TABLETS FOR THE PRODUCTION OF DUCTILE IRON USING THE SANDWICH PROCESS

+ Increased melting and treatment flexibility
+ Reduced scrap from dross and pinholes
+ Increased furnace life
+ No chunky-type graphite
+ Lower magnesium fade rate
NODULANT
Tablets for the production of ductile iron using the sandwich process

NODULANT tablets consist of pure magnesium and pure iron, plus calcium to moderate the magnesium reaction. A range of products containing up to 10% magnesium is manufactured, and some also include rare earths. NODULANT tablets contain only low levels of silicon.

Advantages of NODULANT tablets
+ Increased melting flexibility
The low silicon content of NODULANT tablets maximise re-melting returns and simplify silicon control.
+ Increased treatment flexibility
NODULANT tablets allow variations in base sulphur and temperatures without fear of excess silicon. Ductile iron can be produced directly from a high sulphur base iron.
+ Reduced scrap due to dross
NODULANT tablets provide cleaner metal and lower scrap rates due to dross.
+ Reduced scrap due to pinholes
NODULANT tablets contain no aluminium and do not provoke hydrogen pinholes.
+ No chunky-type graphite
NODULANT tablets reduce the tendency to create chunky graphite in heavy sections.
+ Increased furnace life
Melting higher silicon irons decreases refractory attack of acid linings in electric furnaces and increases lining life by up to 50%.

Magnesium recovery using NODULANT tablets
Typical recoveries using NODULANT tablets range from 35 to 45%. In ideal cases recoveries range from 50 to 65%. The recovery strongly depends on ladle geometry and other foundry conditions.

Cover material for NODULANT tablets
Small compact steel punchings or machining chips are recommended.

Inoculation and NODULANT tablets
Inoculation practice is the same as for other common treatment processes.