CUSTOMER ZONE · QUALITY REQUIREMENTS

Technical Conditions for Acceptance of Castings

How we inspect aluminum castings, the rules under which you accept them, and what to agree on before placing an order. Acceptance is always based on the drawing or 3D model and the order, and in commercial matters on the offer and the General Terms of Sale (GTS).

drawing and order
basis of acceptance – requirements agreed before production

PN-EN 1706
aluminum alloys

on request
strength testing and material structure analysis

ISO 9001:2015
TÜV Rheinland Polska certificate

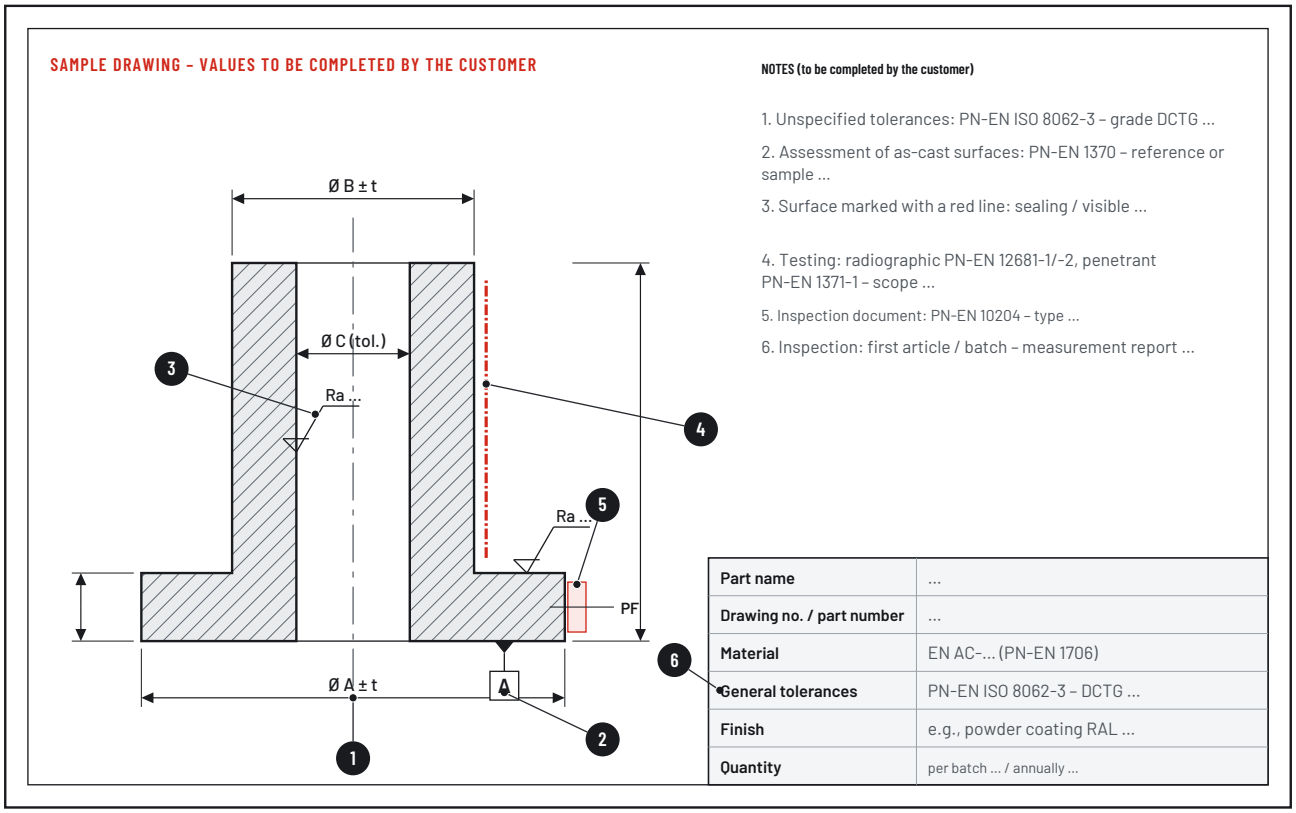
01 · Acceptance at a glance

Basis of acceptance	drawing or 3D model, order and offer
Dimensions	tolerances per drawing; general – e.g. DCTG class according to PN-EN ISO 8062-3
Surface	requirements and evaluation criteria agreed before production
Material	alloy designation according to the standard, e.g. EN AC-42000 (PN-EN 1706)
Testing	strength and material structure testing – on request
Documents	simplified technical documentation: part drawing, technical conditions of manufacture and acceptance
Packaging	packaging cost included in the price (GTS, § 6 para. 1)
Acceptance of delivery	claims regarding quantity and type of goods – in the delivery documents (GTS, § 7 para. 1 item 7)

02 · Dimensions and tolerances

The tolerances given on the drawing are binding. Achievable accuracy depends on the technology and the size of the casting: in high-pressure die casting, tolerances in the range of ±0.1 mm are often achievable, permanent mold casting delivers stable dimensions throughout the series, and critical dimensions are brought to the drawing tolerances by CNC machining.

- functional and mounting dimensions with tolerances – these determine acceptance;
- general casting tolerances – e.g., dimensional tolerance grade DCTG per PN-EN ISO 8062-3 (if they are not on the drawing, state them in your inquiry);
- machining allowances and machining datums, if the casting will be machined;
- locations where cleaned-up marks from the gating system and mold parting line may remain;
- inspection method: first article, batch inspection, dimensions for the measurement report.



1. Functional and mounting dimensions with tolerances – these determine acceptance
2. Datum (e.g., A) for dimensions and machining; for machined parts – allowances and machining datums
3. Machined surfaces with required roughness (e.g., Ra)
4. Functional or visible surfaces – e.g., sealing surfaces or surfaces for anodizing
5. Location where cleaned-up marks from the gating system and mold parting line (PL) may remain
6. General casting tolerances – e.g., grade DCTG per PN-EN ISO 8062-3

Fig. 1. Sample drawing – what to specify on the casting drawing. Values marked "..." are to be completed by the customer.

03 · Surface quality

Inspection includes visual examination and technical surface assessment methods. When submitting an inquiry:

- mark visible and functional surfaces on the drawing, e.g., sealing or contact surfaces;
- state the required roughness (e.g., Ra) for machined surfaces and, for as-cast surfaces, the assessment method, e.g., comparison with a reference or sample; the rules for assessing casting surface condition are described in PN-EN 1370;
- define assessment criteria for surfaces of particular importance – e.g., sealing surfaces or surfaces intended for anodizing;
- specify the required finish: grinding and polishing, electroplated coatings, or powder coating in an RAL color.

04 · Material and mechanical properties

We use certified raw materials and test the material regularly. In your inquiry and order, specify:

- alloy designation per PN-EN 1706 (e.g., EN AC-42000, EN AC-46200);
- required mechanical properties (e.g., tensile strength, yield strength, elongation, hardness) and how they are to be verified, e.g., by testing specimens;
- material condition, if relevant – e.g., after heat treatment;
- type of inspection document, if required – e.g., per PN-EN 10204.

05 · Non-destructive testing

We use non-destructive testing methods such as ultrasonic and radiographic testing. If the casting requires testing, specify in your inquiry:

- test method, e.g., radiographic (PN-EN 12681-1 or PN-EN 12681-2) or penetrant (PN-EN 1371-1);
- scope: all pieces, selected pieces from a batch, or the first pieces from a series;
- areas of the casting to be tested;
- acceptance criteria, e.g., permissible size and distribution of discontinuities.

Testing requirements are best stated already in the request for quotation – they affect the casting process and the price.

06 · Packaging and transport

Price and packaging	the quoted price includes packaging costs (GTC, § 6 sec. 1); the packaging format – e.g., crates, separators, protection of machined surfaces – is specified by you in the order (GTC, § 4 sec. 1)
Delivery	according to the Incoterms 2010 rule specified in the quotation (GTC, § 4 sec. 7)
Transfer of risk	upon commencement of unloading (GTC, § 4 sec. 8)
Unloading	within 2 hours of the truck's arrival, when the foundry arranges transport (GTC, § 4 sec. 9)
Markets	Poland, Germany, Scandinavia, Southern Europe

07 · Acceptance of delivery and complaints

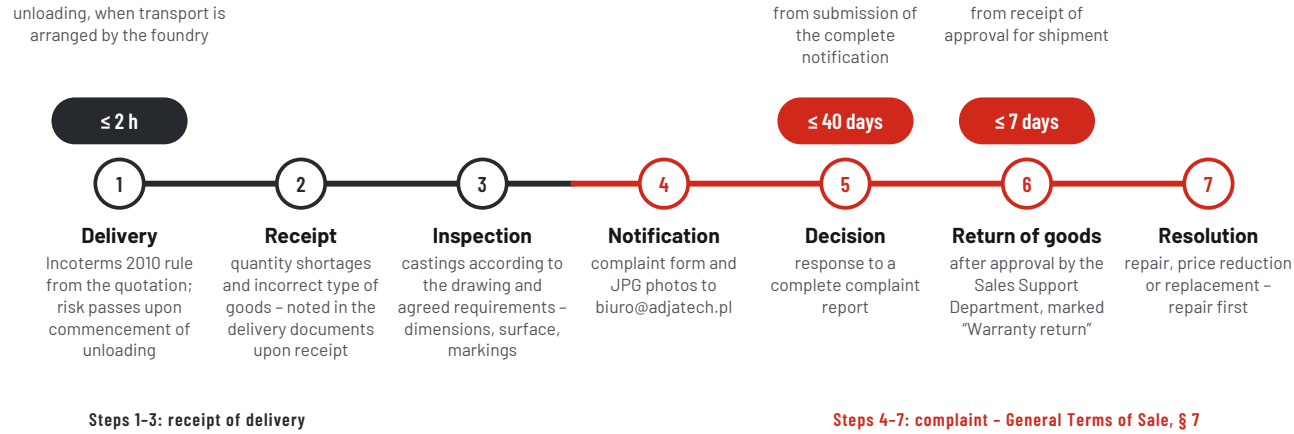


Fig. 2. Receipt of delivery and complaint procedure with the time limits resulting from the General Terms of Sale.

Submit complaints using the complaint notification form (Customer Zone), sent by e-mail to biuro@adjatech.pl, together with photos of the defect. Samples: Adjatech Metalworking Sp. z o.o., ul. Gnieźnieńska 26, Janikowo, 62-006 Kobylnica, marked "Sales Support Department". The full text of § 7 of the General Terms of Sale is binding.

08 · Request for quotation checklist

What to provide	Example or guidance
Drawing or model	2D drawing in PDF and 3D model in STEP format
Material	alloy per standard, e.g. EN AC-42000 (PN-EN 1706)
Quantity	per batch and per year – prototype, short run or series production
Tolerances	from the drawing; general casting tolerances – e.g. DCTG class per PN-EN ISO 8062-3
Surface	functional and visible surfaces, roughness, acceptance criteria
Machining and coatings	surfaces for CNC machining, grinding, polishing, powder coating (RAL color)
Testing	e.g. strength, material structure, radiographic – if required
Documents	type of inspection document (e.g. per PN-EN 10204), measurement report
Packaging and delivery	type of packaging, place of delivery, Incoterms rule

The more of this information you provide in your inquiry, the more accurate the quotation will be. The request for quotation form (PDF) contains all the fields from this list.

Standards referenced in this document: PN-EN 1706 · PN-EN ISO 8062-3 · PN-EN 1370 · PN-EN 12681-1 · PN-EN 12681-2 · PN-EN 1371-1 · PN-EN 10204 · Incoterms 2010 rules.

Contact for technical requirements

FOUNDRY
Mikołaj Kosicki
tel. +48 531 541 171
m.kosicki@adjatech.pl
permanent mold, sand and high-pressure die castings, patterns and molds

MACHINING
Rafał Wojtkowiak
tel. +48 531 541 003
r.wojtkowiak@adjatech.pl
CNC milling and turning, machining of castings – series and one-off production

OFFICE · MON–FRI 8:30–16:30
Odlewnia Poznań
tel. +48 61 662 43 37
odlewnia@adjatech.pl
requests for quotation, orders and documents

Plant and office: ul. Gnieźnieńska 26, Janikowo, 62-006 Kobylnica (near Poznań) · Registered office: ul. Piotra Ściegiennego 139, 60-304 Poznań

Information as of: October 2026. This document is for information purposes only and does not constitute an offer within the meaning of Art. 66 § 1 of the Polish Civil Code. Order details – material, tolerances, scope of testing, lead times and price – are specified in the quotation and the order; commercial matters are governed by the General Terms of Sale of Adjatech Metalworking Sp. z o.o.