

HMS 1&2 Specifications

Heavy melting steel (**HMS**) or heavy melting scrap, is a designation for recyclable steel and wrought iron. It is broken up into two major categories: HMS 1 and HMS 2. The difference between the two is HMS 1 does not contain galvanized and blackened steel, whereas HMS 2 does. The Institute of Scrap Recycling Industries breaks up the categories further:^[1]

- **ISRI 200** (HMS 1): Wrought iron and/or steel scrap $\frac{1}{4}$ inch and larger in thickness. All pieces must be smaller than 60x24 in.
- **ISRI 201** (HMS 1): Same as ISRI 200 except pieces must be smaller than 36x18 in.
- **ISRI 202** (HMS 1): Same as ISRI 200 except pieces must be smaller than 60x18 in.
- **ISRI 203** (HMS 2): Wrought iron and/or steel scrap, black and galvanized, $\frac{1}{8}$ inch and larger in thickness.
- **ISRI 204** (HMS 2): Same as ISRI 203 except pieces must be smaller than 36x18 in.
- **ISRI 205** (HMS 2): Same as ISRI 204 except it may contain automotive scrap except for thin gauge material.
- **ISRI 206** (HMS 2): Same as ISRI 205 except pieces must be smaller than 60x18 in.

HMS stands for heavy melting scrap, and 1 & 2 are the two grades within that definition. Both HMS 1 & 2 comprise obsolete scrap only. That is iron and steel recovered from items demolished or dismantled at the end of their life.

Because both grades guarantee a minimum piece thickness – at least 1/4inch (6.3mm) for HMS 1, and 1/8in for HMS 2 – consignments have a high density. Both also have defined maximum dimensions (usually 60in x 24in), and will be prepared to facilitate handling and charging to a furnace.

This density, sizing and preparation makes for efficient furnace operation by minimizing the time to charge enough scrap for a full melt. In contrast, thin mixed scrap greatly increases charging time, cutting furnace productivity.