

Production of Pig Iron at a Smelting Plant

Weighing and feeding technology – the foundation for the highest product quality and process stability



From Ore to Pig Iron

When you're processing, mixing, and homogenizing huge quantities of bulk solids for use in the blast furnace, only weighing technology that remains reliable under the harshest conditions can guarantee repeatable process quality and provide the proper balance of materials.

Process Step 1

Unloading and storage using Schenck Process crane scales and reliable, precise MULTIBELT® belt scales.

Process Step 2

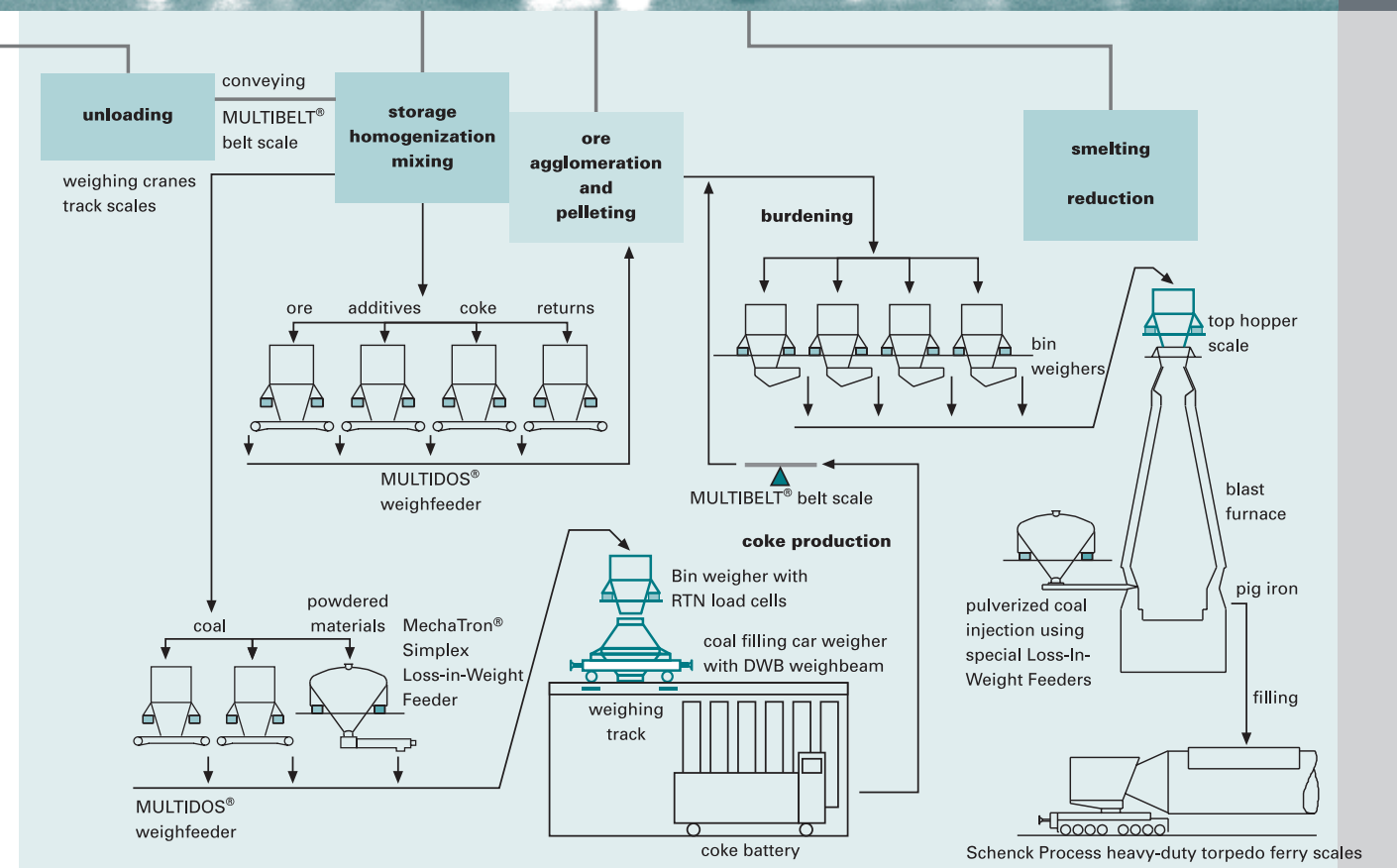
Homogenization and mixing in the stock piles area, agglomeration or pelleting with continuous material flow. Schenck Process MULTIDOS® weighfeeders and Loss-in-Weight Feeder (Simplex or MechaTron®) guarantee stable, precise batching.

Process Step 3

Coal and coke: several Schenck Process weighing systems are used for optimal filling of the coke oven battery, from the coal tower hopper scales to the coal filling car and the associated rail. High-accuracy RTN load cells or the ultra-heavy-duty Schenck Process DWB weighbeams.

Process Step 4

The central unit of the integrated smelting plant reduces the ore to pig iron. Coke is brought in via Schenck Process bin weighers and used as a reduction agent or pulverized coal can be blown in using e.g., a Loss-in-Weight Feeder. Schenck Process application expertise about weighing equipment for blast furnace charging ensures economical and stable burdening. The molten pig iron is filled into torpedo cars and transported to the steel mill. Schenck Process heavy-duty weighing technology using DWB weighbeams also masters this application well.



More about MULTIBELT® on pages 108–109

More about MULTIDOS® on pages 68–73

More about MechaTron® Loss-in-Weight Feeder on pages 20–29

More about crane scales on pages 100–105

More about bin weighing kits on page 120

More about RTN load cells on pages 122–123

More about DWB weighbeams on pages 122–123

More about torpedo scales on pages 62–63

More about MULTIRAIL® train scales on pages 84–91

More about DISOCONT® on pages 126–127

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