
**Technical conditions of work execution (TCWE):
Blasting stainless steel – at the blast shop
FK system – povrchové úpravy, s.r.o.**

These TCWE do not replace the General Terms and Conditions of FK system – povrchové úpravy, s.r.o.

1. Acceptance of a part for surface treatment

- 1.1. Please submit your order at least 1 day in advance in Czech, Slovak, or English to the email address fkssystem@fkssystem.cz, which is the only address to receive and process orders. Orders are confirmed only electronically by a confirmation sent from the system. Without an order, goods will not be released for treatment.

Among other things, an order must state:

- customer identification
- ref. No. of our offer, if any has been made
- identification of the part(s) or order
- Required surface treatment, including specification of the abrasive and the desired final surface roughness expressed in Ra units in μm (unless specified in the order, glass beads are used as standard to achieve a roughness of Ra 1.6 μm)
- material grade (if there are multiple grades, please specify all)
- any special requirements for packaging, handling, etc.

All information required by the contractor for the correct performance of the work must be stated directly in the body of the order (not on a drawing or in an attachment, and not merely by reference to the offer). All information must be provided in a single document (i.e., it is not possible to provide part of the information in the body of the order and part in the body of an email message).

- 1.2. Parts must be delivered with a delivery note referring to the order number under which treatment was ordered.
- 1.3. If the stainless steel part also includes a part made of carbon steel or other material, it is necessary to point this out in the order. Carbon steel parts must be primed, taped or it must be otherwise ensured that the carbon surface does not come into contact with the abrasive during blasting (unless otherwise expressly agreed with the contractor's technician). This protection of the carbon part may be damaged by blasting.
- 1.4. Parts to be blasted must be delivered dry, without grease, without any paint or marker markings, etc., without mechanical impurities incl. stickers, burnt foil, etc., without chips and chips after machining. Delivery of parts contrary to the above may result in poorer visual quality of the blasted surface.
- 1.5. If there are places and surfaces on the parts that do not need to be blasted (there is no need), the customer must explicitly draw attention to this fact in the order, and at the same time the customer must provide a drawing with the part where these places will be clearly and unmistakably marked (e.g. with a colour highlighter). Otherwise, these places will also be blasted and charged to the customer.
- 1.6. If there are places and surfaces on the parts that must not be blasted (e.g. machined surfaces, sealing surfaces, seating surfaces, etc.), and places where abrasives or fine dust must not reach

during work (e.g. internal surfaces of tanks and containers, etc.), the customer must explicitly draw attention to this fact in the order, and at the same time the customer must provide a drawing with the part where these places will be clearly and unmistakably marked (e.g. with a colour highlighter). Furthermore, unless otherwise agreed with the contractor's technician, the customer must supply blanking plugs to the flanges, external and internal threads, etc. to the part so that the specified machined surface or internal space can be protected. Otherwise, the contractor is not responsible for the blasting of these places or damage to the entire part.

- 1.7. After prior agreement with the technician, parts can be delivered, e.g. greasy for degreasing, with scales after annealing for removing scale, with protective foil, if necessary, etc.
- 1.8. During the period of winter chemical treatment of roads (salting), it is necessary to transport parts only on a tarpaulin cargo area, both parts for pickling and parts that have already been pickled. Salt acts very aggressively on the stainless steel surface, and even packaging in PE foil will not sufficiently protect the parts. We recommend transporting parts after pickling by tarpaulin vehicles all year round.
- 1.9. Only a random check is performed on receipt. Any damage can only be detected after work on the parts has started. The number of pieces is not checked.
- 1.10. The date of execution and completion of work will be decided by the blast shop technician.

2. Quality standards

- 2.1. Blasting is a technical operation ensuring the unification of the surface and small traces after machining processes. Blasting cannot restore the corrosion resistance of steel, which is significantly reduced by mechanical and thermal stress during production. Pickling and passivation operations are used for this.
- 2.2. The surface after blasting will be metallicly clean without corrosion and without colour fading after welding. It will be as uniform as possible, depending on the mechanical pre-treatment, quality and roughness of the surface to be blasted. After blasting, the parts are blown with compressed air, but a thin layer of fine dust may remain on the surface, which is held to the surface by the action of electricity static forces. This is not considered a defect.
- 2.3. Blasting cannot remove slag, burnt grease in welds, deep grooves and scratches in the surface, dirt ground into the surface, burnt remains of protective foil, etc.
- 2.4. Blasting will dull the surface and increase the roughness of the surface.
- 2.5. A non-blasted and non-unified surface cannot be claimed on poorly accessible or completely inaccessible places/surfaces.
- 2.6. During blasting, due to the kinetic energy of the abrasive, the blasted surface is slightly stretched and internal stress is introduced. For some types of parts, this fact is manifested by the formation of deformations. This phenomenon is more pronounced for single-sided blasted surfaces, as well as for double-sided blasted surfaces of sheet metal parts up to 2 mm thick. When identifying such type of parts, it is very advisable to test this phenomenon on a test piece. If the customer consents to this test and for this purpose and the part is significantly deformed during it or even becomes unusable, compensation for the destroyed part cannot be demanded from the contractor.

3. Problem areas in terms of pickling

3.1. Inaccessible pockets and similar places

The blasted parts must not have "semi-closed" spaces in which the abrasive could remain without the possibility of its cleaning after finishing the blasting work. In the event that such spaces are present on the part, our technician must be demonstrably informed of this fact. Otherwise, we bear no responsibility for stuck abrasive and its further action in the part or the entire assembly of parts.

3.2. Ground parts

Unifying the transition between the raw surface of the part and the place where it was necessary to grind for production or visual reasons is always problematic. For the best unification of the ground area with the original surface, it is most suitable to use a vibrating sander and sandpaper with a grain size of 180 or higher at the end of the grinding work.

4. Packaging

4.1. In order to avoid scratching the blasted surface and spoiling the work, each part is individually packed in shrink film or in PE foil 0.05 mm thick. The individual parts on the pallets are separated with cardboard or Miralon as needed. This packaging is subject to a fee - see the price list. Parts are stacked on pallets preferably in the same way as they were delivered.

4.2. If, after packing, the parts no longer fit on the original number of pallets, they will be stored on additional pallets. The price of these pallets will be added to the invoice.

4.3. In the event of a request for a different packaging method or not to pack at all, this must be agreed with the technician and included in the order.

4.4. The packaging is not intended for open trucks and is not intended for storage in outdoor, unsheltered places.

5. Shipment of parts after surface treatment

5.1. If parts are picked up by an external carrier, it is necessary for the driver to report the name of the company that ordered the surface treatment and the order number for which the treatment was ordered. Without this, it is not possible to identify the order and carry out the loading.

5.2. Our company does not arrange transport, nor does it assume any responsibility for proper and careful securing of goods for the purpose of transport on a vehicle. The driver/carrier assumes responsibility for the subject of the order on loading the goods and signing the delivery note

6. Order completion times

6.1. Orders are normally processed within 5 working days, if technologically possible.

6.2. Prices and conditions are listed in the attached Price Clause. The possibility of express processing and technical and deadline specifications must be agreed in advance.