

RODNEY HUNT MACHINE COMPANY

SPECIFICATIONS FOR TURBINE WATER WHEEL

ORANGE, MASS., U. S. A. June 23, 1924.

RODNEY HUNT MACHINE COMPANY (hereinafter referred to as the Company) proposes to build for

M. H. Parks and Company,

Winchendon, Mass.

(hereinafter referred to as the Purchaser) the following machinery and equipments, the details and specifications of which are herein particularly set forth, and the general agreements regarding which, including agreements as to title, price, date of shipment and the like, are to be found in a document signed by the parties hereunto and of even date herewith to which reference is hereby made:

TYPE AND SIZE

Designed for Horizontal shaft service according to the following specifications: One Type B McCormick 24" diameter with Balance Gate Casing. General description as illustrated in the Company's Catalogue No. 29 Section A-B Page 33 Horse power 43.5 when there is 12 feet effective head at the wheel shaft minus 3 to 5 per cent. possibly due to friction in bearings. Normal Speed 175 R. P. M.

DESCRIPTION OF TURBINE

All parts will be made extra heavy and powerful. All joints and flanges machine planed and bolted in a very substantial manner. The gates will be finished and adjusted so as to operate easily, and with a comparatively small amount of power. The operating mechanism designed and constructed with special regard to durability and freedom from disarrangement and repairs, and for readily replacing and inter-changing parts when desired. The highest standard of excellence possible being the Company's constant aim, particularly along the most essential lines in Turbine construction, such as Highest efficiency, Power, Easy and Quick Regulation, Steady Motion, Durability, etc.

WHEEL SHAFT

The wheel shaft will be 3 7/16" diameter, x 14'-0" long, and will be made of the best quality of hammered iron, or steel, if preferred. The shaft will be turned true and smooth to size specified on plans. The runner will be fitted and keyed complete to the shaft at the Company's works and later removed for shipping. Speed specified on plans may be adopted as normal or a different speed may be regarded as advisable by the Company.

FLUME DESCRIPTION

Length 5'-6" long. Diameter 5'-6" having two extra heavy cast iron heads riveted to the ends of a cylindrical steel plate casing. The heads to be strongly ribbed with circular and radial ribs on the outside and having a circular opening sufficiently large to admit the wheel casing, or curb. This opening to be surrounded with a raised machine faced boss at least 3 inches wide.

FITTINGS

The cylindrical flume casing to be fitted with a large manhole saddle tightly riveted. The cover to be fitted and secured to saddle with machine faced joint and tap bolts. When necessary, owing to form of flume and location of penstock inlet, a brass spring pressure relief valve will be provided and under certain conditions a brass seat suction spring valve will be provided for air inlet. The flume casing to have substantial flanges riveted to the sides for support on steel I Beams.

ERECTION

The flume, etc., will be erected at the Company's Works, as complete as may be practicable for convenient shipping and handling at the plant. If it is found desirable to rivet any plate seams in the wheel-room at Purchaser's plant for convenience in handling, or to avoid removing mill walls, such riveting is to be regarded as a part of the installation expense. All riveting of penstock and draft-tube connecting seams to be regarded as a part of the installation expense. The Company to furnish rivets and tools for such riveting.

RODNEY HUNT MACHINE COMPANY

PROPOSAL FOR

One H. P. Type B Runner, with Balance Gate Casing.

Orange, Mass., U. S. A. June 23, 1924.

RODNEY HUNT MACHINE COMPANY (hereinafter referred to as the Company) proposes to build for M. H. Parks & Company, Winchendon, Mass.

(hereinafter referred to as the Purchaser) the following machinery and equipments:

- 1 - Left Hand 24" Type B McCormick Runner with Balance Gate Casing.
- 1 - $\frac{1}{2}$ "x5'-6"x5'-6" Steel and Iron Case with 42" Mouth Piece and Connections. Cast Iron Heads. Plates and Yoke Bearing.
- 1 - 34" dia. C 1 Quarter turn and $\frac{1}{2}$ " x 34" x 37" x 4'-5" Draft Tube and Connecting Ring.
- 1 - 3 $\frac{7}{16}$ " x 14'-0" Turbine Shaft, and pair 3" Flange Couplings
- 1 - Man Hole Casting, And 10 C 1, Supporting Brackets and Bolts.
- 1 - Gate Hoist, Segment Type to outside end of case
- 2 - 12" x 10'-6" x 1 - 12" x 11'-0" 1-Beams - 31.5¢
- 1 8" Plug Drain Valve
- All Assembling Bolts, Rivets, and minor parts \$1549 FOB Orange
- 1 - Steel Penstock 50" x 48" x 42" x 107'-0" Long, Painted one coat inside and outside with water proof paint.
Ship in car load sections - 25' to 30' long - All Joints fitted for field erection - Send Rivets, Forge and Riveting Tools
\$538 FOB Or.

PRICE—The price of the above described materials and equipments is Two Thousand Eighty Seven dollars \$ 2087 F. O. B. Orange, Mass.

and the Purchaser is to make payment of this amount to the Company according to the following terms which terms apply also to any other materials supplied in connection with this installation.

TERMS—50% on shipment. When for any reason Purchaser desires deferred shipment, this payment shall become due 30 days after completion of work.

30% 30 days thereafter.

Balance in 30 days thereafter, or as may be mutually arranged.

If all materials and equipments shall not be forwarded on the same date pro rata payments for partial shipments are to be made.

TIME OF SHIPMENT—Shipment of the above machinery and equipments is to be made in about 4 weeks from date of signing these proposals by Purchaser and receipt of full data, possibly less time, depending on the amount of work on hand when the order is received. The time of shipment and installation is subject to strikes, accidents and other causes beyond the Company's control. The Purchaser will remove old work, using care not to break or otherwise damage. The Purchaser will do all excavating and constructing, earth, cement, masonry or carpenter work to facilitate installation without hindrance, and provide for keeping water out of pit and trailrace for favorable installation of materials furnished by the Company. Purchaser to furnish electricity for lights, etc. All belting, power transmission ropes, cables, chains, etc., will be furnished by the Purchaser, also trucking facilities, staging and skidding timbers and plank, and keep escaping steam away from water wheel location. The Company is not responsible for machinery broken in transit. In case of damaged material, the Purchaser should refuse to accept the shipment or insist that a full description of breakage be written on the transportation expense bill, thus showing a valid claim against the delivery company. The Company will ship new parts promptly.

FOREMAN—The Company can furnish a foreman to superintend and help erect wheel work on foundations furnished by Purchaser at their regular rate of \$1.25 per hour. Other workmen furnished by Company at 95 cents per hour and expenses as above if desired. Labor bill to be paid within 15 days from date men return as per conditions specified on regular form of outside work-cards used by Company's men, signed and approved by Purchaser. Traveling and board expense additional. The day going and the day returning to be reckoned as working time. Any extra time, etc., paid as specified on Time Cards furnished by the Company's workmen for recording time. Purchaser to furnish common helpers. To insure best operation of the Governor, the Company may regard a special workman as necessary for setting and connecting. The Purchaser agrees to pay for such additional expense. Also emergency expense for foreman to and from Company's Works. Above wage rates may terminate four month after shipment. Purchaser by acceptance of recommendations as made by Company's Foreman, assumes full responsibility of

GUARANTY

The Company guarantees that the Wheel which it herein agrees to furnish, if set in accordance with its instructions will develop 43.5 horse power at the wheel shaft coupling when there is 21-0" effective head on the wheel minus 3 to 5 per cent, possibly due to friction in the bearings. The Company shall not be held responsible for failure if the wheel is not properly set according to its instructions, or if there has been any misrepresentation as to the head or quantity of water or if there shall be obstructions in the head canal and raceway inconsistent with good engineering practice and other unfavorable conditions as the Company may decide before or after installation, or if there shall be any damage to wheel or parts or if there shall be any inattention of purchaser's employees to proper adjustment of all parts including packing and other bearings. Any and all testing expense to be born by the Purchaser including full detail reports which the Purchaser agrees to furnish the Company. The Purchaser agrees to thoroughly clean interior of old penstock if continued in use and make raceway like plan furnished by the Company.

TITLE TO PROPERTY

The Purchaser agrees that title to the materials and equipments furnished by the Company is to remain in the Company, and that said materials and equipments are to be personal property, no matter how they may be affixed to the realty; until all payments therefor (including deferred payments and payments of notes and renewals thereof, if any, or any judgments recovered therefor) shall have been fully made in cash, and that if default is made in any payment of an installment or note or other evidence of indebtedness hereunder; then all future payments, whether in form of notes or otherwise, shall forthwith become due and payable, anything therein to the contrary notwithstanding, and the Company, at its option, in case of such default of payment, or of a refusal to accept said property, may enter the premises where said materials and equipments may be located and take possession thereof with or without process of law, and remove the same as its property without prejudice to right of action, for any damage the Company may suffer by reason of the purchaser's refusal to accept or of the purchaser's refusal or failure to surrender the materials and equipments when so required; and that the purchaser will at all times perform all acts which may be necessary to perfect and assure such retention of title to said materials and equipments in the Company. The Company shall not be liable for consequential damages during the time of removal or thereafter.

DELAYS, ETC.

The Company shall not be held responsible for any loss, damage or delays caused by fires, strikes, lockouts, embargoes or other causes beyond the control of the Company, while said equipment is being manufactured, shipped and installed. Receipt of the machinery by the Purchaser shall constitute acceptance for delivery and a waiver of any and all claims for loss and damage due to delay; but this shall not relieve the Company from the obligations specifying guarantees above. The Company agrees to correct, at its own expense, any inherent defects in this machinery, which may develop under normal and proper use within sixty (60) days from first starting, provided the Purchaser gives the Company immediate written notice of such defects. All material and workmanship shall be subject to approval by the Purchaser as installation progresses and if no objection is made to material or workmanship when installation is completed, said material and workmanship shall be considered as approved and accepted by the Purchaser. The equipment is furnished hereinbefore and hereinafter specified, subject to the provisions, and a further condition that the Purchaser shall be held liable for loss or damage by fire or otherwise.

The Company shall not be held responsible for work done or left undone, apparatus furnished, or repairs made by others, or for alterations or changes made by our agents or employees at the request or direction of the Purchaser, nor for consequential damages of any kind.

It is understood and agreed that the apparatus herein specified shall be at the risk of the Purchaser from the time of its delivery by the Company on board cars at point of shipment (unless other delivery point is specified.)

No verbal agreement or statements between Company's agents and the Purchaser shall be binding upon the Company, unless approved in writing by Official authority.

This proposal is in duplicate and shall become a contract binding upon the Company only upon actual receipt by the Company of this proposal duly signed and accepted by the Purchaser within 30 days from date hereof.

FINAL AGREEMENT

It is mutually agreed that this proposal supercedes all previous proposals or agreements, whether verbal or written, made between the parties hereto, concerning the subject matter hereof; that this proposal and the acceptance thereof is deemed to be executed at Orange, in the County of Franklin, Commonwealth of Massachusetts, and shall be construed according to the laws of Massachusetts, the place where said contract is made; and that this proposal is void unless accepted and returned on or before

Respectfully submitted,

The foregoing proposal is accepted by the undersigned according to these terms this

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of 192

By Purchaser

RODNEY HUNT MACHINE COMPANY

By

C. C. Harris Treas.

hereby agree that the materials

and equipments herein specified to be furnished by RODNEY HUNT MACHINE COMPANY to
shall be and remain the personal property of said RODNEY HUNT MACHINE COMPANY, and that the
same shall be free from any and all claims by mortgage or otherwise which I
the future may have against the property of
now have or in

(Name of one having claim or mortgage)