

# PRODUCT SPECIFICATIONS

## TM-7 – Mounted Valve Exerciser

General		Yes	No	Specify
Capacity	Operates all valves 4" (100mm) and larger	X		
Speed	Standard Duty: 6-68 RPM (27 RPM at recommended flow) Heavy Duty: 4-62 RPM (25 RPM at recommended flow)	X		
Torque	Standard Duty: 0-1,500 ft. lbs. fully isolated within equipment's design Heavy Duty: 0-2,500 ft. lbs. fully isolated within equipment's design	X		
Supply Requirements	Standard Duty: 2-20 GPM @ 2,000 PSI (8 GPM recommended) Heavy Duty: 2-30 GPM @ 2,000 PSI (12 GPM recommended)	X		
Finish	White, two part powder on carbon steel components	X		

Dexterity		Yes	No	Specify
Range	Complete head coverage within reach over 180 degrees of motion when used in conjunction with swivel deck mount (Standard Duty only)			Optional
Reach	21 inches from frame to center of head; 27 inches maximum.	X		
Alignment	Swivel output allows up to 15 degrees of valve stem misalignment	X		
Valve Key	Included valve key operates standard AWWA 2" nuts to a depth of 6', rated for 2,500 ft. lbs of torque. Longer, shorter and low clearance keys are available as options.	X		

Operation		Yes	No	Specify
Valve Machine Intelligent Automation	Wachs valve exercisers utilize industry exclusive "no assumption" automation technology to safely and effectively turn valves using AWWA recommended procedures. This technology protects the operators by keeping "hands off" the machine while exercising the valve and protects the valve by not assuming size, direction or current position. Allowing the machine to follow the path of least resistance, the programming and sensors automatically stop the rotation and reverse in half turn increments as to flush calcification from valve gate. This automation always exercises valve at the minimum torque required to turn, then automatically lowers preset threshold once rotation begins so impact at end of valve travel is soft as possible.	X		
HC-100	Ruggedized Controller/Datalogger to operate and collect data (including GPS) during the operation of ERV-750, TM7 and TM-6 machine (includes PDA style PC, 12v vehicle charger kit, AC charging kit, USB sync cable, machine control cable, screen protector & preloaded with Vitals Mobile software). Submeter GPS options available.			Optional

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Operator Safety	No operator support or interaction required during valve exercise, all reaction torque and feedback is absorbed through machine only. This combined with automated control allow the operator to start the exercise then get out of any environmental conditions which might pose a hazard. When combined with optional wireless control tether (#79-419-00), allow operator to monitor and control the exerciser up to 25' away for increased safety.	X		
Wireless Control Tether	Wireless adapter for valve machines provides a secure Bluetooth connection between machine and controller to function either wirelessly to a range of 25' or tethered through the existing control cable.			Optional
Data Management	Fully compatible with either VITALS or infraMap with VITALS software packages which enable full data logging and synchronization between the handheld and your desktop. Allows importing of existing data labels and categories with user defined fields.	X		

<b>Mechanical</b>		Yes	No	Specify
Position Locks	Reach of the exerciser slide is locked in place through the use of a single, over center cam. When using the swivel mount, radial position is infinitely lockable throughout the range of motion via twin mechanical clamps.	X		
Materials of Construction	Frame - A500 steel structural square tube, 3" x .188 wall Exerciser Slide - Cast aluminum alloy Reservoir - 1/8" (10 Ga) cold rolled steel	X		
Torque Measurement	A single pressure transducer combined with an calibration script, samples system pressure in both directions prior to beginning an exercise for precise feedback every exercise.	X		
Drive	Single Hydraulic motor with spur gear offset drive reduction allowing for pass through of drive key to keep operating head at a consistent and convenient working height.	X		

<b>Power Supply</b>		Yes	No	Specify
Hydraulic Reservoir	10 gallon reservoir with auxiliary hydraulic control circuit for operating other tools, with switchover control.	X		
Heat Exchanger	Air over fluid heat exchanger with temperature controlled electric fan provides up to 10,000 BTU/hour heat dissipation capacity.			Optional
Gas Engine	Standard Duty: 16 H.P Briggs & Stratton Vanguard V-Twin Engine Hydraulic Power Supply Heavy Duty: 20 H.P Kohler Command V-Twin Engine Hydraulic Power Supply			Optional