

General Terms and Conditions for Heat Treatment Companies

The Industry Association for Hardening Technology (IHT), Hagen, recommends without obligation that its members use the following General Terms and Conditions in their business transactions. The addressees are free to follow the recommendation or to use other General Terms and Conditions.

I. General conditions

I.1 Place of performance, place of jurisdiction and applicable law

The place of performance and place of jurisdiction for all services, deliveries and payments is the location of the contractor's place of business. However, the contractor is also entitled to bring legal action before the courts responsible for the client's place of business. The contract is subject to the law of the Federal Republic of Germany. The application of the United Nations Convention on Contracts for the International Sale of Goods (UN Sales Convention) of 11 April 1980 is excluded.

I.2 Conclusion and execution of the contract

The contractor's offers are subject to change. All incoming orders only become binding upon receipt of the order confirmation or upon their execution. Section II.2 remains unaffected.

The contractor is entitled to reject orders from the client that are placed on the basis of contracts and to refuse to fulfil orders that have been placed if it becomes apparent that its claim for payment would be jeopardised by the client's inability to pay. This is particularly the case if the client's creditworthiness is assessed as high risk by Allianz Trade or another credit insurer or by any other credit check and/or if the sum insured made available to the contractor by its trade credit insurer to secure claims against the client would be exceeded upon acceptance of the order and/or if the contribution on any loss of receivables from the client is increased by the trade credit insurer after acceptance of the order by more than 10 percentage points compared to the contribution at the time of acceptance.

The contractor is entitled to terminate orders without notice if there is an important reason for doing so. Good cause shall be deemed to exist in particular if, after acceptance of the order, it becomes apparent that the payment claim would be jeopardised by the client's inability to pay – the provisions in the preceding paragraph shall apply accordingly – and the client fails to provide credible assurance of its ability to pay within a reasonable period of time despite being requested to do so.

Section 321 of the German Civil Code (BGB) and other statutory rights to refuse performance and rights of retention remain unaffected.

Orders shall only be executed under the present terms and conditions. Standard terms and conditions of purchase and other terms and conditions of business of the client shall not be recognised, even if they are not expressly contradicted. The

contracting parties shall immediately confirm verbal agreements in detail in writing.

I.3 Force majeure and other unforeseeable events

Force majeure, labour disputes, unrest, armed conflicts, terrorist attacks, official measures, epidemics, power outages and other unforeseeable, unavoidable and serious events shall release the contracting parties from their performance obligations for the duration of the disruption and to the extent of its effect. This shall also apply if these events occur at a time when the affected contracting party is in default, unless it has caused the default intentionally or through gross negligence. The contracting parties are obliged to provide the necessary information without undue delay and to adapt their obligations to the changed circumstances in good faith.

I.4 Pricing

Prices are quoted in EURO ex works excluding VAT and costs for any packaging. If order-related costs change by more than 10% after conclusion of the contract, each contracting party is entitled to demand a reasonable adjustment of the prices, taking these factors into account.

I.5 Payment

Invoices are payable immediately upon receipt without any deductions. If the payment deadline is exceeded, the contractor is entitled to demand the statutory default interest and the statutory lump-sum compensation. The assertion of further damages is not excluded. The client's right to withhold or offset payments is excluded, unless counterclaims are undisputed or legally recognised.

I.6 Lien

The contractor has a lien on the client's workpieces for all current and future claims as soon as they are handed over for heat treatment. Sections 1204 et seq. of the German Civil Code (BGB) apply accordingly.

II. Terms and conditions of execution and delivery

II.1 Information provided by the client

All workpieces handed over for heat treatment must be accompanied by an order or delivery note containing at least the following information:

- a) Description, number of items, net weight, value of the parts and type of packaging;
- b) Material quality (standard designation or steel grade and steel manufacturer);
- c) The desired heat treatment, in particular

- aa) for carburising, the required carburising depth with limit carbon content (e.g. CD 0.35 = 0.8+0.4 mm);
- bb) for case hardening or carbonitriding, the specified case hardening depth (CHD) with indication of the limit hardness and the desired surface hardness (e.g. CHD550 HV1 = 0.8+0.4 mm, surface hardness = 57+6 HRC);
- cc) for tempering, the required hardness according to Brinell or Vickers. Unless otherwise agreed, the test shall be carried out on the surface of the components;
- dd) for hardening, the desired hardness testing method according to Vickers or Rockwell, specifying the required hardness value (e.g. 57+6 HRC or 600+150 HV10). Unless otherwise agreed, the test shall be carried out on the surface of the components;
- ee) for nitriding, the desired nitriding hardness depth (NHD) or the desired treatment duration (e.g. NHD = 0.2+0.2 mm or nitriding 20 hours)
- ff) for nitrocarburizing, the thickness of the compound layer (CLT) or the treatment duration (e.g. CLT = 10+10 µm or nitrocarburizing 2 hours)
- gg) for surface hardening, the specified surface hardening depth (SHD) with the desired surface hardness (e.g. SHD500 = 1.2 +1.0 mm, surface hardness = 57+6 HRC), as well as the location of the area to be hardened
- d) information on the desired test method, the test location and the test load in accordance with the currently valid technical standards;
- e) information on the subsequent intended use and, in particular, on any safety relevance of the component; and
- f) further information or specifications necessary for the success of the treatment in accordance with the currently valid technical standards.

If partial hardening is required, drawings must be enclosed which show exactly which areas are to be hardened and which are to remain soft.

If similar workpieces are made from different steel melts, this must be specified. Similarly, special requirements regarding dimensional accuracy or surface condition must be noted on the delivery documents. The client must make special reference to welded or soldered workpieces and those containing hollow bodies. All materials used in the component must be specified. The contractor shall check the information provided by the client for content and completeness to the best of his knowledge. If there are any concerns about the success of the heat treatment, the contractor shall inform the client.

The client undertakes to deliver the workpieces in a condition suitable for treatment (free of scale, oils, grease, wax or cooling lubricants).

II.2 Delivery time

The delivery time begins as soon as the contracting parties have clarified the order and the client has fulfilled all requirements. For procedural reasons, the delivery time is only considered to be approximately agreed and shall be extended appropriately – even within a delivery delay – in the event of unforeseeable obstacles which the contractor could not avert with reasonable care under the circumstances of the case. Unforeseeable obstacles include, in particular, any necessary but initially unforeseeable multiple treatments, defective and/or untimely deliveries by the contractor's suppliers (unless the contractor is responsible for this) and serious disruptions in the contractor's own operations for which the contractor is not responsible, e.g. due to accidents or malfunctions of machinery and equipment. Clause I.3 remains unaffected.

If the contractor can foresee that it will not be able to meet the delivery time, it shall inform the client immediately, notify it of the reasons and, if possible, specify a new delivery date.

II.3 Transfer of risk

Unless otherwise agreed, the heat treatment goods shall be delivered by the client at its own expense and risk and collected after completion.

Unless otherwise agreed in individual cases, the heat treatment goods stored at the contractor's premises are not insured by the contractor's property insurance. It is recommended that the question of insurance cover, including co-insurance for useful heat damage, be clarified with your own insurer.

Upon handover to the forwarding agent or carrier or upon commencement of storage, but no later than upon leaving the factory or warehouse, the risk shall pass to the client, even if the contractor has taken over delivery and collection with its own fleet of vehicles.

II.4 Inspections

The heat-treated goods shall be inspected to the extent customary in the industry and, if applicable, in accordance with the client's specifications before leaving the hardening shop. Further inspections and analyses shall only be carried out on the basis of special agreements.

The client shall ensure that the heat-treated goods meet the requirements before further use. The necessary inspections or other activities shall be carried out for this purpose. With regard to the heat treatment to be carried out, the client is responsible for ensuring that the workpieces are manufactured in accordance with the rules of technology, that the information required in accordance with Section II.1 is correct and complete, and that the heat treatment specifications are adapted to the subsequent intended use.

II.5 Inadequate heat treatment

Once the order has been placed, the desired heat treatment is carried out as a service with the necessary care and suitable means based on the information provided in Section II.1. In doing so, the contractor complies with the official requirements and the applicable legal regulations of the European Union (EU) and the Federal Republic of Germany. This applies, for example, where relevant, to the

- REACH Regulation (Regulation (EC) No. 1907/2006),
- the Electrical and Electronic Equipment Substances Regulation (ElektroStoffV),
- the End-of-Life Vehicles Regulation (AltfahrzeugV) and

- the Packaging Act (VerpackG)
as German transpositions of the corresponding EU directives.

The success of heat treatment, the achievement of a certain quality, suitability for a specific use or the achievement of certain results, e.g. with regard to freedom from distortion and cracks, surface hardness, hardness penetration, through-hardening, electroplating capability, etc., are not guaranteed, in particular due to the possibility of varying hardenability of the material used, hidden defects, unfavourable shaping or possible changes in the preceding work process. The shrinkage that occurs to a reasonable extent during the hardening process of mass-produced articles and small parts, which is customary in the industry and process-related, does not justify any claims for defects. If the contractor carries out alignment work at the request of the client, he shall not be liable for any breakage that may occur in the process, nor for the successful application of insulating agents against carburisation or nitriding.

If the heat treatment is unsuccessful, the agreed remuneration shall nevertheless be paid. Complaints must be reported in writing without delay. Any necessary follow-up treatment shall be carried out in consultation with the client and, unless otherwise agreed, shall be invoiced separately.

The client's claims for follow-up treatment or compensation due to a possible culpable breach of contractual obligations by the contractor remain unaffected.

If, in exceptional cases, a service under a contract for work and services has been commissioned, the limitation period for claims for defects is 12 months from the transfer of risk, unless the law stipulates longer periods.

II.6 Liability

Unless otherwise specified below, any other and further claims by the client are excluded.

This applies in particular to claims for damages due to breach of obligations arising from the contractual relationship and from tort. The contractor shall not be liable for lost profits or other financial losses suffered by the client. Nor shall it be liable for damages resulting from treatment proposed by the contractor and approved by the client.

The above limitations of liability shall not apply in cases of intent, gross negligence on the part of the contractor's legal representatives or executive employees, or culpable breach of essential contractual obligations. In the event of a culpable breach of essential contractual obligations, the contractor shall only be liable for reasonably foreseeable damage typical for this type of contract, except in cases of intent or gross negligence on the part of its legal representatives or executive employees.

Furthermore, the limitations of liability shall not apply in cases where liability is assumed under the Product Liability Act for personal injury or property damage to privately used items due to defects in the delivered products. They also do not apply in the event of injury to life, limb or health and in the absence of warranted characteristics or a guaranteed quality, if and to the extent that the warranty or guarantee was specifically intended to protect the client against damage that did not occur to the heat-treated goods themselves.

Insofar as the contractor's liability is excluded or limited, this also applies to the personal liability of its employees, workers, staff, legal representatives and vicarious agents.

The statutory provisions on the burden of proof remain unaffected.

II.7 Partnership clause

In all compensation payments made by the contractor, in particular with regard to the amount of damages, the economic circumstances of the contracting parties, the nature, scope and duration of the business relationship, and the order value of the heat treatment services shall be taken into account in good faith.

May 16th, 2025

Gez. S. Koskivuori (03.07.2025)