LUDON FORGE

CO., LTD.



PRODUCT & CAPABILITY CATALOGUE · EDITION 2026

FORGED BALL VALVE BODIES & BLANKS

One-piece closed-die forgings in carbon and stainless steel for valve manufacturers worldwide. We forge, heat treat, blast and machine on our own site.

NPS ½" – 4" · DN15 – DN100

A105 · F304 · F316

2,000,000 BLANKS / YEAR

ISO 9001 CERTIFIED QMS

OEM & CUSTOM FORGING TO CUSTOMER DRAWING

01

COMPANY AT A GLANCE

A forging plant dedicated to valve components. We supply valve makers rather than compete with them.

Ludon Forge Co., Ltd. makes forged valve components. Our main product is the ball valve body, forged in one piece in carbon and stainless steel, and alongside it we forge other parts to customer drawings.

Our 10,000 m² plant runs 8 forging lines and more than 110 CNC machines, and turns out 2 million ball valve blanks a year, about 12,000 tonnes. Die design, forging, heat treatment, machining and materials testing all happen here, so you deal with one supplier from the first drawing to the finished part.

2,000,000
BALL VALVE BLANKS
forged per year

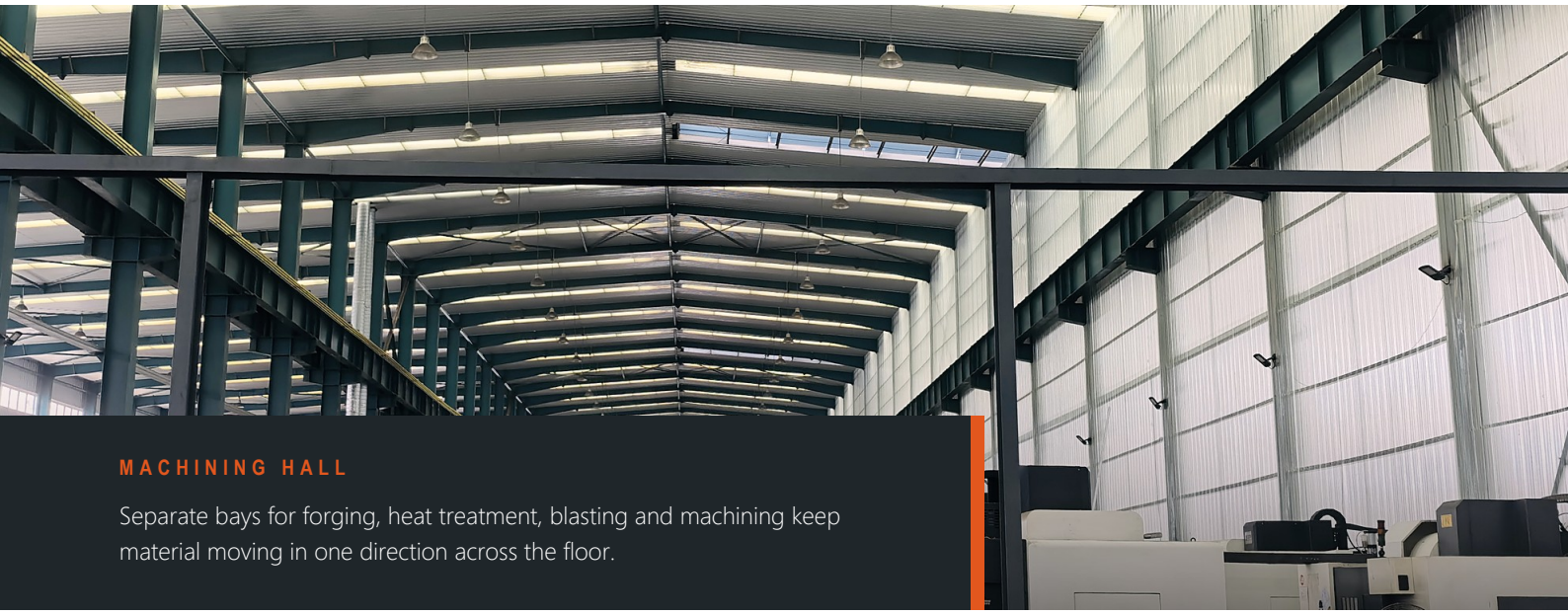
12,000 t
ANNUAL FORGED OUTPUT
pieces from 1.5 to 20 kg

10,000 m²
OWNED PRODUCTION FLOOR
single production site

8
CLOSED-DIE FORGING LINES
16 presses, 315 – 2,500 t

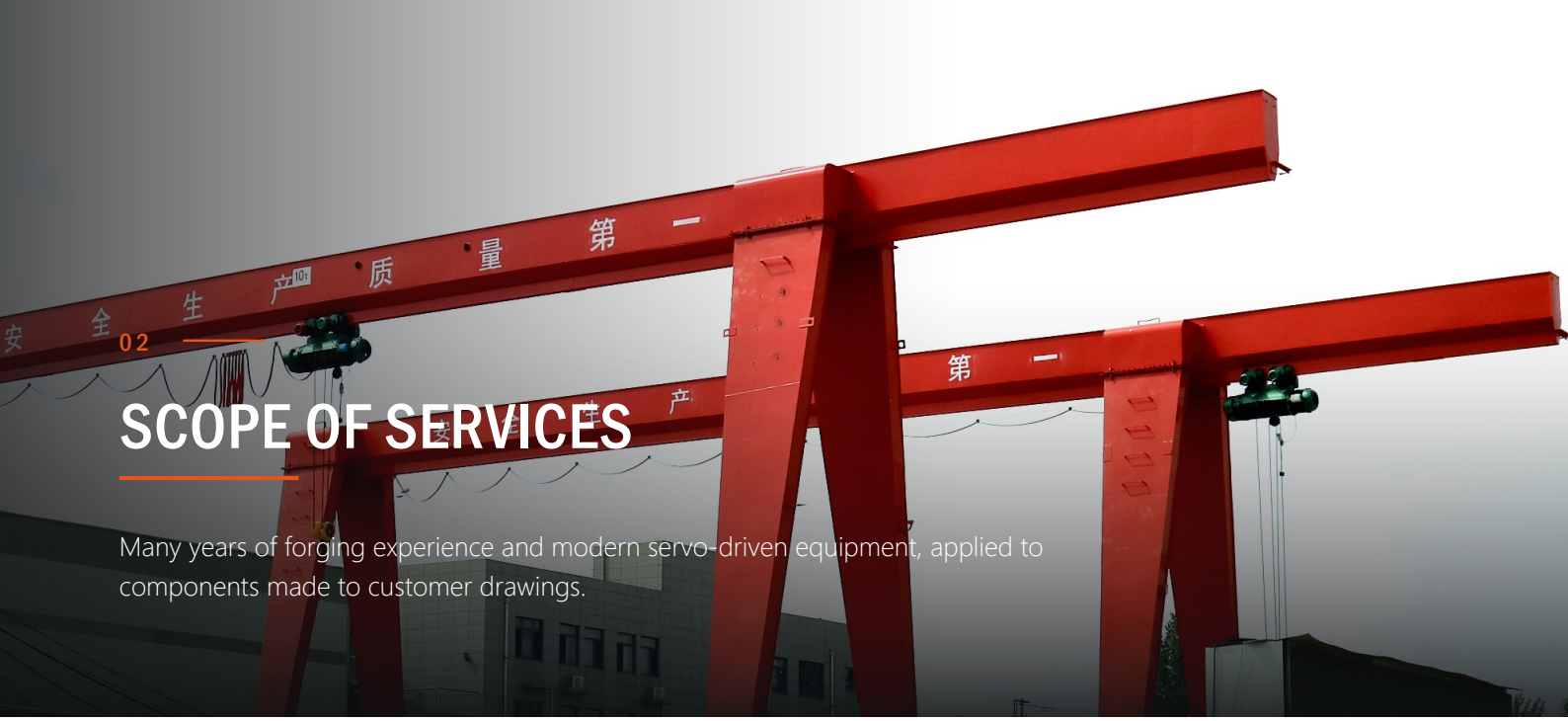
110+
CNC MACHINES
90+ lathes · 22 machining centres

40 %
OF FORGING POWER
from our own solar PV



MACHINING HALL

Separate bays for forging, heat treatment, blasting and machining keep material moving in one direction across the floor.



02

SCOPE OF SERVICES

Many years of forging experience and modern servo-driven equipment, applied to components made to customer drawings.

01 CLOSED-DIE FORGING

Ball valve bodies and other complex parts are forged in one piece in closed dies, in carbon and stainless steel. The grain follows the shape of the part and the structure stays dense, which is what gives the body its strength and its tightness under pressure.

02 OWN DIE SHOP · 3D CAD/CAM

We design and cut our own dies on CAD/CAM and simulate the forming step before any steel is committed, so the tenth batch comes out like the first.

03 HEAT TREATMENT

Normalising, solution annealing, quenching and tempering, all done in our own furnaces for carbon and stainless steel alike. None of it is subcontracted.

04 SURFACE PREPARATION TO Sa 2½

Shot blasting to ISO 8501-1 Sa 2½ takes off every trace of mill scale and leaves an even, near white surface that is ready for machining, inspection or coating.

05 CNC MACHINING

More than 90 CNC lathes and 22 machining centres cover both rough and finish machining, with capacity sized to keep pace with the forging lines.

06 MATERIALS LABORATORY

Our laboratory analyses chemical composition by spectrometry and carries out tensile, impact and hardness testing on Brinell, Vickers and Rockwell scales. Every heat is tested.

07 QUALITY CONTROL & TRACEABILITY

Raw material, forged blanks and finished parts are all inspected, and every piece stays linked to its heat number and its material record.

08 ONE SUPPLIER, FULL SCOPE

You send a drawing and get back either a machine-ready blank or a finished part, on one order, from one supplier, with one set of documents.

ONE DRAWING. ONE SUPPLIER.

Die design · forging · heat treatment · blasting · machining · testing

03

FROM DRAWING TO DELIVERY

Seven stages take a customer CAD drawing through to a certified forging, ready for machining.

1

DRAWING & DFM REVIEW

We review the drawing and the specification, say what would make the part easier to forge, and agree a tooling plan.

2

DIE DESIGN & SIMULATION

Dies are designed and cut here on 3D CAD/CAM, with the forming step simulated before steel is committed.

3

CLOSED-DIE FORGING

Certified billet is heated and forged on 315 to 2,500 t servo presses with programmable forming energy.

4

HEAT TREATMENT

Normalising, solution annealing or quench and temper, to suit the grade and the properties called for.

5

CNC MACHINING

Rough or finish turning and milling on 90+ CNC lathes and 22 machining centres, to the stock you specify.

6

BLASTING TO Sa 2½

Shot blasting to ISO 8501-1 Sa 2½ removes all mill scale and leaves a clean, near white surface.

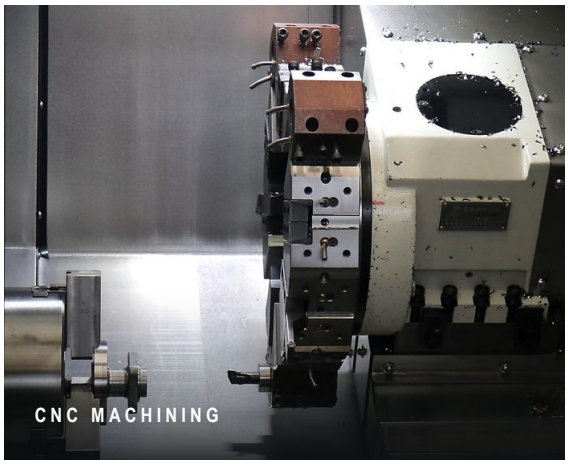
7

INSPECTION, PACKING & EXPORT

Dimensions, hardness and material are verified, the EN 10204 3.1 papers are issued, and parts are preserved and packed for export.



FORGING



CNC MACHINING

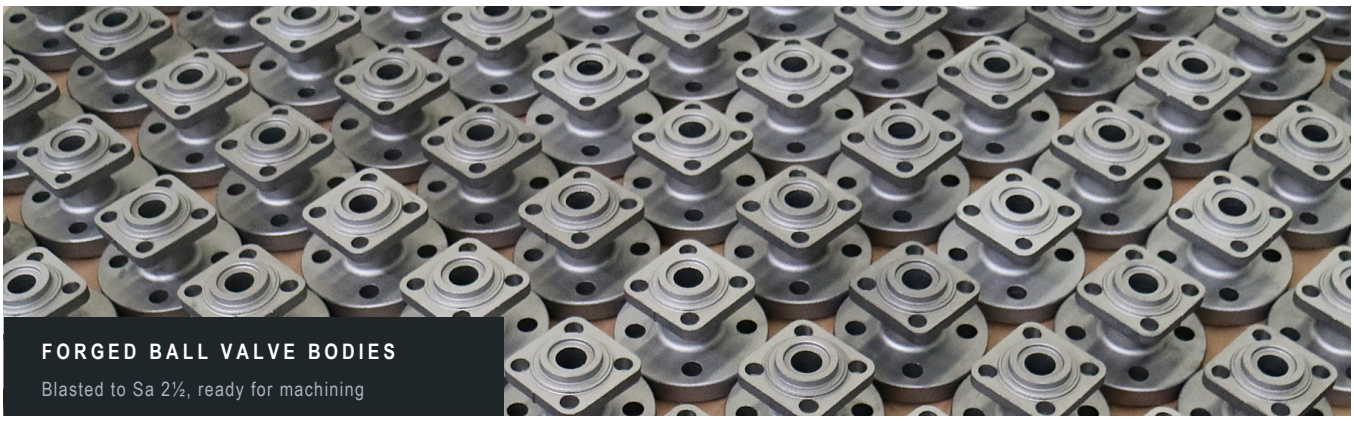


PACKING & EXPORT

04

PRODUCT PROGRAMME

Ball valve bodies from NPS ½" – 4" (DN15 – DN100), ASME Class 150 – 300 (PN16 – PN40), and any other forging you can send us a drawing for.



FORGED BALL VALVE BODIES
Blasted to Sa 2½, ready for machining

MATERIAL & SIZE RANGE

MATERIAL GRADE	STANDARD	SIZE RANGE	TYPICAL SERVICE / NOTES
Carbon steel A105	ASTM A105	NPS ½" – 4"	General oil, gas and water service
Stainless steel 304	ASTM A182 F304	NPS ½" – 4"	Light corrosion, general industrial duty
Stainless steel 316	ASTM A182 F316	NPS ½" – 4"	Corrosive media, including chlorides
Custom grades	To customer spec	On request	Forged to your drawing and material spec

NOMINAL SIZE COVERAGE · NPS AND DN

½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"
DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100

TYPICAL COMPONENTS

- Ball valve bodies, forged in one piece. This is what the plant is built around.
- Bonnets, caps, end connections and connecting flanges.
- Blanks for stems, seats and retainers, and related valve parts.
- Special parts made from scratch, die included, to your drawing.

SUPPLY CONDITION

- Forged and heat treated blanks, blasted to ISO 8501-1 Sa 2½.
- Rough machined to agreed stock on bore, ends and seat faces.
- Finish machined to your drawing on request.
- Every consignment ships with its EN 10204 3.1 certificate.

05

CAPACITY & FACILITIES

Built for repeat series work, with the presses and the automation to hold one shape run after run.



FORGING

- 8 closed-die forging lines
- 16 presses from 315 t to 2,500 t
- Mostly electric screw presses; the remaining hydraulic presses run on servo pumps
- Programmable forming energy throughout
- Automatic loading and unloading between operations

MACHINING

- 90+ CNC lathes
- 22 CNC machining centres
- Rough and finish turning, drilling and milling
- Machining capacity sized to match forging output

HEAT TREATMENT & TESTING

- Furnace lines for normalising and solution annealing
- Shot blasting plant to ISO 8501-1 Sa 2½
- Optical emission spectrometer
- Tensile, impact and hardness test equipment

PLANT & OUTPUT

- 10,000 m^2 of production floor, owned rather than rented
- A separate bay for each stage of the process
- 2,000,000 ball valve blanks per year
- ≈ 12,000 tonnes of forgings per year

LOW CARBON MANUFACTURING

SERVO PRESSES · 40 % SOLAR · LOWER FOOTPRINT

Every press on site is servo driven. The electric screw presses that make up the majority draw power only during the forming stroke and need no large hydraulic oil system, while the hydraulic presses that remain run their pumps on demand. Against a conventional constant pump press this sharply cuts idle energy and oil heating, and it removes most of the waste oil and the leakage that come with it. Our own solar array covers roughly 40 % of the electricity used in forging, which lowers the carbon figure carried by each part.

06

CERTIFICATION

Our quality management system is certified to ISO 9001:2015 and audited by Bureau Veritas.

BUREAU VERITAS

CERTIFICATE

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System of

Ludon Forge Co., Ltd.

No.11, Jingsi Road, Phoenix Industrial Park, Dongchangfu District, Liaocheng, Shandong

Unified social credit code: 91371500MA3C9QBR47

has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification:

Manufacture of Valve Components

External Certificate Number:
F02326Q00479R002

Original certification date:
20-09-2026

Current cycle start date:
20-09-2026

Expiry date:
19-09-2029
(Subject to the continued satisfactory operation of the organisation's Management System)
BV Certificate Number:
CN062319
Version: 1

Issue Date:
20-09-2026

Signed on behalf of BVCH SAS UK Branch

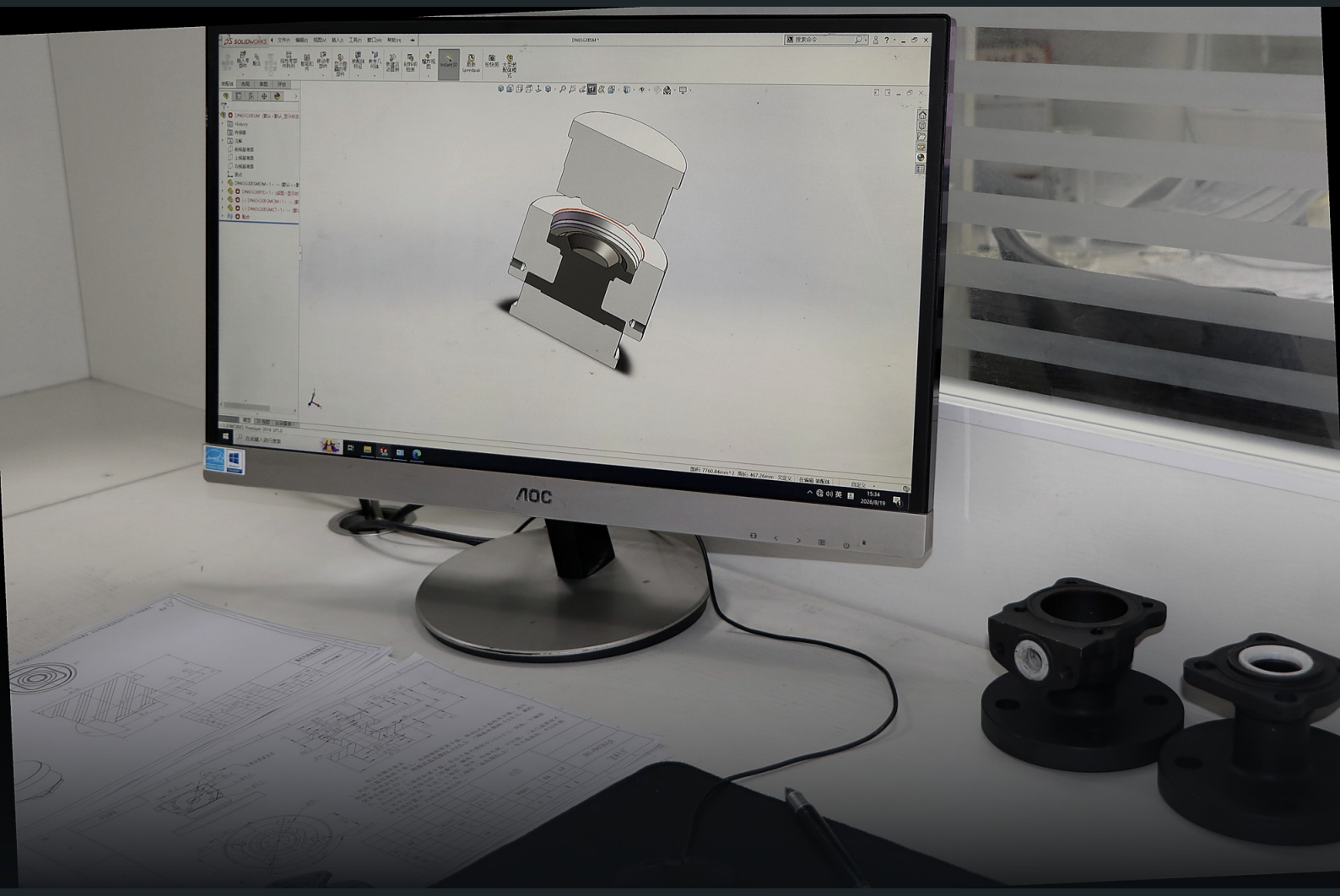
UKAS MANAGEMENT SYSTEMS
0008

Accredited entity: Bureau Veritas Certification Holding SAS - UK Branch 5th Floor, 100 Lower Thames Street, London, EC3 6DL, United Kingdom
Local Office: Bureau Veritas Certification (Beijing) Co., Ltd, Room 02, 9 / F, West Office Building 1, Oriental Economic and Trade City, Oriental Plaza, No.1 East Chang'an Street, Dongcheng District, Beijing, China. 100738

Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call : +86 10 59683663
Certified organisation has to accept and pass regular surveillance audits, then this certificate can be continuously valid.
Information of this certificate may be obtained by visiting CNCA website (www.cnca.gov.cn).

CER CERTIF ALL TPL 001 Rev 4.5 C2.2 Contractual

1/1



SEND US YOUR DRAWING.

Send a CAD file or a sample part. You will get our comments on how it forges, a tooling plan and a price for the blank.

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