



Compact VMS

Valve Maintenance Skid System

| Valve Exercising Equipment | | Yes | No | Specify |
|--|--|-----|----|---------|
| ERV-750 Patents: #9,523,443 #9,188,240 #9,038,667 #8,025,078 | An articulating arm, automated valve operator, utilizing proprietary intelligent automation (VITALS) to control torque, direction, and turns. Dual arms (one telescoping) provide 13' [3.9 m] reach over 270 degrees of freedom while automatic hydraulic disk brakes safely secure equipment in any position during operations up to 750 ft/lbs [1016 Nm] of torque. Constructed of 3" [76 mm] square steel tube. Powder coated for long life. A lightweight, telescoping valve key is also provided. | X | | |
| Valve Machine Intelligent Automation (VITALS) Patent: #5,937,373 | Wachs valve exercisers utilize proprietary "no assumption" automation technology to safely and effectively turn valves using AWWA recommended procedures. This technology protects the operators by keeping their "hands off" the machine while exercising the valve and protects the valve by not assuming size, direction, or current position. Torque is applied until the device senses resistance, causing the programming and sensors to automatically stop the rotation and reverse in half-turn increments to flush calcification from the valve gate. This patented automation process exercises valves at the minimum torque required to turn, then automatically lowers the preset threshold once rotation begins so the impact at end of valve travel is soft as possible. | X | | |
| TC-100 Controller (#79-422-05) | Ruggedized Windows 11 Pro Tablet Controller to operate and collect data for either arm (ERV-750) or slide (TM-6 upgraded & TM-7) style valve exercisers. The TC-110 includes a built-in GPS and bright touch screen display. TC-110 is water resistant and meets IP68 and MIL-STD-810H military specifications. Includes TC-110 tablet controller with battery, stylus and tether, hand strap, AC 120V wall charger, 12V vehicle charger and dedicated control cable assembly. | X | | |
| Data Management | Fully compatible with the VITALS database, infraMap with VITALS, Unity with VITALS, or Sedaru with VITALS GIS software packages enabling full data logging and synchronization between the handheld and your ArcGIS database. Allows importing/exporting of existing data labels and categories with user-defined fields. | X | | |

| Power Pack | | Yes | No | Specify |
|-------------------------|---|-----|----|-------------|
| Engine | Briggs & Stratton 16 Hp [11.9 kW] gasoline, model 305447 Vanguard 16 HP V-Twin H/S (U14-002-00 Gas). | | | Skid Option |
| | Rehiko 15.4 Hp (11.5 kW), I-2 4-stroke, liquid cooled, IDI diesel engine EPA Tier 4F & EU Stage IIIA emission compliant (U14-002-00 Diesel). | | | |
| Controls | Digital tachometer, engine hour meter, ignition switch and throttle conveniently mounted on service side of equipment. | X | | |
| Hydraulic System | Direct coupled pump rated at 8 GPM [30 LPM] @ 1,800 PSI [124 BAR] continuous duty. 10 gallon [37 L] hydraulic reservoir with thermostatically-controlled fan-cooled heat exchanger. Instrumentation includes an oil level gauge, temperature gauge, pressure gauge, and selector valve switching to an HTMA class II auxiliary hydraulic circuit. | X | | |

| Skid | | Yes | No | Specify |
|---------------|---|-----|----|---------|
| Frame | 3" Structural steel main frame with integrated 8" fork slot tubes | X | | |
| Finish | Entire fabricated skid is solvent washed and phosphoric etched. All seams are caulked then a two part urethane paint (color black) applied. | X | | |