

# Setting Parameters

## Dental Designer™ 3shape▶ for cara production service

As of 09.2018

### Important Information:

- Observe the Processing Guides of the materials.
- The given dimensions serve as guidelines and may be customized according to individual wishes.

Software Setting Options (all figures in mm):

| cara C&B Zr high translucent esthetic – A1, A2, A3, A3.5, B1, B2, B3, C2, D3 |                         |             |                      |                                      |              |                    |              |                  |                                     |       |
|--|-------------------------|-------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|-------|
| Software Designation   | Internal crown surfaces |             |                      | External crown surface/core build-up |              |                    |              |                  |                                     |       |
|  | Extra cement gap        | Cement cap  | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |       |
| <b>Indication</b>  |                         |             |                      |                                      |              |                    |              |                  |                                     |       |
| <b>Single crown</b>  | Anterior                | 0.02 – 0.04 | 0.01                 | 1.0                                  | 0.30         | 1.0 – 2.5          | 0.3          | 75 – 100°        | 0.10                                | –     |
|  | Premolar                | 0.02 – 0.04 | 0.01                 | 1.0                                  | 0.40         | 1.0 – 2.5          | 0.3          | 75 – 100°        | 0.10                                | –     |
|  | Molar                   | 0.02 – 0.04 | 0.01                 | 1.0                                  | 0.40         | 1.0 – 2.5          | 0.3          | 75 – 100°        | 0.10                                | –     |
|  | Primary crown           | 0.02 – 0.04 | 0.01                 | 1.0                                  | 0.40         | 1.0 – 2.5          | 0.3          | 45 – 80°         | 0.15                                | –     |
| <b>Splinted single crowns</b>  |                         |             |                      |                                      |              |                    |              |                  |                                     | 6 – 9 |
| <b>Bridges (3 units)</b>   | Anterior (1 – 3)        | 0.04        | 0.01                 | 1.0                                  | 0.40         | 1.0 – 2.5          | 0.3          | 70 – 90°         | 0.10                                | ≥ 7   |
|  | Posterior (3)           | 0.04        | 0.01                 | 1.0                                  | 0.50         | 1.0 – 2.5          | 0.3          | 70 – 90°         | 0.10                                | ≥ 8   |
| <b>Configuration Parameters cara ZrO<sub>2</sub> Inlay, Onlay, Veneer</b>    |                         |             |                      |                                      |              |                    |              |                  |                                     |       |
|  | Extra cement gap        | Cement cap  | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |       |
| <b>Inlay</b>   | 0.04                    | 0.03        | 0.1 – 0.5            | 0.25                                 | 0.6          | 0.5                | 0.5          | ≥ 0.3            | –                                   |       |
| <b>Onlay</b>   | 0.04                    | 0.03        | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |       |
| <b>Veneer</b>  | 0.04                    | 0.03        | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |       |



Set the milling radius of 0.6 for all indications.

Giving a hand to oral health.



**KULZER**  
MITSUI CHEMICALS GROUP



**carad C&B Zr high translucent – A1, A2, A3, A3.5, B1, B2, B3, C2, D3**

| Software Designation          | Internal crown surfaces  |            |                      | External crown surface/core build-up |              |                    |              |                  |                                     |
|-------------------------------|--|------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|
|                               | Extra cement gap   | Cement cap | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>             |  |            |                      |                                      |              |                    |              |                  |                                     |
| <b>Single crown</b>           |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.02 – 0.04  | 0.01       | 1.0                  | 0.30                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Premolar                      | 0.02 – 0.04  | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Molar                         | 0.02 – 0.04  | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Primary crown                 | 0.02 – 0.04  | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 45 – 80°     | 0.15             | –                                   |
| <b>Splinted single crowns</b> | Settings as above but note connector size                            |            |                      |                                      |              |                    |              |                  | 6 – 9                               |
| <b>Bridges (3 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior (1 – 3)              | 0.04   | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 7                                 |
| Posterior (3 – 5)             | 0.04   | 0.01       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 8                                 |
| Posterior (5 – 8)             | 0.05   | 0.01       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (4 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.06   | 0.02       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 7                                 |
| Posterior                     | 0.06   | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (5 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.06   | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 8                                 |
| Posterior                     | 0.06   | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (6 – 16 units)</b> | 0.07   | 0.02       | 1.0                  | 0.60                                 | 1.0 – 2.5    | 0.3                | 65 – 90°     | 0.10             | ≥ 9                                 |
|                               | Configuration Parameters carad ZrO <sub>2</sub> Inlay, Onlay, Veneer |            |                      |                                      |              |                    |              |                  |                                     |
|                               | Extra cement gap   | Cement cap | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |
| <b>Inlay</b>                  | 0.04   | 0.03       | 0.1 – 0.5            | 0.25                                 | 0.6          | 0.5                | 0.5          | ≥ 0.3            | –                                   |
| <b>Onlay</b>                  | 0.04   | 0.03       | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |
| <b>Veneer</b>                 | 0.04   | 0.03       | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |

Set the milling radius of 0.6 for all indications.

**carad C&B Zr – white, B-light and A-intensive**



| Software Designation          | Internal crown surfaces  |            |                      | External crown surface/core build-up |              |                    |              |                  |                                     |
|-------------------------------|--|------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|
|                               | Extra cement gap   | Cement cap | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>             |  |            |                      |                                      |              |                    |              |                  |                                     |
| <b>Single crown</b>           |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.02 – 0.04  | 0.010      | 1.0                  | 0.30                                 | 1.0 – 2.5    | 0.2                | 75 – 100°    | 0.15             | –                                   |
| Premolar                      | 0.02 – 0.04  | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.2                | 75 – 100°    | 0.15             | –                                   |
| Molar                         | 0.02 – 0.04  | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.2                | 75 – 100°    | 0.15             | –                                   |
| Primary crown                 | 0.02 – 0.04  | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.2                | 45 – 80°     | 0.20             | –                                   |
| <b>Splinted single crowns</b> | Settings as above but note connector size                            |            |                      |                                      |              |                    |              |                  | 6 – 9                               |
| <b>Bridges (3 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior (1 – 3)              | 0.04   | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior (3 – 5)             | 0.04   | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 8                                 |
| Posterior (5 – 8)             | 0.05   | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (4 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.05   | 0.015      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior                     | 0.05   | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (5 units)</b>      |  |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior                      | 0.06   | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 8                                 |
| Posterior                     | 0.06   | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.2                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (6 – 16 units)</b> | 0.07   | 0.015      | 1.0                  | 0.60                                 | 1.0 – 2.5    | 0.2                | 65 – 90°     | 0.15             | ≥ 9                                 |
|                               | Configuration Parameters carad ZrO <sub>2</sub> Inlay, Onlay, Veneer |            |                      |                                      |              |                    |              |                  |                                     |
|                               | Extra cement gap   | Cement cap | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |
| <b>Inlay</b>                  | 0.04   | 0.030      | 0.1 – 0.5            | 0.25                                 | 0.5          | 0.5                | 0.5          | ≥ 0.2            | –                                   |
| <b>Onlay</b>                  | 0.04   | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.2            | –                                   |
| <b>Veneer</b>                 | 0.04   | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.2            | –                                   |

Always observe the general guidelines for all-ceramic preparations!



**cara C&B Zr translucent – white WS and B-medium WS**

| Software Designation   | Internal crown surfaces                   |            |                      | External crown surface/core build-up |              |                    |              |                  |                                     |
|--|---|------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|
|  | Extra cement gap                          | Cement cap | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| <b>Single crown</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.30                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Premolar   | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Molar  | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Primary crown  | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 45 – 80°     | 0.20             | –                                   |
| <b>Splinted single crowns</b>  | Settings as above but note connector size |            |                      |                                      |              |                    |              |                  | 6 – 9                               |
| <b>Bridges (3 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior (1 – 3)   | 0.04                                      | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior (3 – 5)  | 0.04                                      | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 8                                 |
| Posterior (5 – 8)  | 0.05                                      | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (4 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.05                                      | 0.015      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior  | 0.05                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (5 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.06                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 8                                 |
| Posterior  | 0.06                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (6 – 7 units)</b>   | 0.07                                      | 0.015      | 1.0                  | 0.60                                 | 1.0 – 2.5    | 0.3                | 65 – 90°     | 0.15             | ≥ 9                                 |
| <b>Configuration Parameters cara Zr<sub>2</sub> Inlay, Onlay, Veneer</b> |   |            |                      |                                      |              |                    |              |                  |                                     |
|  | Extra cement gap                          | Cement cap | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |
| <b>Inlay</b>   | 0.04                                      | 0.030      | 0.1 – 0.5            | 0.25                                 | 0.5          | 0.5                | 0.5          | ≥ 0.3            | –                                   |
| <b>Onlay</b>   | 0.04                                      | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |
| <b>Veneer</b>  | 0.04                                      | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |

Always observe the general guidelines for all-ceramic preparations!

**cara C&B Zr translucent – light, medium and intensive**



| Software Designation   | Internal crown surfaces                   |            |                      | External crown surface/core build-up |              |                    |              |                  |                                     |
|--|---|------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|
|  | Extra cement gap                          | Cement cap | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| <b>Single crown</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.02 – 0.04                               | 0.01       | 1.0                  | 0.30                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Premolar   | 0.02 – 0.04                               | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Molar  | 0.02 – 0.04                               | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.10             | –                                   |
| Primary crown  | 0.02 – 0.04                               | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 45 – 80°     | 0.15             | –                                   |
| <b>Splinted single crowns</b>  | Settings as above but note connector size |            |                      |                                      |              |                    |              |                  | 6 – 9                               |
| <b>Bridges (3 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior (1 – 3)   | 0.04                                      | 0.01       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 7                                 |
| Posterior (3 – 5)  | 0.04                                      | 0.01       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 8                                 |
| Posterior (5 – 8)  | 0.05                                      | 0.01       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (4 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.06                                      | 0.02       | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 7                                 |
| Posterior  | 0.06                                      | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (5 units)</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior   | 0.06                                      | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 8                                 |
| Posterior  | 0.06                                      | 0.02       | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.10             | ≥ 9                                 |
| <b>Bridges (6 – 7 units)</b>   | 0.07                                      | 0.02       | 1.0                  | 0.60                                 | 1.0 – 2.5    | 0.3                | 65 – 90°     | 0.10             | ≥ 9                                 |
| <b>Configuration Parameters cara Zr<sub>2</sub> Inlay, Onlay, Veneer</b> |   |            |                      |                                      |              |                    |              |                  |                                     |
|  | Extra cement gap                          | Cement cap | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |
| <b>Inlay</b>   | 0.04                                      | 0.03       | 0.1 – 0.5            | 0.25                                 | 0.6          | 0.5                | 0.5          | ≥ 0.3            | –                                   |
| <b>Onlay</b>   | 0.04                                      | 0.03       | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |
| <b>Veneer</b>  | 0.04                                      | 0.03       | 0.1 – 1.0            | 0.25                                 | 0.6          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |

Set the milling radius of 0.6 for all indications.



**cara C&B Zr Multilayer – Shade A, Shade B and Shade C**

| Software Designation  | Internal crown surfaces                   |            |                      | External crown surface/core build-up |              |                    |              |                  |                                     |
|---|---|------------|----------------------|--------------------------------------|--------------|--------------------|--------------|------------------|-------------------------------------|
|   | Extra cement gap                          | Cement cap | Dist. to margin line | Wall thickness                       | Wall height  | Marginline offset  | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| <b>Single crown</b>   |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior  | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Premolar  | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Molar   | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 75 – 100°    | 0.15             | –                                   |
| Primary crown   | 0.02 – 0.04                               | 0.010      | 1.0                  | 0.40                                 | 1.0 – 2.5    | 0.3                | 45 – 80°     | 0.20             | –                                   |
| <b>Splinted single crowns</b>                                       | Settings as above but note connector size |            |                      |                                      |              |                    |              |                  | 6 – 9                               |
| <b>Bridges (3 units)</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior (1 – 3)  | 0.04                                      | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior (3 – 5)   | 0.04                                      | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| Posterior (5 – 8)   | 0.05                                      | 0.010      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (4 units)</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior  | 0.05                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 7                                 |
| Posterior   | 0.05                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (5 units)</b>  |   |            |                      |                                      |              |                    |              |                  |                                     |
| Anterior  | 0.06                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 8                                 |
| Posterior   | 0.06                                      | 0.015      | 1.0                  | 0.50                                 | 1.0 – 2.5    | 0.3                | 70 – 90°     | 0.15             | ≥ 9                                 |
| <b>Bridges (6 – 7 units)</b>  | 0.07                                      | 0.015      | 1.0                  | 0.60                                 | 1.0 – 2.5    | 0.3                | 65 – 90°     | 0.15             | ≥ 9                                 |
| Configuration Parameters cara ZrO <sub>2</sub> Inlay, Onlay, Veneer |   |            |                      |                                      |              |                    |              |                  |                                     |
|   | Extra cement gap                          | Cement cap | Dist. to margin line | Smooth dist.                         | Drill radius | Drill comp. offset | Transition   | Margin offset    | Connector thickness mm <sup>2</sup> |
| <b>Inlay</b>  | 0.04                                      | 0.030      | 0.1 – 0.5            | 0.25                                 | 0.5          | 0.5                | 0.5          | ≥ 0.3            | –                                   |
| <b>Onlay</b>  | 0.04                                      | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |
| <b>Veneer</b>   | 0.04                                      | 0.030      | 0.1 – 1.0            | 0.25                                 | 0.5          | 0.5 – 1.5          | 0.5          | ≥ 0.3            | –                                   |

Always observe the general guidelines for all-ceramic preparations!

**cara C&B Lithium Disilicate (made of well-proven IPS e.max® CAD blanks by Ivoclar Vivadent)**



| Software Designation   | Internal crown surfaces |            |                      | External crown surface                |                     |                      |                       |                  |                |                            |
|--|-------------------------|------------|----------------------|---------------------------------------|---------------------|----------------------|-----------------------|------------------|----------------|----------------------------|
|  | Extra cement gap        | Cement cap | Dist. to margin line | Wall thickness                        | Wall height         | Marginline offset    | Offset angle          | Extension offset | Milling radius | Miller correction distance |
| <b>Indication</b>  |                         |            |                      |                                       |                     |                      |                       |                  |                |                            |
| <b>Single crown</b>  |                         |            |                      |                                       |                     |                      |                       |                  |                |                            |
| Anterior   | 0.03                    | 0.005      | 1.5 – 3.0            | See table with minimum wall thickness | 1.0 – 2.5           | 0.4                  | 75 – 100°             | 0.2              | 0.7            | 1.5                        |
| Premolar   | 0.03                    | 0.005      | 1.5 – 3.0            |                                       | 1.0 – 2.5           | 0.4                  | 75 – 100°             | 0.2              | 0.7            | 1.5                        |
| Molar  | 0.03                    | 0.005      | 1.5 – 3.0            |                                       | 1.0 – 2.5           | 0.4                  | 75 – 100°             | 0.2              | 0.7            | 1.5                        |
| Configuration Parameters cara LiSi <sub>2</sub> * Inlay, Onlay, Veneer |                         |            |                      |                                       |                     |                      |                       |                  |                |                            |
|  | Extra cement gap        | Cement cap | Dist. to margin line | Smooth dist.                          | Drill radius        | Drill comp. offset   | Transition            | Margin offset    |                |                            |
| <b>Inlay</b>   | 0.03                    | 0.005      | 0.5                  | 0.25                                  | 0.7                 | 0.2                  | 0.5                   | 0.3              |                |                            |
| <b>Onlay</b>   | 0.03                    | 0.005      | 0.5                  | 0.25                                  | 0.7                 | 0.2                  | 0.5                   | 0.3              |                |                            |
| <b>Veneer</b>  | 0.03                    | 0.005      | 0.5                  | 0.25                                  | 0.7                 | 0.2                  | 0.5                   | 0.4              |                |                            |
| <b>Minimum wall thickness cara LiSi<sub>2</sub>*</b>                   |                         |            | <b>Veneer</b>        | <b>Inlay</b>                          | <b>Onlay</b>        | <b>Partial crown</b> | <b>Crown</b>          |                  |                |                            |
|  |                         |            |                      |                                       |                     |                      | <b>Anterior tooth</b> | <b>Premolar</b>  | <b>Molar</b>   |                            |
| Staining technique   |                         |            | circular             | 0.6                                   | 1.0 (Isthmus width) | 1.0                  | 1.5                   | 1.2              | 1.5            | 1.5                        |
|  |                         |            | Incisal/occlusal     | 0.7                                   | 1.0 (Isthmus width) | 1.0                  | 1.5                   | 1.5              | 1.5            | 1.5                        |
| Cutback technique (after reduction)                                    |                         |            | circular             | 0.6                                   | –                   | –                    | 1.5                   | 1.2              | 1.5            | 1.5                        |
|  |                         |            | Labial/occlusal      | 0.4                                   | –                   | –                    | 1.3                   | 0.4              | 1.0            | 1.3                        |

\* cara LiSi<sub>2</sub> frames are made of well-proven IPS e.max® CAD blanks by Ivoclar Vivadent.

IMPORTANT: The minimum wall thickness must be observed and when designing, bear in mind the dimensions of cara LiSi<sub>2</sub>\* blanks! Width: 12 mm and Height: 14 mm. To avoid margin chipping, edge thickness must be observed. Always make sure to observe the general guidelines for all-ceramic preparations!

**cara C&B CoCr SLM/SLM anatomic+**



| Software Designation          | Internal crown surfaces |            |                      | External crown surface/core build-up |                |             |                   |              |                  |                                     |
|-------------------------------|-------------------------|------------|----------------------|--------------------------------------|----------------|-------------|-------------------|--------------|------------------|-------------------------------------|
|                               | Extra cement gap        | Cement cap | Dist. to margin line | Smooth dist.                         | Wall thickness | Wall height | Marginline offset | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |
| <b>Indication</b>             |                         |            |                      |                                      |                |             |                   |              |                  |                                     |
| <b>Single crown</b>           | 0.115                   | 0.030      | 1.0 – 2.5            | 1.5                                  | 0.40           | 1           | 0.18              | 75°          | 0.1              |                                     |
| <b>Bridges (3 units)</b>      |                         |            |                      |                                      |                |             |                   |              |                  |                                     |
| Anterior                      | 0.115                   | 0.035      | 1.0 – 2.5            | 1.5                                  | 0.40           | 1           | 0.18              | 75°          | 0.1              | min. 5                              |
| Posterior                     | 0.120                   | 0.035      | 1.0 – 2.5            | 1.5                                  | 0.40           | 1           | 0.20              | 75°          | 0.1              | min. 6                              |
| <b>Bridges (4 – 8 units)</b>  | 0.120                   | 0.035      | 1.0 – 2.5            | 1.5                                  | 0.40           | 1           | 0.20              | 75°          | 0.1              | min. 7                              |
| <b>Bridges (9 – 16 units)</b> | 0.120                   | 0.035      | 1.0 – 2.5            | 1.5                                  | 0.50           | 1           | 0.20              | 75°          | 0.1              | min. 8                              |
| <b>Primary Telescope**</b>    | 0.115                   | 0.030      | 1.0 – 2.5            | 1.5                                  | 0.45           | 1           | 0.18              | 55°          | 0.1              |                                     |

\*\* Primary telescopes are not available in SLM anatomic+.



| cara C&B CoCr milled          |   |               |                      |                                      |             |                   |              |                  |                                     |     |
|-------------------------------|---|---------------|----------------------|--------------------------------------|-------------|-------------------|--------------|------------------|-------------------------------------|-----|
| Software Designation          | Internal crown surfaces                   |               |                      | External crown surface/core build-up |             |                   |              |                  |                                     |     |
|                               | Extra cement gap                          | Cement cap    | Dist. to margin line | Wall thickness                       | Wall height | Marginline offset | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |     |
| <b>Indication</b>             |   |               |                      |                                      |             |                   |              |                  |                                     |     |
| <b>Single crown</b>           | Anterior                                  | 0.065 – 0.095 | 0.017 – 0.025        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 65 – 100°        | 0.1                                 | –   |
|                               | Premolar                                  | 0.065 – 0.090 | 0.017 – 0.020        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 65 – 100°        | 0.1                                 | –   |
|                               | Molar                                     | 0.065 – 0.090 | 0.017 – 0.020        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 65 – 100°        | 0.1                                 | –   |
|                               | Primary crown                             | 0.065 – 0.095 | 0.017 – 0.025        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 40 – 85°         | 0.1                                 | –   |
| <b>Splinted single crowns</b> | Settings as above but note connector size |               |                      |                                      |             |                   |              |                  | 5 – 7                               |     |
| <b>Bridges (3 units)</b>      | Anterior (1 – 3)                          | 0.065 – 0.095 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 5 |
|                               | Posterior (3 – 5)                         | 0.065 – 0.095 | 0.017 – 0.025        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 6 |
|                               | Posterior (5 – 8)                         | 0.065 – 0.095 | 0.017 – 0.020        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 6 |
| <b>Bridges (4 units)</b>      | Anterior                                  | 0.065 – 0.095 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 5 |
|                               | Posterior                                 | 0.065 – 0.095 | 0.017 – 0.025        | 0.5 – 2.0                            | 0.35        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 6 |
| <b>Bridges (5 units)</b>      | Anterior                                  | 0.065 – 0.095 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 6 |
|                               | Posterior                                 | 0.065 – 0.095 | 0.017 – 0.025        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 7 |
| <b>Bridges (6 units)</b>      | Anterior                                  | 0.075 – 0.095 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 6 |
|                               | Posterior                                 | 0.065 – 0.095 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 70 – 90°         | 0.1                                 | ≥ 7 |
| <b>Bridges (7 – 16 units)</b> |   | 0.075 – 0.100 | 0.017 – 0.030        | 0.5 – 2.0                            | 0.40        | 1.0 – 2.5         | 0.1          | 65 – 90°         | 0.1                                 | ≥ 7 |



| cara Temp PMMA – light and medium |   |             |                      |                                      |             |                   |              |                  |                                     |      |
|-----------------------------------|---|-------------|----------------------|--------------------------------------|-------------|-------------------|--------------|------------------|-------------------------------------|------|
| Software Designation              | Internal crown surfaces                   |             |                      | External crown surface/core build-up |             |                   |              |                  |                                     |      |
|                                   | Extra cement gap                          | Cement cap  | Dist. to margin line | Wall thickness                       | Wall height | Marginline offset | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |      |
| <b>Indication</b>                 |   |             |                      |                                      |             |                   |              |                  |                                     |      |
| <b>Single crown</b>               | Anterior                                  | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                                   | Premolar                                  | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                                   | Molar                                     | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                                   | Primary crown                             | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 45 – 80°         | 0.20                                | –    |
| <b>Splinted single crowns</b>     | Settings as above but note connector size |             |                      |                                      |             |                   |              |                  | 10 – 16                             |      |
| <b>Bridges (3 units)</b>          | Anterior (1 – 3)                          | 0.04        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                                   | Posterior (3 – 5)                         | 0.04        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
|                                   | Posterior (5 – 8)                         | 0.05        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (4 units)</b>          | Anterior                                  | 0.05        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                                   | Posterior                                 | 0.05        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (5 units)</b>          | Anterior                                  | 0.06        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                                   | Posterior                                 | 0.06        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (6 – 16 units)</b>     |   | 0.07        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 65 – 90°         | 0.15                                | ≥ 16 |



| cara Cast PMMA                |   |             |                      |                                      |             |                   |              |                  |                                     |      |
|-------------------------------|---|-------------|----------------------|--------------------------------------|-------------|-------------------|--------------|------------------|-------------------------------------|------|
| Software Designation          | Internal crown surfaces                   |             |                      | External crown surface/core build-up |             |                   |              |                  |                                     |      |
|                               | Extra cement gap                          | Cement cap  | Dist. to margin line | Wall thickness                       | Wall height | Marginline offset | Offset angle | Extension offset | Connector thickness mm <sup>2</sup> |      |
| <b>Indication</b>             |   |             |                      |                                      |             |                   |              |                  |                                     |      |
| <b>Single crown</b>           | Anterior                                  | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                               | Premolar                                  | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                               | Molar                                     | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 75 – 100°        | 0.15                                | –    |
|                               | Primary crown                             | 0.02 – 0.04 | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 45 – 80°         | 0.20                                | –    |
| <b>Splinted single crowns</b> | Settings as above but note connector size |             |                      |                                      |             |                   |              |                  | 10 – 16                             |      |
| <b>Bridges (3 units)</b>      | Anterior (1 – 3)                          | 0.04        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                               | Posterior (3 – 5)                         | 0.04        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
|                               | Posterior (5 – 8)                         | 0.05        | 0.010                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (4 units)</b>      | Anterior                                  | 0.05        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                               | Posterior                                 | 0.05        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (5 units)</b>      | Anterior                                  | 0.06        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 10 |
|                               | Posterior                                 | 0.06        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 70 – 90°         | 0.15                                | ≥ 16 |
| <b>Bridges (6 – 16 units)</b> |   | 0.07        | 0.015                | 1                                    | 0.6 – 1.2   | 1.0 – 2.5         | 0.2          | 65 – 90°         | 0.15                                | ≥ 16 |

The general safety regulations for handling dental products are applicable.

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