 0,25 | 0,14 | -    | -    |      |

|                   |           |           |          |       |       |      |      |      |      |      |      |      |      |      |
|-------------------|-----------|-----------|----------|-------|-------|------|------|------|------|------|------|------|------|------|
| Multi-span system | I         | ULS       | pressure | 4,47  | 3,25  | 2,54 | 2,07 | 1,67 | 1,22 | 0,93 | 0,74 | 0,60 | 0,49 | 0,41 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49 | 2,07 | 1,54 | 1,14 | 0,87 | 0,69 | 0,56 | 0,47 | 0,39 |
|                   |           | SLS L/100 | pressure | 15,40 | 10,71 | 7,93 | 6,08 | 4,73 | 3,73 | 2,98 | 2,41 | 1,96 | 1,62 | 1,35 |
|                   |           |           | suction  | 15,65 | 10,91 | 8,10 | 6,22 | 4,85 | 3,84 | 3,08 | 2,50 | 2,05 | 1,69 | 1,40 |
|                   |           | SLS L/150 | pressure | 9,93  | 6,86  | 5,06 | 3,86 | 2,98 | 2,34 | 1,85 | 1,49 | 1,21 | 0,98 | 0,81 |
|                   |           |           | suction  | 10,18 | 7,07  | 5,23 | 4,01 | 3,11 | 2,45 | 1,95 | 1,58 | 1,28 | 1,05 | 0,87 |
|                   | SLS L/200 | pressure  | 7,19     | 4,95  | 3,63  | 2,76 | 2,12 | 1,65 | 1,30 | 1,04 | 0,83 | 0,67 | 0,55 |      |
|                   |           | suction   | 7,45     | 5,15  | 3,80  | 2,90 | 2,24 | 1,75 | 1,39 | 1,12 | 0,91 | 0,74 | 0,61 |      |
|                   | II        | ULS       | pressure | 4,47  | 3,25  | 2,54 | 2,07 | 1,67 | 1,22 | 0,93 | 0,74 | 0,60 | 0,49 | 0,41 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49 | 1,85 | 1,27 | 0,92 | 0,69 | 0,54 | 0,43 | 0,36 | 0,30 |
|                   |           | SLS L/100 | pressure | 15,40 | 10,71 | 7,93 | 6,08 | 4,73 | 3,73 | 2,98 | 2,41 | 1,96 | 1,62 | 1,35 |
|                   |           |           | suction  | 15,40 | 10,71 | 7,93 | 6,08 | 4,73 | 3,73 | 2,98 | 2,41 | 1,96 | 1,62 | 1,35 |
|                   |           | SLS L/150 | pressure | 9,93  | 6,86  | 5,06 | 3,86 | 2,98 | 2,34 | 1,85 | 1,49 | 1,21 | 0,98 | 0,81 |
|                   |           |           | suction  | 9,93  | 6,86  | 5,06 | 3,86 | 2,98 | 2,34 | 1,85 | 1,49 | 1,21 | 0,98 | 0,81 |
|                   | SLS L/200 | pressure  | 7,19     | 4,95  | 3,63  | 2,76 | 2,12 | 1,65 | 1,30 | 1,04 | 0,83 | 0,67 | 0,55 |      |
|                   |           | suction   | 7,19     | 4,95  | 3,63  | 2,76 | 2,12 | 1,65 | 1,30 | 1,04 | 0,83 | 0,67 | 0,55 |      |
|                   | III       | ULS       | pressure | 4,47  | 3,25  | 2,54 | 2,07 | 1,67 | 1,22 | 0,93 | 0,74 | 0,60 | 0,49 | 0,41 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,28 | 1,36 | 0,87 | 0,59 | 0,42 | 0,32 | 0,24 | 0,19 | 0,16 |
|                   |           | SLS L/100 | pressure | 15,40 | 10,71 | 7,93 | 6,08 | 4,73 | 3,73 | 2,98 | 2,41 | 1,96 | 1,62 | 1,35 |
|                   |           |           | suction  | 15,02 | 10,40 | 7,68 | 5,87 | 4,54 | 3,56 | 2,84 | 2,28 | 1,85 | 1,51 | 1,25 |
|                   |           | SLS L/150 | pressure | 9,93  | 6,86  | 5,06 | 3,86 | 2,98 | 2,34 | 1,85 | 1,49 | 1,21 | 0,98 | 0,81 |
|                   |           |           | suction  | 9,55  | 6,55  | 4,82 | 3,65 | 2,80 | 2,18 | 1,71 | 1,36 | 1,09 | 0,88 | 0,72 |
|                   | SLS L/200 | pressure  | 7,19     | 4,95  | 3,63  | 2,76 | 2,12 | 1,65 | 1,30 | 1,04 | 0,83 | 0,67 | 0,55 |      |
|                   |           | suction   | 6,82     | 4,64  | 3,38  | 2,55 | 1,93 | 1,48 | 1,15 | 0,90 | 0,71 | 0,56 | 0,45 |      |

|                   |             |   |
|-------------------|-------------|---|
| I colour group:   | very bright | RAL: 1015, 7035, 9002, 9010, 9016             |
| II colour group:  | bright      | RAL: 5012, 9006, 6011                         |
| III colour group: | dark        | RAL: 3000, 5010, 6029, 7016, 7024, 8017, 9007 |

In the case of dark colors, the total length of the board is limited. Details available from our sales representatives.

For other values of the internal temperature, thickness and material lining, etc., Please contact us to perform separate calculations.

## Maximum allowable loads for a given span length:

GS insPIRe® CH160

module: 1000/1140 mm

|   |     |    |    |
|---|-----|----|----|
| External cladding thickness [mm]:               | 0,5 |    |    |
| Internal cladding thickness [mm]:               | 0,4 |    |    |
| Outdoor temperature (summer/winter) [°C]:       | 55  | 65 | 80 |
| Indoor temperature (summer/winter) [°C]:        | -20 |    |    |
| Minimum width of end support [mm]:              | 40  |    |    |
| Minimum width of the intermediate support [mm]: | 60  |    |    |

|  |        |
|--|--------|
| The minimum number of the screws on the end support :          | 3      |
| The minimum number of the screws on the intermediate support : | 3      |
| Core material :  | PIR    |
| Cladding steel grade:  | S220GD |
| Ultimate limit state (compare design loads)                    | ULS    |
| Serviceability limit state (compare characteristic loads)      | SLS    |

| Static diagram     | Colour group | Criterion | Maximum evenly distributed load [kN/m <sup>2</sup> ] |       |       |      |      |      |      |      |      |      |      |      |
|--------------------|--------------|-----------|--|-------|-------|------|------|------|------|------|------|------|------|------|
|                    |              |           | Axial span of supports [m]                           |       |       |      |      |      |      |      |      |      |      |      |
|                    |              |           | 1,5  | 2,0   | 2,5   | 3,0  | 3,5  | 4,0  | 4,5  | 5,0  | 5,5  | 6,0  | 6,5  |      |
| Single-span system | I            | ULS       | pressure   | 7,11  | 5,33  | 4,27 | 3,56 | 3,05 | 2,67 | 2,37 | 2,13 | 1,94 | 1,78 | 1,64 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22 | 4,55 | 3,34 | 2,56 | 2,02 | 1,64 | 1,35 | 1,14 | 0,97 |
|                    |              | SLS L/100 | pressure   | 16,20 | 11,15 | 8,07 | 6,03 | 4,60 | 3,56 | 2,79 | 2,21 | 1,77 | 1,43 | 1,16 |
|                    |              |           | suction  | 16,46 | 11,39 | 8,30 | 6,24 | 4,79 | 3,73 | 2,95 | 2,35 | 1,90 | 1,54 | 1,27 |
|                    |              | SLS L/150 | pressure   | 10,45 | 7,10  | 5,08 | 3,74 | 2,81 | 2,14 | 1,65 | 1,29 | 1,01 | 0,80 | 0,64 |
|                    |              |           | suction  | 10,71 | 7,35  | 5,31 | 3,95 | 3,00 | 2,31 | 1,81 | 1,43 | 1,14 | 0,91 | 0,74 |
|                    | SLS L/200    | pressure  | 7,57   | 5,08  | 3,58  | 2,59 | 1,92 | 1,43 | 1,08 | 0,82 | 0,63 | 0,48 | 0,37 |      |
|                    |              | suction   | 7,84   | 5,33  | 3,81  | 2,80 | 2,11 | 1,61 | 1,24 | 0,96 | 0,76 | 0,60 | 0,48 |      |
|                    | II           | ULS       | pressure   | 7,11  | 5,33  | 4,27 | 3,56 | 3,05 | 2,67 | 2,37 | 2,13 | 1,94 | 1,78 | 1,64 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22 | 4,55 | 3,34 | 2,56 | 2,02 | 1,64 | 1,35 | 1,14 | 0,97 |
|                    |              | SLS L/100 | pressure   | 16,20 | 11,15 | 8,07 | 6,03 | 4,60 | 3,56 | 2,79 | 2,21 | 1,77 | 1,43 | 1,16 |
|                    |              |           | suction  | 16,20 | 11,15 | 8,07 | 6,03 | 4,60 | 3,56 | 2,79 | 2,21 | 1,77 | 1,43 | 1,16 |
|                    |              | SLS L/150 | pressure   | 10,45 | 7,10  | 5,08 | 3,74 | 2,81 | 2,14 | 1,65 | 1,29 | 1,01 | 0,80 | 0,64 |
|                    |              |           | suction  | 10,45 | 7,10  | 5,08 | 3,74 | 2,81 | 2,14 | 1,65 | 1,29 | 1,01 | 0,80 | 0,64 |
|                    | SLS L/200    | pressure  | 7,57   | 5,08  | 3,58  | 2,59 | 1,92 | 1,43 | 1,08 | 0,82 | 0,63 | 0,48 | 0,37 |      |
|                    |              | suction   | 7,57   | 5,08  | 3,58  | 2,59 | 1,92 | 1,43 | 1,08 | 0,82 | 0,63 | 0,48 | 0,37 |      |
|                    | III          | ULS       | pressure   | 7,11  | 5,33  | 4,27 | 3,56 | 3,05 | 2,67 | 2,37 | 2,13 | 1,94 | 1,78 | 1,64 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22 | 4,55 | 3,34 | 2,56 | 2,02 | 1,64 | 1,35 | 1,14 | 0,97 |
|                    |              | SLS L/100 | pressure   | 16,20 | 11,15 | 8,07 | 6,03 | 4,60 | 3,56 | 2,79 | 2,21 | 1,77 | 1,43 | 1,16 |
|                    |              |           | suction  | 15,81 | 10,78 | 7,73 | 5,71 | 4,31 | 3,30 | 2,56 | 2,00 | 1,58 | 1,26 | 1,01 |
|                    |              | SLS L/150 | pressure   | 10,45 | 7,10  | 5,08 | 3,74 | 2,81 | 2,14 | 1,65 | 1,29 | 1,01 | 0,80 | 0,64 |
|                    |              |           | suction  | 10,05 | 6,73  | 4,73 | 3,42 | 2,52 | 1,88 | 1,42 | 1,07 | 0,82 | 0,63 | 0,48 |
|                    | SLS L/200    | pressure  | 7,57   | 5,08  | 3,58  | 2,59 | 1,92 | 1,43 | 1,08 | 0,82 | 0,63 | 0,48 | 0,37 |      |
|                    |              | suction   | 7,18   | 4,71  | 3,24  | 2,28 | 1,63 | 1,17 | 0,85 | 0,61 | 0,44 | 0,31 | 0,21 |      |

|                   |           |           |          |       |       |      |      |      |      |      |      |      |      |      |
|-------------------|-----------|-----------|----------|-------|-------|------|------|------|------|------|------|------|------|------|
| Multi-span system | I         | ULS       | pressure | 5,35  | 3,90  | 3,05 | 2,49 | 2,10 | 1,79 | 1,36 | 1,06 | 0,85 | 0,70 | 0,58 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49 | 2,07 | 1,78 | 1,55 | 1,25 | 0,98 | 0,79 | 0,65 | 0,55 |
|                   |           | SLS L/100 | pressure | 16,61 | 11,78 | 8,90 | 7,00 | 5,65 | 4,64 | 3,83 | 3,19 | 2,68 | 2,26 | 1,93 |
|                   |           |           | suction  | 16,84 | 11,97 | 9,06 | 7,14 | 5,78 | 4,75 | 3,93 | 3,27 | 2,75 | 2,34 | 1,99 |
|                   |           | SLS L/150 | pressure | 10,77 | 7,60  | 5,72 | 4,48 | 3,61 | 2,95 | 2,43 | 2,01 | 1,68 | 1,41 | 1,20 |
|                   |           |           | suction  | 11,00 | 7,79  | 5,88 | 4,62 | 3,73 | 3,05 | 2,52 | 2,10 | 1,76 | 1,48 | 1,26 |
|                   | SLS L/200 | pressure  | 7,86     | 5,51  | 4,13  | 3,22 | 2,59 | 2,11 | 1,72 | 1,42 | 1,18 | 0,99 | 0,83 |      |
|                   |           | suction   | 8,08     | 5,70  | 4,29  | 3,36 | 2,71 | 2,21 | 1,82 | 1,51 | 1,26 | 1,06 | 0,90 |      |
|                   | II        | ULS       | pressure | 5,35  | 3,90  | 3,05 | 2,49 | 2,10 | 1,79 | 1,36 | 1,06 | 0,85 | 0,70 | 0,58 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49 | 2,07 | 1,78 | 1,38 | 1,04 | 0,80 | 0,64 | 0,52 | 0,43 |
|                   |           | SLS L/100 | pressure | 16,61 | 11,78 | 8,90 | 7,00 | 5,65 | 4,64 | 3,83 | 3,19 | 2,68 | 2,26 | 1,93 |
|                   |           |           | suction  | 16,61 | 11,78 | 8,90 | 7,00 | 5,65 | 4,64 | 3,83 | 3,19 | 2,68 | 2,26 | 1,93 |
|                   |           | SLS L/150 | pressure | 10,77 | 7,60  | 5,72 | 4,48 | 3,61 | 2,95 | 2,43 | 2,01 | 1,68 | 1,41 | 1,20 |
|                   |           |           | suction  | 10,77 | 7,60  | 5,72 | 4,48 | 3,61 | 2,95 | 2,43 | 2,01 | 1,68 | 1,41 | 1,20 |
|                   | SLS L/200 | pressure  | 7,86     | 5,51  | 4,13  | 3,22 | 2,59 | 2,11 | 1,72 | 1,42 | 1,18 | 0,99 | 0,83 |      |
|                   |           | suction   | 7,86     | 5,51  | 4,13  | 3,22 | 2,59 | 2,11 | 1,72 | 1,42 | 1,18 | 0,99 | 0,83 |      |
|                   | III       | ULS       | pressure | 5,35  | 3,90  | 3,05 | 2,49 | 2,10 | 1,79 | 1,36 | 1,06 | 0,85 | 0,70 | 0,58 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49 | 2,07 | 1,48 | 1,01 | 0,72 | 0,53 | 0,40 | 0,31 | 0,25 |
|                   |           | SLS L/100 | pressure | 16,61 | 11,78 | 8,90 | 7,00 | 5,65 | 4,64 | 3,83 | 3,19 | 2,68 | 2,26 | 1,93 |
|                   |           |           | suction  | 16,27 | 11,49 | 8,65 | 6,79 | 5,47 | 4,47 | 3,68 | 3,05 | 2,55 | 2,15 | 1,83 |
|                   |           | SLS L/150 | pressure | 10,77 | 7,60  | 5,72 | 4,48 | 3,61 | 2,95 | 2,43 | 2,01 | 1,68 | 1,41 | 1,20 |
|                   |           |           | suction  | 10,45 | 7,31  | 5,47 | 4,27 | 3,43 | 2,79 | 2,28 | 1,88 | 1,56 | 1,30 | 1,09 |
|                   | SLS L/200 | pressure  | 7,86     | 5,51  | 4,13  | 3,22 | 2,59 | 2,11 | 1,72 | 1,42 | 1,18 | 0,99 | 0,83 |      |
|                   |           | suction   | 7,53     | 5,22  | 3,88  | 3,01 | 2,41 | 1,95 | 1,57 | 1,29 | 1,06 | 0,87 | 0,73 |      |

|                   |             |   |
|-------------------|-------------|---|
| I colour group:   | very bright | RAL: 1015, 7035, 9002, 9010, 9016             |
| II colour group:  | bright      | RAL: 5012, 9006, 6011                         |
| III colour group: | dark        | RAL: 3000, 5010, 6029, 7016, 7024, 8017, 9007 |

In the case of dark colors, the total length of the board is limited. Details available from our sales representatives.

For other values of the internal temperature, thickness and material lining, etc., Please contact us to perform separate calculations.

## Maximum allowable loads for a given span length:

GS insPIRe® CH200

module: 1000/1140 mm

|   |     |    |    |
|---|-----|----|----|
| External cladding thickness [mm]:               | 0,5 |    |    |
| Internal cladding thickness [mm]:               | 0,4 |    |    |
| Outdoor temperature (summer/winter) [°C]:       | 55  | 65 | 80 |
| Indoor temperature (summer/winter) [°C]:        | -20 |    |    |
| Minimum width of end support [mm]:              | 40  |    |    |
| Minimum width of the intermediate support [mm]: | 60  |    |    |

|  |        |
|--|--------|
| The minimum number of the screws on the end support :          | 3      |
| The minimum number of the screws on the intermediate support : | 3      |
| Core material :  | PIR    |
| Cladding steel grade:  | S220GD |
| Ultimate limit state (compare design loads)                    | ULS    |
| Serviceability limit state (compare characteristic loads)      | SLS    |

| Static diagram     | Colour group | Criterion | Maximum evenly distributed load [kN/m <sup>2</sup> ] |       |       |       |      |      |      |      |      |      |      |      |
|--------------------|--------------|-----------|--|-------|-------|-------|------|------|------|------|------|------|------|------|
|                    |              |           | Axial span of supports [m]                           |       |       |       |      |      |      |      |      |      |      |      |
|                    |              |           | 1,5  | 2,0   | 2,5   | 3,0   | 3,5  | 4,0  | 4,5  | 5,0  | 5,5  | 6,0  | 6,5  |      |
| Single-span system | I            | ULS       | pressure   | 8,00  | 6,00  | 4,80  | 4,00 | 3,43 | 3,00 | 2,67 | 2,40 | 2,18 | 2,00 | 1,85 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22  | 5,18 | 4,18 | 3,20 | 2,53 | 2,05 | 1,70 | 1,42 | 1,21 |
|                    |              | SLS L/100 | pressure   | 24,03 | 16,68 | 12,19 | 9,19 | 7,08 | 5,54 | 4,38 | 3,51 | 2,84 | 2,31 | 1,90 |
|                    |              |           | suction  | 24,34 | 16,97 | 12,46 | 9,44 | 7,31 | 5,74 | 4,57 | 3,68 | 2,99 | 2,45 | 2,03 |
|                    |              | SLS L/150 | pressure   | 15,61 | 10,73 | 7,77  | 5,80 | 4,42 | 3,41 | 2,67 | 2,11 | 1,68 | 1,35 | 1,10 |
|                    |              |           | suction  | 15,92 | 11,02 | 8,04  | 6,05 | 4,64 | 3,62 | 2,86 | 2,28 | 1,84 | 1,49 | 1,22 |
|                    | SLS L/200    | pressure  | 11,40  | 7,76  | 5,56  | 4,10  | 3,08 | 2,35 | 1,82 | 1,41 | 1,11 | 0,87 | 0,69 |      |
|                    |              | suction   | 11,71  | 8,05  | 5,83  | 4,35  | 3,31 | 2,56 | 2,00 | 1,58 | 1,26 | 1,01 | 0,82 |      |
|                    | II           | ULS       | pressure   | 8,00  | 6,00  | 4,80  | 4,00 | 3,43 | 3,00 | 2,67 | 2,40 | 2,18 | 2,00 | 1,85 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22  | 5,18 | 4,18 | 3,20 | 2,53 | 2,05 | 1,70 | 1,42 | 1,21 |
|                    |              | SLS L/100 | pressure   | 24,03 | 16,68 | 12,19 | 9,19 | 7,08 | 5,54 | 4,38 | 3,51 | 2,84 | 2,31 | 1,90 |
|                    |              |           | suction  | 24,03 | 16,68 | 12,19 | 9,19 | 7,08 | 5,54 | 4,38 | 3,51 | 2,84 | 2,31 | 1,90 |
|                    |              | SLS L/150 | pressure   | 15,61 | 10,73 | 7,77  | 5,80 | 4,42 | 3,41 | 2,67 | 2,11 | 1,68 | 1,35 | 1,10 |
|                    |              |           | suction  | 15,61 | 10,73 | 7,77  | 5,80 | 4,42 | 3,41 | 2,67 | 2,11 | 1,68 | 1,35 | 1,10 |
|                    | SLS L/200    | pressure  | 11,40  | 7,76  | 5,56  | 4,10  | 3,08 | 2,35 | 1,82 | 1,41 | 1,11 | 0,87 | 0,69 |      |
|                    |              | suction   | 11,40  | 7,76  | 5,56  | 4,10  | 3,08 | 2,35 | 1,82 | 1,41 | 1,11 | 0,87 | 0,69 |      |
|                    | III          | ULS       | pressure   | 8,00  | 6,00  | 4,80  | 4,00 | 3,43 | 3,00 | 2,67 | 2,40 | 2,18 | 2,00 | 1,85 |
|                    |              |           | suction  | 10,36 | 7,77  | 6,22  | 5,18 | 4,18 | 3,20 | 2,53 | 2,05 | 1,70 | 1,42 | 1,21 |
|                    |              | SLS L/100 | pressure   | 24,03 | 16,68 | 12,19 | 9,19 | 7,08 | 5,54 | 4,38 | 3,51 | 2,84 | 2,31 | 1,90 |
|                    |              |           | suction  | 23,57 | 16,24 | 11,79 | 8,82 | 6,74 | 5,22 | 4,10 | 3,25 | 2,60 | 2,10 | 1,71 |
|                    |              | SLS L/150 | pressure   | 15,61 | 10,73 | 7,77  | 5,80 | 4,42 | 3,41 | 2,67 | 2,11 | 1,68 | 1,35 | 1,10 |
|                    |              |           | suction  | 15,15 | 10,30 | 7,36  | 5,42 | 4,07 | 3,10 | 2,39 | 1,86 | 1,45 | 1,14 | 0,90 |
|                    | SLS L/200    | pressure  | 11,40  | 7,76  | 5,56  | 4,10  | 3,08 | 2,35 | 1,82 | 1,41 | 1,11 | 0,87 | 0,69 |      |
|                    |              | suction   | 10,94  | 7,32  | 5,15  | 3,73  | 2,74 | 2,04 | 1,53 | 1,16 | 0,88 | 0,66 | 0,50 |      |

|                   |           |           |          |       |       |       |       |      |      |      |      |      |      |      |
|-------------------|-----------|-----------|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| Multi-span system | I         | ULS       | pressure | 6,13  | 4,48  | 3,50  | 2,86  | 2,41 | 2,08 | 1,72 | 1,34 | 1,08 | 0,88 | 0,73 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49  | 2,07  | 1,78 | 1,55 | 1,38 | 1,24 | 1,00 | 0,82 | 0,69 |
|                   |           | SLS L/100 | pressure | 24,54 | 17,47 | 13,25 | 10,45 | 8,47 | 6,99 | 5,80 | 4,85 | 4,10 | 3,48 | 2,98 |
|                   |           |           | suction  | 24,80 | 17,70 | 13,45 | 10,62 | 8,62 | 7,12 | 5,92 | 4,96 | 4,20 | 3,57 | 3,06 |
|                   |           | SLS L/150 | pressure | 16,01 | 11,35 | 8,57  | 6,75  | 5,45 | 4,49 | 3,71 | 3,10 | 2,61 | 2,21 | 1,88 |
|                   |           |           | suction  | 16,27 | 11,57 | 8,76  | 6,91  | 5,60 | 4,62 | 3,83 | 3,20 | 2,70 | 2,29 | 1,96 |
|                   | SLS L/200 | pressure  | 11,75    | 8,28  | 6,24  | 4,89  | 3,95  | 3,25 | 2,67 | 2,22 | 1,85 | 1,56 | 1,33 |      |
|                   |           | suction   | 12,01    | 8,51  | 6,43  | 5,05  | 4,09  | 3,37 | 2,78 | 2,33 | 1,95 | 1,65 | 1,41 |      |
|                   | II        | ULS       | pressure | 6,13  | 4,48  | 3,50  | 2,86  | 2,41 | 2,08 | 1,72 | 1,34 | 1,08 | 0,88 | 0,73 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49  | 2,07  | 1,78 | 1,55 | 1,32 | 1,02 | 0,81 | 0,66 | 0,54 |
|                   |           | SLS L/100 | pressure | 24,54 | 17,47 | 13,25 | 10,45 | 8,47 | 6,99 | 5,80 | 4,85 | 4,10 | 3,48 | 2,98 |
|                   |           |           | suction  | 24,54 | 17,47 | 13,25 | 10,45 | 8,47 | 6,99 | 5,80 | 4,85 | 4,10 | 3,48 | 2,98 |
|                   |           | SLS L/150 | pressure | 16,01 | 11,35 | 8,57  | 6,75  | 5,45 | 4,49 | 3,71 | 3,10 | 2,61 | 2,21 | 1,88 |
|                   |           |           | suction  | 16,01 | 11,35 | 8,57  | 6,75  | 5,45 | 4,49 | 3,71 | 3,10 | 2,61 | 2,21 | 1,88 |
|                   | SLS L/200 | pressure  | 11,75    | 8,28  | 6,24  | 4,89  | 3,95  | 3,25 | 2,67 | 2,22 | 1,85 | 1,56 | 1,33 |      |
|                   |           | suction   | 11,75    | 8,28  | 6,24  | 4,89  | 3,95  | 3,25 | 2,67 | 2,22 | 1,85 | 1,56 | 1,33 |      |
|                   | III       | ULS       | pressure | 6,13  | 4,48  | 3,50  | 2,86  | 2,41 | 2,08 | 1,72 | 1,34 | 1,08 | 0,88 | 0,73 |
|                   |           |           | suction  | 4,14  | 3,11  | 2,49  | 2,07  | 1,78 | 1,30 | 0,93 | 0,68 | 0,52 | 0,41 | 0,32 |
|                   |           | SLS L/100 | pressure | 24,54 | 17,47 | 13,25 | 10,45 | 8,47 | 6,99 | 5,80 | 4,85 | 4,10 | 3,48 | 2,98 |
|                   |           |           | suction  | 24,15 | 17,13 | 12,95 | 10,20 | 8,25 | 6,80 | 5,63 | 4,70 | 3,95 | 3,35 | 2,85 |
|                   |           | SLS L/150 | pressure | 16,01 | 11,35 | 8,57  | 6,75  | 5,45 | 4,49 | 3,71 | 3,10 | 2,61 | 2,21 | 1,88 |
|                   |           |           | suction  | 15,61 | 11,00 | 8,28  | 6,49  | 5,24 | 4,30 | 3,54 | 2,94 | 2,46 | 2,07 | 1,75 |
|                   | SLS L/200 | pressure  | 11,75    | 8,28  | 6,24  | 4,89  | 3,95  | 3,25 | 2,67 | 2,22 | 1,85 | 1,56 | 1,33 |      |
|                   |           | suction   | 11,35    | 7,94  | 5,94  | 4,64  | 3,73  | 3,05 | 2,50 | 2,06 | 1,71 | 1,44 | 1,21 |      |

|                   |             |   |
|-------------------|-------------|---|
| I colour group:   | very bright | RAL: 1015, 7035, 9002, 9010, 9016             |
| II colour group:  | bright      | RAL: 5012, 9006, 6011                         |
| III colour group: | dark        | RAL: 3000, 5010, 6029, 7016, 7024, 8017, 9007 |

In the case of dark colors, the total length of the board is limited. Details available from our sales representatives.

For other values of the internal temperature, thickness and material lining, etc., Please contact us to perform separate calculations.