

Small introduction on the converters at the
basic oxygen steel plant

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Sample Slide – Agenda / Summary slide

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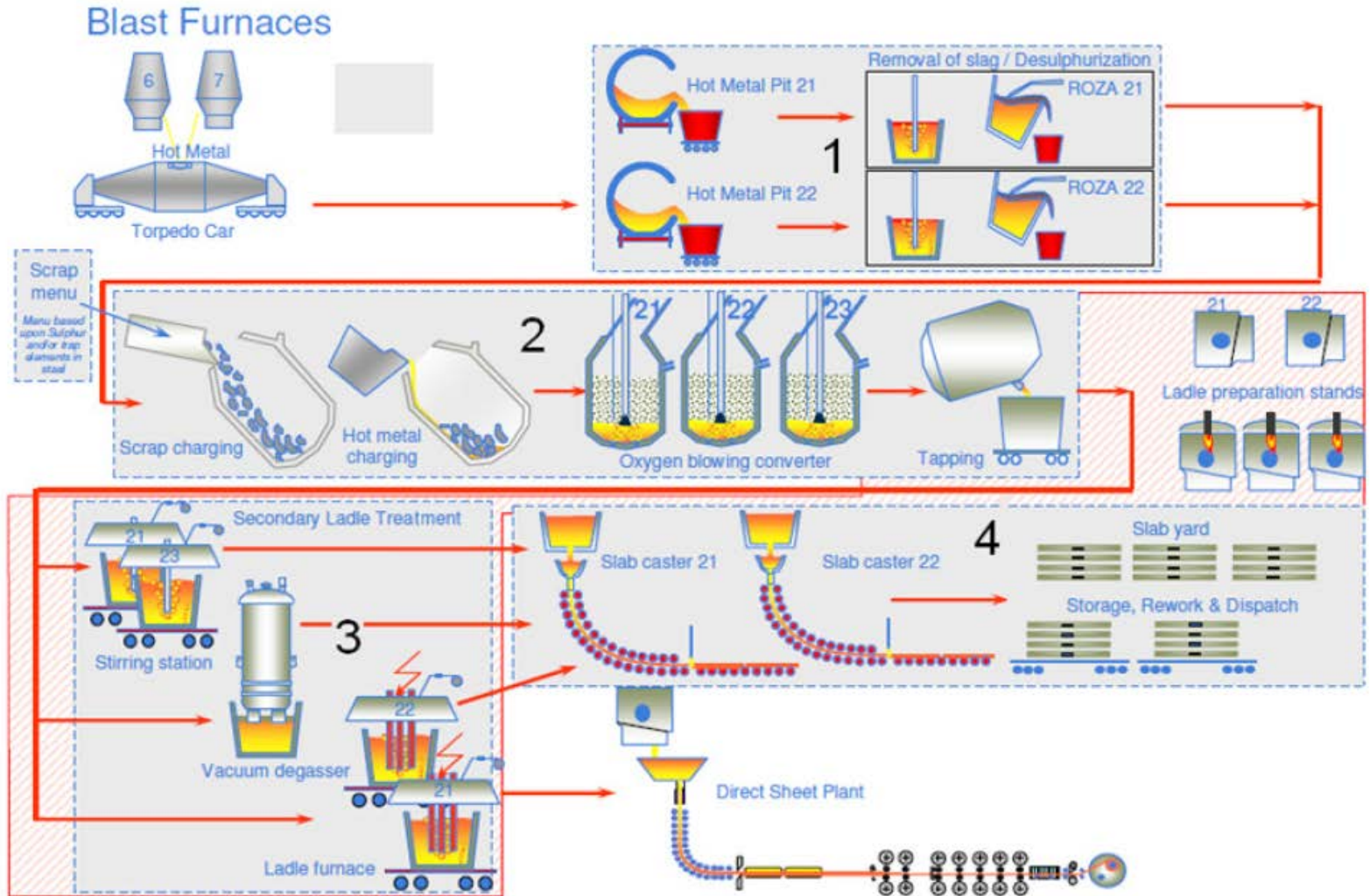
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Case study: How to beat discontinuity?

BOS plant



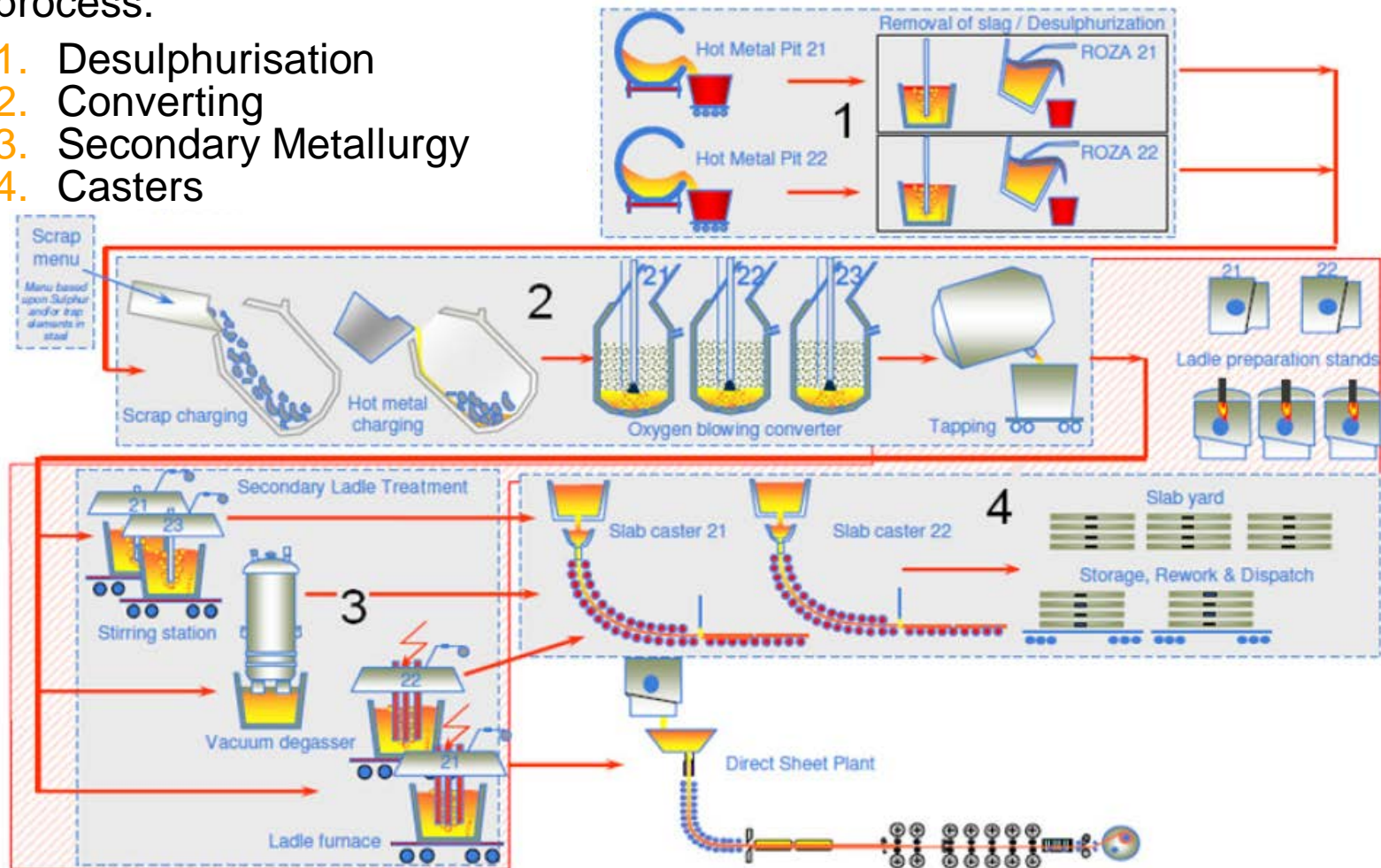
BOS plant



BOS plant

The main steps in steelmaking process:

1. Desulphurisation
2. Converting
3. Secondary Metallurgy
4. Casters



Converters at BOS plant

1a Scrap charging



1b Hot metal charging

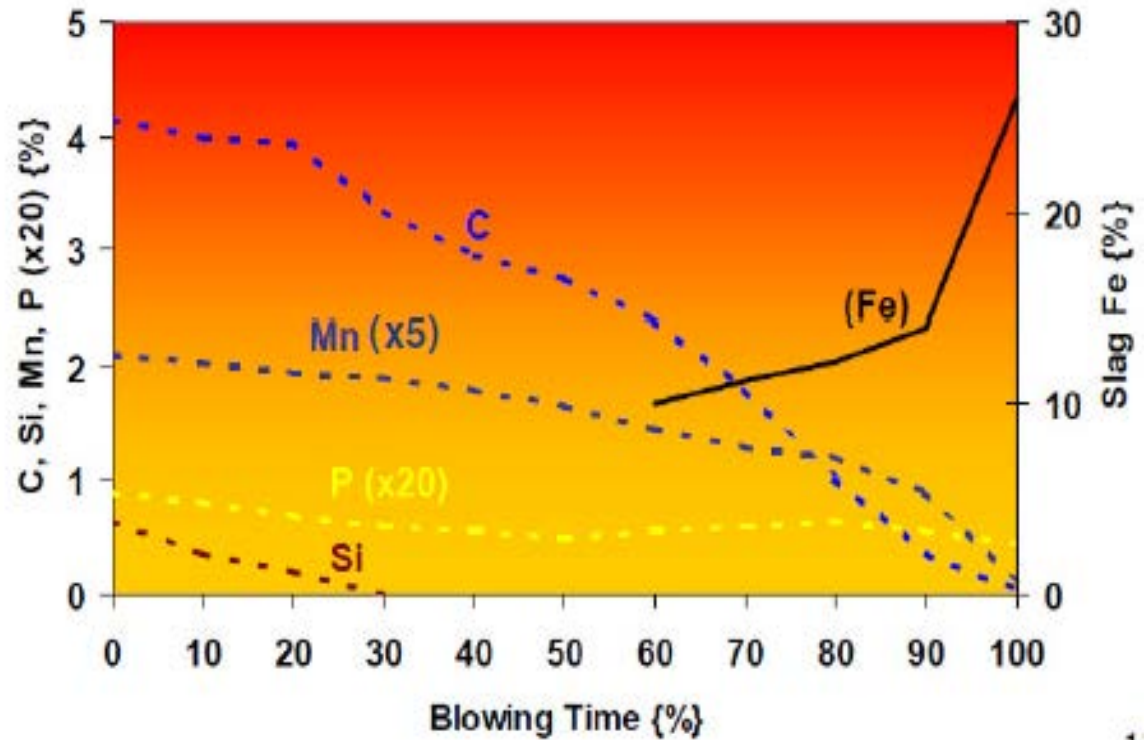
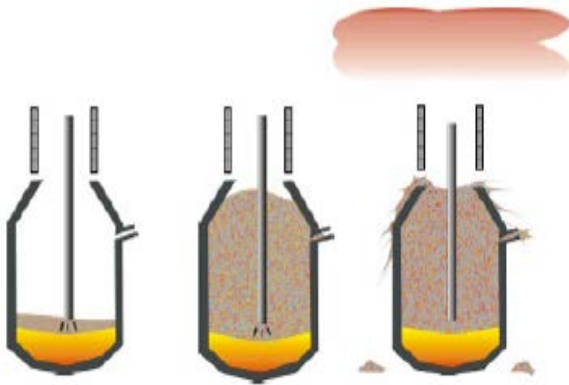


2 Oxygen blowing and addition of pellets and fluxes



Converters at BOS plant

- Process of oxygen blowing



Converters at BOS plant

1a Scrap charging



1b Hot metal charging



2 Oxygen blowing and addition of pellets and fluxes

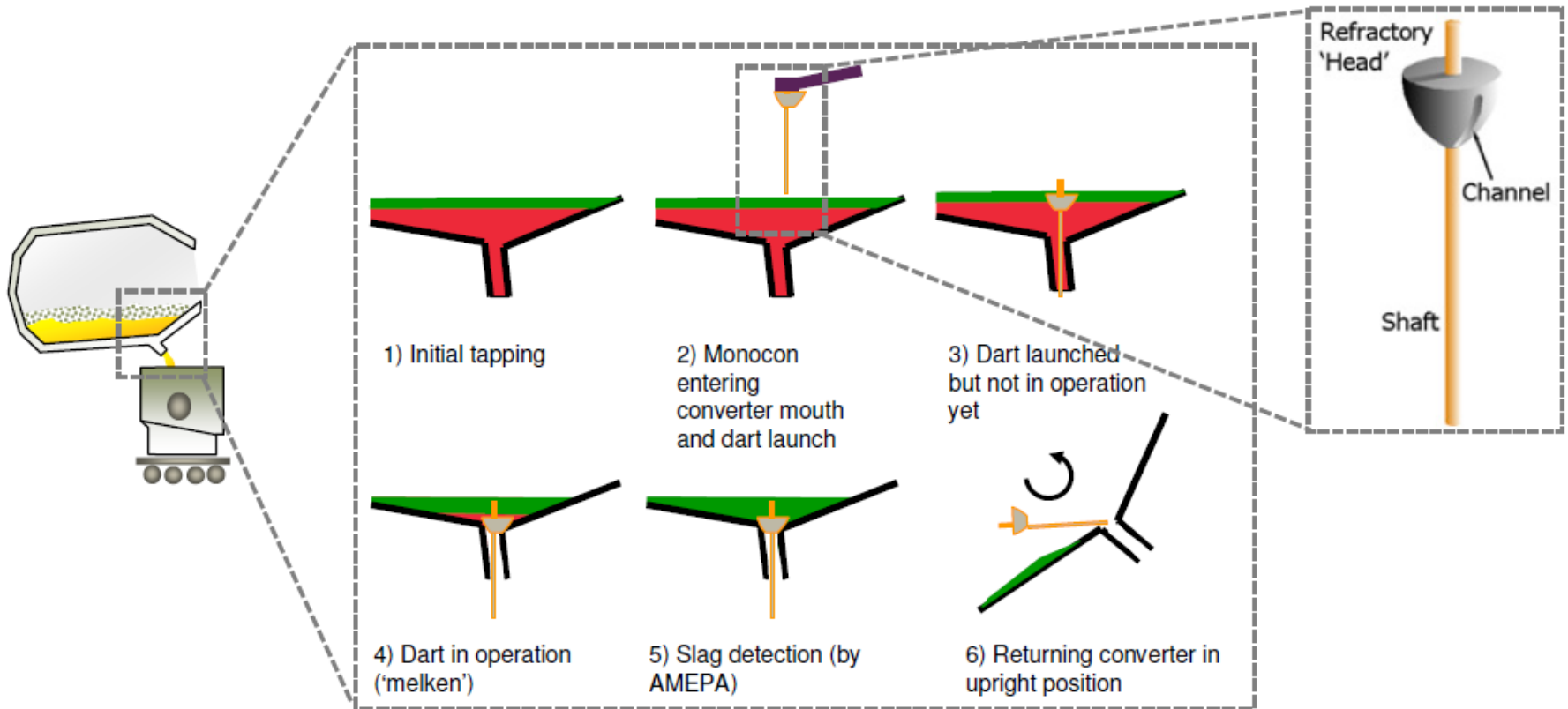


3 Tapping and additives



Converters at BOS plant

- Tapping process



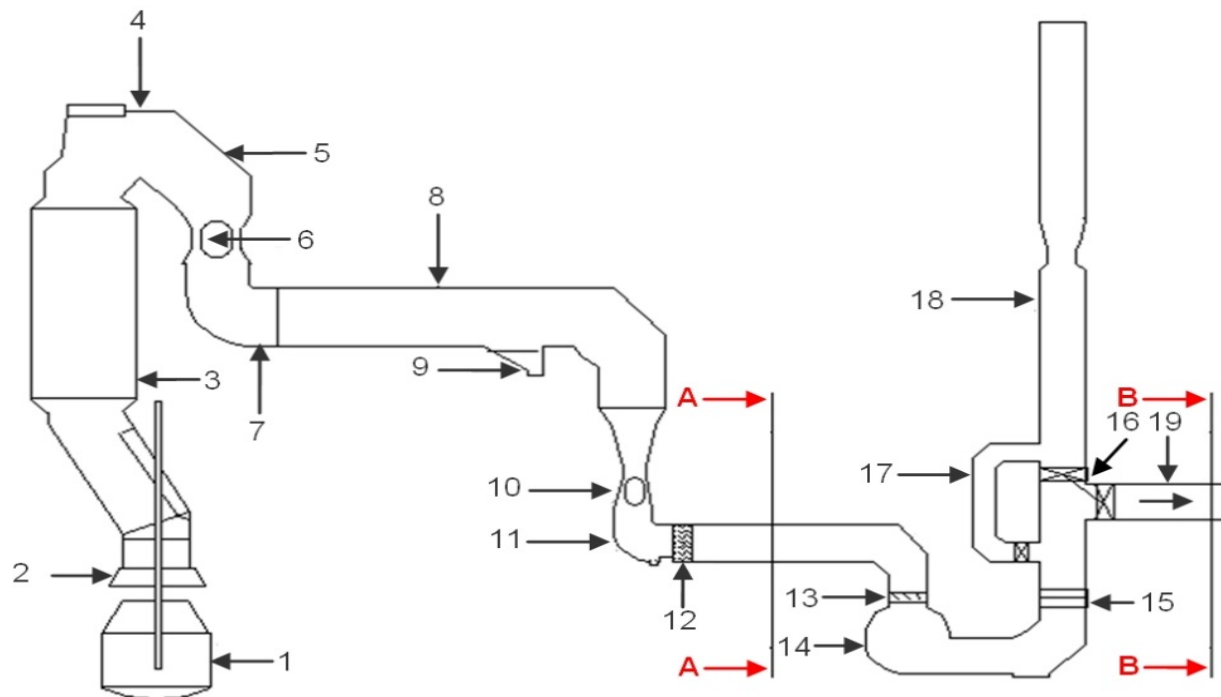
Converters at BOS plant

- Key numbers converters at the BOS plant

Converters	unit	C21/C22	C23
height	m	9.9	10.8
diameter	m	6.5	6.5
Free volume	m ³	268	295
Bath height	m	1.8	1.8
Oxygen blowing speed	Nm ³ /min	~915	~915
Oxygen pressure	bar	8	9
Heat size	tonne	335	335
Blowing time	min	20	18
Cycle time	min	~40	~40

BOS gas cooling

- Converter 23 is different than converter 21 & 22



1 = convertervat
 2 = schort
 3 = schachtketel
 4 = keteltop
 5 = gaskoeler
 6 = vaste venturi
 7 = separatorbocht

8 = oversteekleiding
 9 = slikvanger
 10 = Bischoff-venturi
 11 = separatorbocht
 12 = druppelvanger
 13 = drallklep
 14 = primaire ventilator

15 = geluiddemper
 16 = gasomschakelstation
 17 = omloop
 18 = schoorsteen
 19 = naar gasteruginstallatie

Case study

- Show your creative side
- Make your own assumption, but try to justify them
- You have about an hour, afterwards everybody will present their solution within 5 minutes