



## The Process of Production Of FeMn and SiMn in R.Ž “TOPILNICA” JSC Skopje

*E. Kazankov\**

*R. Ž “Topilnica” JSC, 16 Makedonska Brigada 18, Skopje, North Macedonia*

*\*[emil.kazankov@yahoo.com](mailto:emil.kazankov@yahoo.com); [metalexpert353@gmail.com](mailto:metalexpert353@gmail.com)*

R.Ž Topilnica j.s.c-Skopje as production plant consists of 3 basic production units:

- 1) Receiving bunkers and homogenization of ore
- 2) Mini agglomeration (Dellatre Levier / CRESOT-LOIRE) which collects all the fines of ore, slag, coke, fines of ferromanganese and silicomanganese finished product, finesse of the thyssen hole of the furnace cooling systems that collects all the dust, because the stove has a chimney that serves only as a reserve.
- 3) Silicomanganese crushing and sowing machine (finished product)

The agglomeration process takes place on a sinter tape consisting of 2 parts:

-Sintering zone

-Cooling zone

The thickness of the sintering mixture is 460 mm, where the sinter is heated with fuel oil or gas (by-pass).

Sinter capacity can produce up to 1,200 tons / 24 hours a day. This is emphasized, because the mini agglomeration is a collector of all waste raw materials and thus sums up all operating losses, and most importantly and environmentally positively affects the protection of the environment because there is no need to look for a landfill for waste materials.

**Keywords:** silicomanganese, sinter plant, production FeMn, SiMn, waste materials

### **References:**

1. Brochure of R.Ž „Topilnica” j.s.c-Skopje. 1998., Country: Republic of Macedonia.