

SECTION 17050

TOOLS, SUPPLIES AND SPARE PARTS - GENERAL

PART 1 -- GENERAL

1.01 THE REQUIREMENT

- A. The Contractor shall provide tools, supplies, and spare parts as specified herein for the operation and maintenance of the Control and Information System.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01300 – Submittals
- B. Section 17000 – Control and Information System Scope and General Requirements

PART 2 -- PRODUCTS

2.01 TOOLS

- A. Provide special tools, other than those normally found in an electronic technician's tool box, required to test, diagnose, calibrate, install, wire, connect, disconnect, assemble and disassemble any digital equipment, instrument, panel, rack, cabinet or console mounted equipment for service and maintenance. This shall include, but not be limited to, the following: connector pin insertion and removal tools, wire crimping tools, special wrenches, special instrument calibrators, indicator lamp insertion and removal tools, etc.
- B. Provide tools and test equipment together with items such as instruction manuals, carrying/storage cases, unit battery charger where applicable, special tools, calibration fixtures, cord extenders, patch cords and test leads, which are not specified but are necessary for checking field operation of equipment supplied under this Division.

2.02 SUPPLIES

- A. The Contractor shall provide supplies as specifically required in other Sections of Division 17.

2.03 SPARE PARTS

- A. Provide spare parts for items of control and instrumentation equipment as recommended by the manufacturer and in accordance with the Contract Documents.

- B. Furnish all spares in moisture-proof boxes designed to provide ample protection for their contents. Label all boxes to clearly identify contents and purpose.
- C. The Contractor shall replace all spare parts consumed during installation, testing, start-up, the system availability demonstration, and the guarantee period.
- D. Refer to individual digital hardware and instrument sections for additional requirements specific to those devices.
- E. The Contractor shall provide the following specific spare parts items:
 - 1. One (1) set of calibration solution for each analytical instrument furnished under this contract, including but not limited to Section 17801 and 17802 instruments.
 - 2. One (1) spare analytical controller/display unit. Controller/display unit shall be model SC4500 as manufactured by Hach.
 - 3. One (1) silt density index sensor and controller of the make and model furnished under Section 17870.
 - 4. Five (5) of each type of fuse.

PART 3 -- EXECUTION

(NOT USED)

- END OF SECTION -