



**Smallest sizes –
tightest tolerances
0,25 x 0,5 mm ± 0,04 mm**

Dry Pressing – go for the 3rd Dimension

**Grinding and lapping for superior surface finishing.
Tightest tolerances on highly advanced equipment.**

The CeramTec production lines are highly automated, ideal for large production volumes.

With its modern and advanced equipment CeramTec produces smallest parts at highest precision (e.g. coils with dimensions of 0,5 mm x 0,25 mm x 0,25 mm) and large format components like heat sinks.

i Good to know

WHY DRY PRESSING?

- through holes, cavities, 3rd dimensions
- thickness adjustable
- same shape; different thickness; one tool
- any thickness
- mass production
- no additional edge treatment needed

Dry Pressing

Dimensions

Sizes	Struktural Parts
Standard	up to 115 x 115 mm x 70 mm
Customized formats	up to 200 x 240 mm x 70 mm

Monolithic Membrane

Thickness of membranes (T)	Typical nominal pressure range*
0.12–0.14 mm	1–2 bar
0.16–0.20 mm	5 bar
0.28–0.32 mm	10 bar
0.37–0.40 mm	20 bar
0.64–0.68 mm	50 bar
1.10–1.15 mm	100 bar
1.55–1.60 mm	200 bar
Tolerance of membranes	± 0.025 mm

*membrane thickness has to be specified by customer

Materials and surface quality

	Typical R _a Value – as fired	Content
Rubalit 708	≤ 0.8 μm	> 96%, Al ₂ O ₃
Rubalit 710	≤ 0.55 μm	> 99.6%, Al ₂ O ₃
Rubalit 719	≤ 0.2 μm	> 99.9%, Al ₂ O ₃
Alunit	≤ 0.6 μm	
ZrO ₂	≤ 0.45 μm	

Dry pressing tolerances

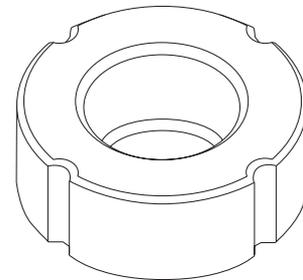
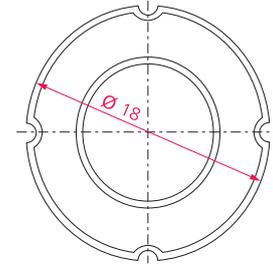
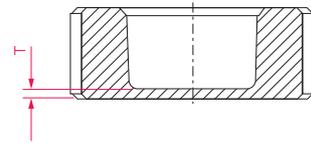
	Standard tolerances	Special tolerances
Length and width (as fired)	± 1% ¹	± 0.7% ²
Thickness	± 10%	± 0.7%
Distance between snap lines	± 1% ¹	± 0.7% ²
After breaking	± 1%	± 0.7%
Plus additional tolerances for break-off	+ 0.1 mm per edge	
Hole diameter		
< 2 mm	± 0.05 mm	± 0.05 mm
2–10 mm	± 0.10 mm	± 0.076 mm
> 10 mm	± 1%	± 0.7%
Distances between holes (center distance)	± 1% ¹	± 0.7% ³
Overall camber (measured between parallel plates, 45°)	0.4% of length	0.3% of length
Perpendicularity	± 0.5% ¹	
Parallelism	quoted upon request	
Radii and corners	0.2 mm	

¹ but not less than +/- 0.1 mm

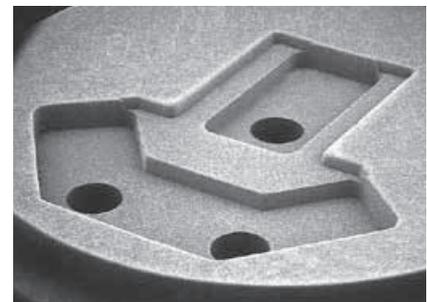
² but not less than +/- 0.05 mm

³ but not less than +/- 0.076 mm

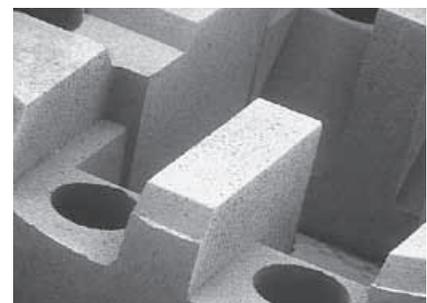
Typical 3-dimensional structures



Monolithic Membrane



Cavities and holes



Edges and recesses

CeramTec
THE CERAMIC EXPERTS

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Indexes and parameters for ceramic substances: In order to profile ceramic substances certain parameters are indicated. The crystalline nature of these substances, statistical fluctuations in the composition of the substances and in the factors that impact on the production processes indicate that the figures quoted are typically mean values and hence the substance parameters quoted in this brochure are only standard, recommended or guide values that might differ given dissimilar dimensions and production processes.