

Medium / Low Carbon FerroManganese



>PRODUCT DATA SHEET

1. Appearance

Lumpy, practically odourless material when dry, with a silvery metallic surface.

2. Effects of the addition of ferromanganese to steel

- Manganese has an important influence on the structure and properties of steel, depending on the amount used and the combined effect with other alloying elements.
- Manganese improves the tensile strength, workability, toughness, hardness and resistance to abrasion.
It also reacts with the remaining sulphur in the steel and thus prevents any tendency of hot shortness.
- By adding the manganese as MC / LC FeMn instead of HC FeMn, approximately 80% to 93 % less carbon is added to the steel.
- As the alloy is delivered in lumpy form, it will give higher Mn yield compared to electrolytic manganese

3. Chemical composition

	% Mn	% C	% Si	% P	% N	% S
GRADE	Range	Max.	Max.	Max.	Max.	Max.
FeMn 80 C15	80-83	1.5	0.6	0.20	0.15*	0.01
FeMn 80 C10	80-83	1.0	0.6	0.20	0.15*	0.01
FeMn 80 C05	80-83	0.5	0.6	0.20	0.15*	0.01

* Nitrogen content can be lowered down to 0.050 % on special request

4. Sizing

- Standard sizing:
 - 20 – 80 mm, maximum 10% undersize
 - 10 – 50 mm, maximum 10% undersize
 - 3 – 25 mm, maximum 5% undersize
- All sizes: maximum 10% oversize.

5. Packing

MC FeMn is usually delivered as bulk. Packing in big bags and other packaging on request.

6. Physical data

- Density : approx. 7.4 g/cm³
- Bulk density : approx. 4 000 kg/m³
- Melting range : 1 230°C – 1 260°C
- Angle of repose : 40° - 60°, dependent on size of material