

CRANE

COCHRANE DIVISION
CRANE CO.
KING OF PRUSSIA, PA. 19406

To LATHROP TROTTER CO.
CINCINNATI, OHIO

All contracts are subject to the approval of Cochrane Division-Crane Co., King of Prussia, Pa., and are contingent upon strikes, accidents, fires or other causes unavoidable or beyond their control. All quotations are for immediate acceptance and subject to change without notice.

SUBJECT: SUPERIOR TOWEL & LAUNDRY CO.
S.O. 1696-69

IN REPLY MENTION DESK

ED:MD

5/20/70

Attached is the letter from AquaMatic, Inc. concerning
the operational hesitation.

I hope this will satisfy the customer's concern.

COCHRANE DIVISION-CRANE CO.

Ed. Davis

Enc.

cc: Mr. Hutchison
Mr. McIntire

cc: To All Service Engineers.





AquaMatic INC.

MANUFACTURERS OF VALVES & CONTROLS FOR
WATER CONDITIONING EQUIPMENT

2412 GRANT AVE., ROCKFORD, ILL. 61101 • PHONE AREA CODE 815, 964-9421

May 8, 1970

Crane - Cochrane Division
P.O. Box 191
King of Prussia, Pa. 19406

Attention: Edward W. Davis Subject: Hesitation in
Solomatic Valves

Gentlemen:

All Solomatic valves above 3/4 IPS size are designed to have a hesitation point during both the upstroke and the downstroke.

On the upstroke, hesitation occurs after the auxiliary and drain valves have opened and will continue until sufficient equalization of pressure has occurred to allow the stemplate to be lifted. The length of the hesitation period will vary with the installation and depends on the position out of which it is moving. The longest hesitation usually occurs rising out of #2-Brine position as the imbalance is most extreme here. Should the valve fail to index or hesitate for a very long time, the cause will very probably be an air pocket in the mineral tank.

Hesitation on the downstroke may be so slight as to be only a sudden deceleration in downward motion. The pause and slow seating are necessary to avoid excessive hammer on seating.

There is also a pause at the top of the stroke before starting down. With the 604 and the 305 used with Solenoid type indexers, this pause is necessary and must be a minimum of 15 seconds to allow for variations in water pressure and other conditions which will affect the index speed.



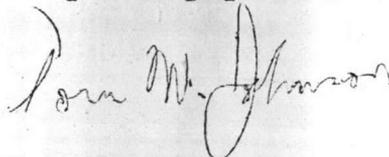
Adjustment of the contacts on the cycle timer will vary this time but care must be taken to insure that the Solomatic is never allowed to start down before it has completed its upstroke. To do so would damage the mechanism and render the valve inoperable.

If the 305 valve is used with motorized valve indexers, the pause at the top of the stroke is regulated by the time it takes the indexer to close after receiving the closing impulse from the limit switch on the 305.

Even in side-by-side installations, there is sufficient difference in hydraulic conditions to create a variance in operating characteristics of the valves which renders it impossible to give you any relevant pressure vs. indexing time data.

If we can be of further service, please let us know.

Very truly yours,



Tom W. Johnson
Chief Engineer

TWJ:sp

