

ASTM sets new standard to restrict lead use in Galvanizing

Standards organization the American Society for Testing and Materials (**ASTM**) has introduced a standard limiting the amount of lead used in the production of hot-dip Galvanized steel, in response to demand from industry players.

The revision to the **ASTM A653/A653M** standard, approved in July, states that the bath metal used in continuous hot-dip Galvanizing shall contain not less than 99% zinc, with a lead level not exceeding 0.009%.

"Subcommittee A05.11 has been requested to add language to this specification that specifies a maximum lead content in the molten bath metal," an **ASTM** technical manager said in an e-mailed statement. "The proposed maximum lead level of 0.009% by far meets existing RoHS legislation (0.1% maximum) and is well below the level where it can begin to cause spangle growth (~0.03%). Also, the revision includes a reference to B852, Continuous Galvanizing Grade Alloys and B6, Zinc. B852 specifies grades of zinc that will more than meet this restriction." RoHS or restriction of hazardous substances is a set of directives adopted in February 2003 by the European Union.

Galvanizing sources said this is the **first time** that the **ASTM** has imposed a maximum limit in its standards on the amount of lead used in the production of Galvanized Steel.

Galvanized steel producers in the Middle East have in recent months indicated that their markets have been impacted by imports of Pre-painted Galv sheet which has contained high lead paint levels.

Some Galv steel manufacturers add excessive amounts of lead to the zinc bath to obtain larger and brighter spangles, while disregarding resultant negative effects on Galv sheet performance, these producers said.

Introduction of the new standard is "a **100% positive step** for committed industries and for the environment," said **UNICOIL**, a major Galv Steel producer in Saudi Arabia, which said its production was already compliant with the new **ASTM** standard.