With the rapid development of industrial technology, automation systems are important for providing safe, quality, fast and competitive of product manufacturing. Programmable Logic Controller (PLC) is preferred by industrial automation systems due to its features such as process speed, quality and reliability, small physical size and easy installation. As PLC systems develop, SCADA systems are began to use in a wide area. Industrial plants can be monitored and controlled remotely and using SCADA systems with PLC. In this study, prototype and implementation of SCADA based mortar mixing automation system with PLC was carried out. The system was controlled by S7-200 PLC and WinTr SCADA interface. All parameters can be entered, monitored and controlled by means of SCADA interface. In the system, mortar admixture were comprised of sand, aggregate, gravel and water. Each material was located in separate hoppers. When material values for mixture were entered, hoppers cover was opened respectively. The amount of entered value and weighed value were compared and when their values were equal, hopper covers closed thanks to weight sensors located at the bottom of the hoppers. Materials were transferred to mixing hopper by means of band system after sand, aggregate and gravel were added. Then, water was pumped from the water hopper to the mixing hopper and all materials were mixed by mixer.