



## **General terms of trade of the SC Plasmaterm SA. Investment casting foundry**

1. Based on a request the seller prepares a written, non-binding quotation.
2. A contract is to be issued between the seller and the buyer upon the buyers written order.
3. The tools for the production may either be presented by the buyer or they may be manufactured by the seller according to the terms of the contract. The general manufacturing time is 30-45 days after the contract date and an advance payment of 40% of the tooling costs. The remaining amount of the tooling cost will be paid after the confirmation of the test samples. The tooling cost may be included on request in the price of castings presuming the requested quantities are at least 10.000 pcs.
4. The tools are the property of the buyer and are stored free of charge by the seller. The seller may only use the tools to produce the products ordered by the buyer and he may not give it to a third party.
5. A test samples of the castings will be produced free of charge within 4 weeks after the tools are ready; and will be shipped to the buyer.
6. The buyer is obliged to check the quality and dimensions of the cast samples and to inform the seller on his observations. The buyer will give free for production when all the observations and eventual modifications are correlated and confirmed. The blue print and any other technical documentation has to show clearly those modifications, which were consented by the parties.
7. Delivery of the products will commence in 30 days after the confirmation of the samples.
8. The price and delivery conditions are EXW; the packaging will follow according to the contract specifications. Shipment costs are charged on a separate Invoice.
9. The buyer accepts the obligation to pay the Invoice in 15 working days after the issuing date. Transfer costs are on the obligation of the buyer.
10. Any transaction between the buyer and the seller is considered confidential.
11. Technical specifications on deviations and tolerances as well as surface quality are according to D1/IT14 – VDG P690 DIN. On request a premium quality may be covered according to D2/IT14, which in most of the cases covers a higher price category. For information the most important specifications are given in Appendix. Any other data or conditions are subject to the agreement or contract.



## Investment castings tolerances

### Specified by an international standard: VDG P690

#### Linear Tolerances

Nominal size mm	D1 Tolerance (general dimensions)	D2 Tolerance (some functional dimensions)
to 6	±0.15	±0.12
6 to 10	±0.18	±0.14
10 to 18	±0.22	±0.17
18 to 30	±0.26	±0.20
30 to 50	±0.40	±0.31
50 to 80	±0.45	±0.37
80 to 120	±0.55	±0.44
120 to 180	±0.80	±0.65
180 to 250	±1.20	±0.95
250 to 315	±1.30	±1.10
315 to 400	±1.80	±1.40

#### Tolerances for straightness, flatness, parallelity, shape

Precision class	Length of the tolerated element		
	to 25 mm	25 to 50 mm	up to 50 mm
	allowed difference		
D1	0.15 mm	0.25 mm	0.6%
D2	0.10 mm	0.20 mm	0.4%

#### Tolerances for angle values and right angles

Precision class	Nominal dimensions			
	to 30 mm	30 to 100 mm	100 to 200 mm	up to 200 mm
<b>D1</b>	<b>allowed deviation</b>			
minute degree	30	30	30	20
mm / 100 mm	0.87	0.87	0.87	0.58
<b>D2</b>	<b>allowed deviation</b>			
minute degree	30	20	15	15
mm / 100 mm	0.87	0.58	0.44	0.44

#### Surface quality according to ISO R 468, DIN 4769 and VSM 10321

	Ra [µm]	Rz [µm]	Rt [µm]
<b>N 9</b>	6.3	23-32	25-38