



Certificate Number	24-6601031-PQA
Issue Date	12-SEP-2024
Expiration Date	08-OCT-2029
ABS Port Office	ABS Cleveland

CERTIFICATE OF Product Quality Assurance

This is to certify that the Undersigned evaluated the manufacturing quality procedures of

Ellwood Crankshaft & Machine Company

located at


2727 Freedland Road, Hermitage, PA 16148

attend its facilities on the date and location stated, in order to carry out an audit of its quality system procedures. The system is considered to be in compliance with the ABS Quality Assurance Certificate criteria, subject to continued compliance with the most recent ISO 9000 Standard based on semi-annual audits by a representative of ABS, and periodic review and renewal of this Certificate, and alignment with Manufacturer Assessment Certificate validity.

Finished Machined Crankshafts and Secondary Shafts

This Certificate is manufacturer and location specific and is subject to annual audits. Consult the ABS Type Approval website to confirm the continued validity of this certificate and the status of products.

The ABS Office issuing the certificate is to be kept updated with changes to the production methods, quality control systems, products and models and any changes made.


Thomas Perk, Surveyor



NOTE: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

First Semi-annual Endorsement

Surveyor

WO and Date

Second Semi-annual Endorsement

Surveyor

WO and Date

Third Semi-annual Endorsement

Surveyor

WO and Date

Fourth Semi-annual Endorsement

Surveyor

WO and Date

Fifth Semi-annual Endorsement

Surveyor

WO and Date

First Annual Endorsement

Surveyor

WO and Date

Second Annual Endorsement

Surveyor

WO and Date

Third Annual Endorsement

Surveyor

WO and Date

Fourth Annual Endorsement

Surveyor

WO and Date



9/12/2024

Ellwood Crankshaft & Machine Company
2727 Freedland Road
Hermitage, PA 16148 USA
724-347-0250
AHargest@elwd.com

Subject: Issuance of ABS Product Quality Assurance Certificate (PQA) Number: 24-6601031-PQA

Dear: Andrew Hargest

This is to certify that a representative of ABS did, at the request of Ellwood Crankshaft & Machine Company, attend its facilities as indicated in the ABS port office survey report number 6601031 dated 9/12/2024, in order to carry out an audit of the quality system procedures and that the system is considered to be in compliance with the requirements of ABS Product Quality Assurance (PQA) Program. This certificate will require annual and renewal audits as noted on the certificate, and it will be endorsed by the Surveyors when the annual audits are completed and credited. You will be advised by E mail when the audits are coming due. A premature audit will not change the anniversary date. The MA Annual Audits have a window of + or - 90 days. The Manufacturing Assessment plans audits around the Quality Manual's defined primary processes, instead of organizing audits strictly by element or clause. This requires audits that represent the entire management system instead of narrow glimpses by element and location. Try to do these audits early rather than late, we have many things to correct when reports come in late and the certificates are automatically canceled.

We have also accepted your request to be considered for the Product Quality Assurance Category (PQA) of the ABS Type Approval Program. I am pleased to enclose the subject Product Quality Assurance Certificate (PQA) in recognition of your satisfactory Manufacturing Assessment (MA) and your request to be able to conduct self-inspection of those parts of the manufacturing process that normally require witnessing by an Exclusive ABS Surveyor. This certificate remains valid subject to Semi Annual audits and does not require endorsements. The Semi-Annual PQA audits are due at the mid-point between the anniversary dates of the MA Certificate. There is a window of + or - 30 days. Semi Annual audits only require audits that represent narrow glimpses by element and location, and this should vary in subsequent attendances.

PQA is a unique trust between ABS and the clients. While in the PQA category clients are allowed to do self-inspection to expedite ABS Unit Certification and be able to use the ABS Logos. Please recognize that in the PQA cycle of Annual and Semi-Annual audits, if an audit is missed, the authorizations for self-inspection given with the PQA expire. The key point here is that the expirations of the certificates show breaks in the continuity of certification and periods of time where ABS will not accept responsibility for the quality of the product self-inspected by the manufacturer.

The MA and PQA certificates do not mitigate the ABS Unit Certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels, MOUs or facilities.

This PQA certification does allow a Surveyor the option of accepting the required witness testing being done by a third party. PQA is provided to waive the attendance of the Surveyor, which reduces the number of opportunities to visit a plant. Therefore, in order to ensure continuous assessment of a manufacturer's quality under the Product Quality Assurance Program, the product will be inspected under a batch procedure program. The frequency is to be determined by the Surveyor-in-Charge based on the



production numbers given by the manufacturer. Please discuss this with the Surveyors and advise us of your final agreement.

Should your client require ABS certification of your product, you must verify that the Rules used to assess your PDA will satisfy the Rules being applied to the final installation. Be sure to discuss this with the Surveyors. This certification cost is not included in the assessments thus far completed. Products requiring ABS Unit-Certification for use on a vessel, MOU, or facility classed with ABS, will be retroactively unit certified by the ABS Cleveland office which has jurisdiction over your company. You will be responsible to advise that office of deliveries of products and to supply the office with all documentation required for Unit-Certification together with a "Declaration of Conformity with Approved Type". The following form of declaration will be accepted if printed on each shipping document or report with the name of your company and initialed by the authorized representative of your company;

"We hereby certify that the product described herein has been manufactured to the applicable ABS Rules dated <state year>. The product has been tested in accordance with the requirements of the American Bureau of Shipping Rules."

Consideration may be given to modifications in the form of the certificate, provided they correspondingly indicate compliance with the requirements of the Rules to no less degree than indicated in the foregoing statement.

The category of Product Quality Assurance (PQA) is issued contingent on your Manufacturing System and Manufacturing Process remaining certified to ISO 9001 (or equivalent standard). You must also remain in compliance with all applicable ABS Rules and those other standards you have elected to use in the evaluation of the products being manufactured.

Should any of the following occur, ABS must be advised as soon as you are able to do so:

- Changes in the outsourcing of materials or components requiring ABS certification.
- When a product requiring ABS certification is being manufactured.
- When ABS approved materials prove defective during manufacture.
- When finished machined products for ABS certification fail during testing.
- When ABS certified products fail in service.

ABS may withdraw the Certification of Recognition for the following reasons:

- Where the equipment fabrication is improperly carried out or the results are improperly reported
- Where a surveyor finds deficiencies in the approved production system of the Manufacturer and appropriate corrective actions are not taken
- Where the manufacturer fails to inform ABS of any change or alteration in Quality Assurance System upon which the recognition is based
- Where intermediate audit is not carried out
- Where willful acts or omissions are ascertained
- Where any deliberate misrepresentation is made by the Manufacturer
- Where ABS fee is not paid
- Where access to the Manufacturer's facility is denied



We look forward to working with you and encourage you to contact the ABS Cleveland for any needed explanations of the ABS Type Approval Program.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Thomas Perk", written over a horizontal line.

Thomas Perk
Senior Surveyor/Auditor
ABS Cleveland