

TIANHUI MACHINE

Casting | Forging | CNC Machining | Inspection

P022 - Polished Pump Impeller Components

P067 - Pump Impeller and Cover Components

P073 - Cast Pump Impellers

P079 - Brass Valve Bodies

P088 - Cast Pump Cover and Rotor Housings

P123 - Cast Pump and Fluid Housings and Covers

P132 - Cast Pump and Valve Housings

P133 - Pump Impellers, Covers and Discs

PRODUCT CAPABILITY PDF

Pump & Valve Components

Custom pump and valve components produced from drawings, samples or project requirements.

Drawing-Based

OEM Production

Casting + CNC

Coordinated Process

Inspection

Project Specific

thcastings.com

Manufacturing Review

Prepared for OEM buyers evaluating custom metal component manufacturing routes.

01 / COMPONENT SCOPE

What We Manufacture for Pump & Valve Components

Pump casings, impellers, valve bodies and flow components with machining and inspection support.

01

Pump casings and pump housings

02

Pump impellers and covers

03

Valve bodies and valve housings

04

Valve balls and sealing parts

05

Flanged adapters and pump connections

06

Metering pump housings

07

Diaphragm pump heads

08

Custom flow-path components

Important note

Most components are produced according to customer drawings, samples or existing parts. Material, tolerance, surface treatment and inspection scope should be confirmed during the manufacturing review instead of assumed from a product image.

02 / MANUFACTURING ROUTES

Choose the route around geometry, material and volume

The same product category can include casting, forging, CNC machining or a combined process. The final route should follow the part drawing and production requirements.

01

Investment casting

Investment casting for stainless pump and valve parts

02

Sand casting

Sand casting for larger pump housings and cast iron bodies

03

CNC machining

CNC machining for sealing, flange and bearing interfaces

04

Air-tightness or leakage checks when specified

Air-tightness or leakage checks when specified

PROCESS SELECTION

The drawing decides the process.

Before quotation, Tianhui reviews part geometry, alloy, annual volume, tolerance, surface condition, machining allowance and inspection requirements to decide the practical manufacturing route.

03 / PRODUCT EXAMPLES

Representative Components from the Image Library

These examples are grouped from the current product photo library. Exact material and final application should be verified against customer drawings or samples.



P017
Pump and Valve Housings

Custom pump and valve housings featuring multi-port cast housings with circular flanges, bolt patterns and internal flow passages. The likely...

Confidence: High



P018
Pump Impellers

Custom pump impellers featuring curved-vane impeller geometry with central hubs and partially enclosed flow passages. The likely...

Confidence: High



P019
Pump Adapters and Housings

Custom pump adapters and housings featuring flanged adapters, nozzle housings and circular fluid interfaces with machined bores. The likely...

Confidence: High



P020
Valve and Pump Housings

Custom valve and pump housings featuring compact multi-port housings, flanged bodies and machined flow openings. The likely...

Confidence: High



P022
Pump Impellers

Custom pump impellers featuring polished open or semi-open impellers with curved blades and central hubs. The likely manufacturing route is...

Confidence: High



P067
Pump Impeller and Cover

Custom pump impeller and cover featuring small centrifugal impeller/rotor and a related circular cover component. The likely...

Confidence: High

04 / QUALITY & CUSTOMIZATION

From image review to controlled production

Production is organized around approved drawings, technical requirements and inspection expectations.

01

Flange face and bolt-hole checks

02

Bore, shaft and sealing interface verification

03

Surface roughness checks on critical machined features

04

Air-tightness testing for selected pump housings and pump heads

RFQ INFORMATION

What to send for a useful quotation

- 2D drawing, 3D model, sample or clear product photos
- Material grade or preferred alloy
- Estimated quantity and annual demand
- Critical dimensions, tolerances or assembly interfaces
- Surface finish, coating or heat-treatment requirements
- Inspection documents, testing or traceability requirements

05 / PROJECT PROOF

Related manufacturing experience

Strong related cases: cast iron metering pump housing and 316L hydraulic metering diaphragm pump head, including deep-hole machining, Ra 0.4/Ra 0.8 surfaces and air-tightness testing.

Additional example parts



Pump Impellers



Brass Valve Bodies



Pump and Valve Housings



Pump Impellers and Covers



Pump Covers and Discs



Pump Casings

NEXT STEP

Send your drawing for manufacturing review

Email: seo@cn-tianhui.com | Website: www.thcastings.com