



# Unibrazed EM-12K

**Classification:**

EM-12K per AWS A5.17 SFA 5.17.

**Description:**

**Unibrazed EM-12K** submerged arc wire is a medium manganese and silicon wire developed for general purpose welding of low and medium carbon steels usable with either an active or neutral flux. It is primarily use for single pass butt and fillet welds on mild and low alloy steel plates up to ½” in thickness.

**Characteristics:**

**Unibrazed EM-12K** contains high levels of carbon, manganese and silicon. The increased carbon content gives the wire a higher tensile strength while the manganese and silicon content improves the deoxidation properties. Unibrazed EM-12K produces weld deposits with minimal porosity even when rust and mill scale are present on the base metal.

**Applications:**

**Unibrazed EM-12K** applications include structural steels, medium strength pressure vessels, ship, barge or offshore oil rig fabrication.

**Typical Deposit Composition:**

	<i>Percent</i>
<b>C</b>	<b>.05 - .15</b>
<b>Mn</b>	<b>.80 – 1.25</b>
<b>Si</b>	<b>.35 - .75</b>
<b>P</b>	<b>.025 max</b>
<b>S</b>	<b>.025 max</b>
<b>Ti</b>	<b>.03 - .17</b>

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.