

KHOUZESTAN STEEL Co.



Crude Steel Index

Iran 2013 :15.4(MMTon) Ranking 15th (WSA)

Steel Domestic Demand :~ 20MMT/Y

Apparent Steel use PerCapita (2012): 240.4 Kg/P

KSC Production2013-14: 3.5(MMTon)

Employee:7411

Owner :Private Sector

Products: Slab&Billet&Bloom

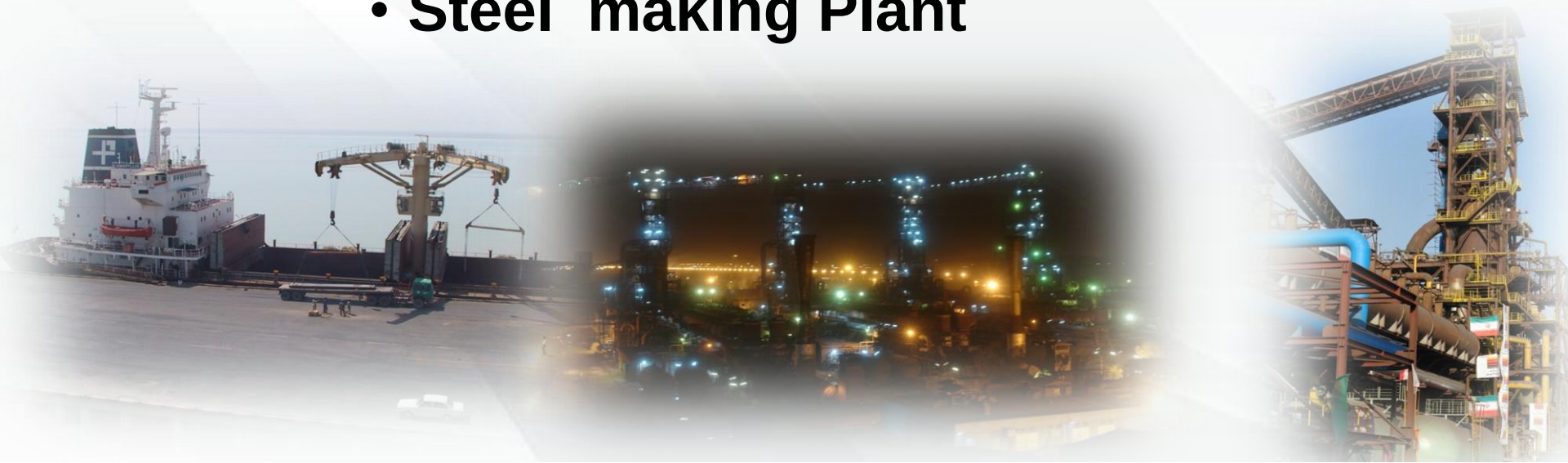
Technology : DIR+EAF

2014-15 Production Plan:3.7 (MMTon)

Capacity Plan: 2016 5 (MMTon)

KSC Main Plants

- Pelletizing Plant
- Direct Reduction Plant
- Steel making Plant



Pelletizing Plant

This section is consist of two Units :

- Material handling
- Two pelletizing plants
 - (Nominal Capacity 5 MT extend to 6 Mt will Reich to 7.2 MT)



Direct Reduction Plant

This section is consist of three Units :

- 3 Midrex modules 1.2 Mt/y --- 2.4 Mt/y
- 2 zam zam modules 1.8 Mt/y

Project - 1 Zam Zam Mega Modules 1.7 Mt/y

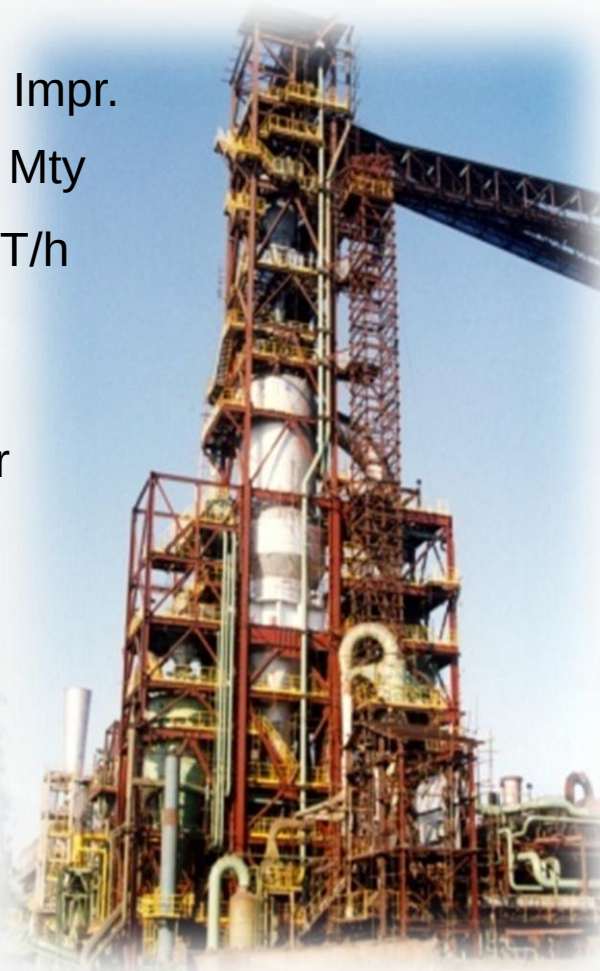


Increasing Capacity of Midrex Modules

	nominal	first improvement	second Impr.
Each M.Capacity :	0.4 Mt/y	0.55 Mty	0.8 Mty
Production Rate :	50 T/h	75T/h	~ 100 T/h

First Improvement: Extending 1 more Bay - Reformer
Changing the Process Gas Compressor
Changing the Air Bundle Tubes
Changing the Stuck Fan

Second Step : Installation Desulfurization
Increasing Operation Experience
Modification on Cooling Scrubber



Steel Making Plant

This unit Produces Slab and Billet's using Sponge– iron (~% 90) and Scrap (~%10) in EAF's (Electric Arc Furnaces)

The main melting and casting facilities are :

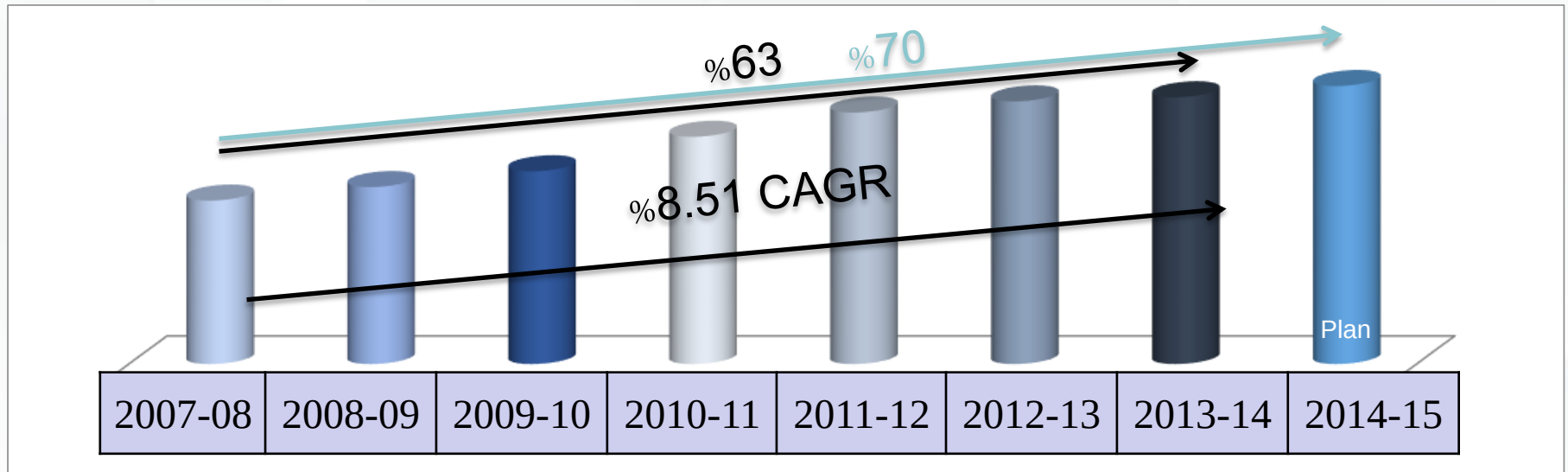
- Six Electric Arc Furnaces.
- Four Ladle Furnaces (LF).
- TWO Slab Casting machines.
- Three Billet & bloom casting machines



KSC - CRUDE STEEL PRODUCTION

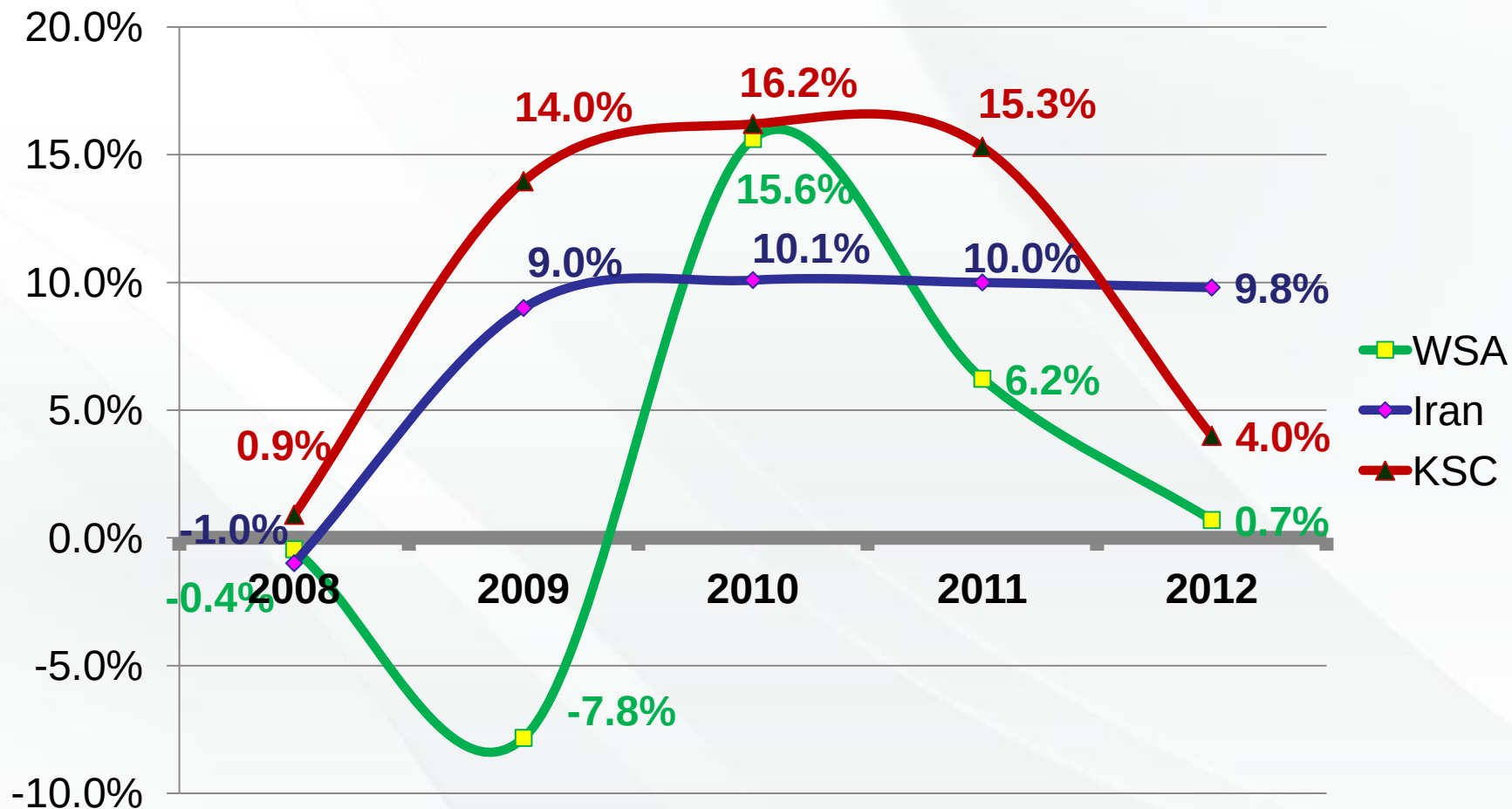
000 tone

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Crude Steel	2175	2355	2565	3024	3347	3495	3551	3700 Plan
% Growth Y.O.Y	----	8	9	18	11	4	1.6	4.2



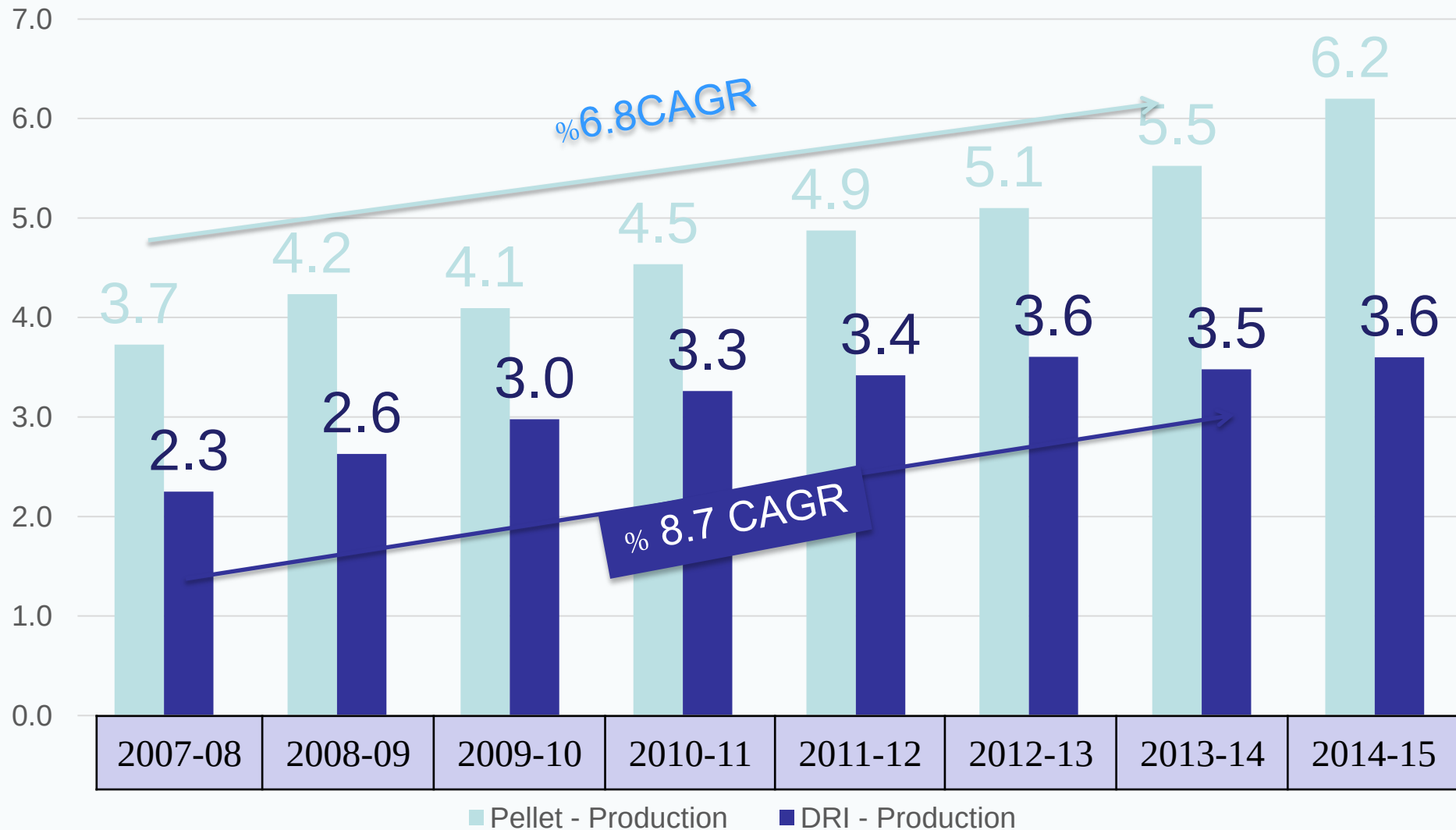
❖ Incrsing more than 1.37 Million Tone Crode Steel

Y-O-Y Growth Rate



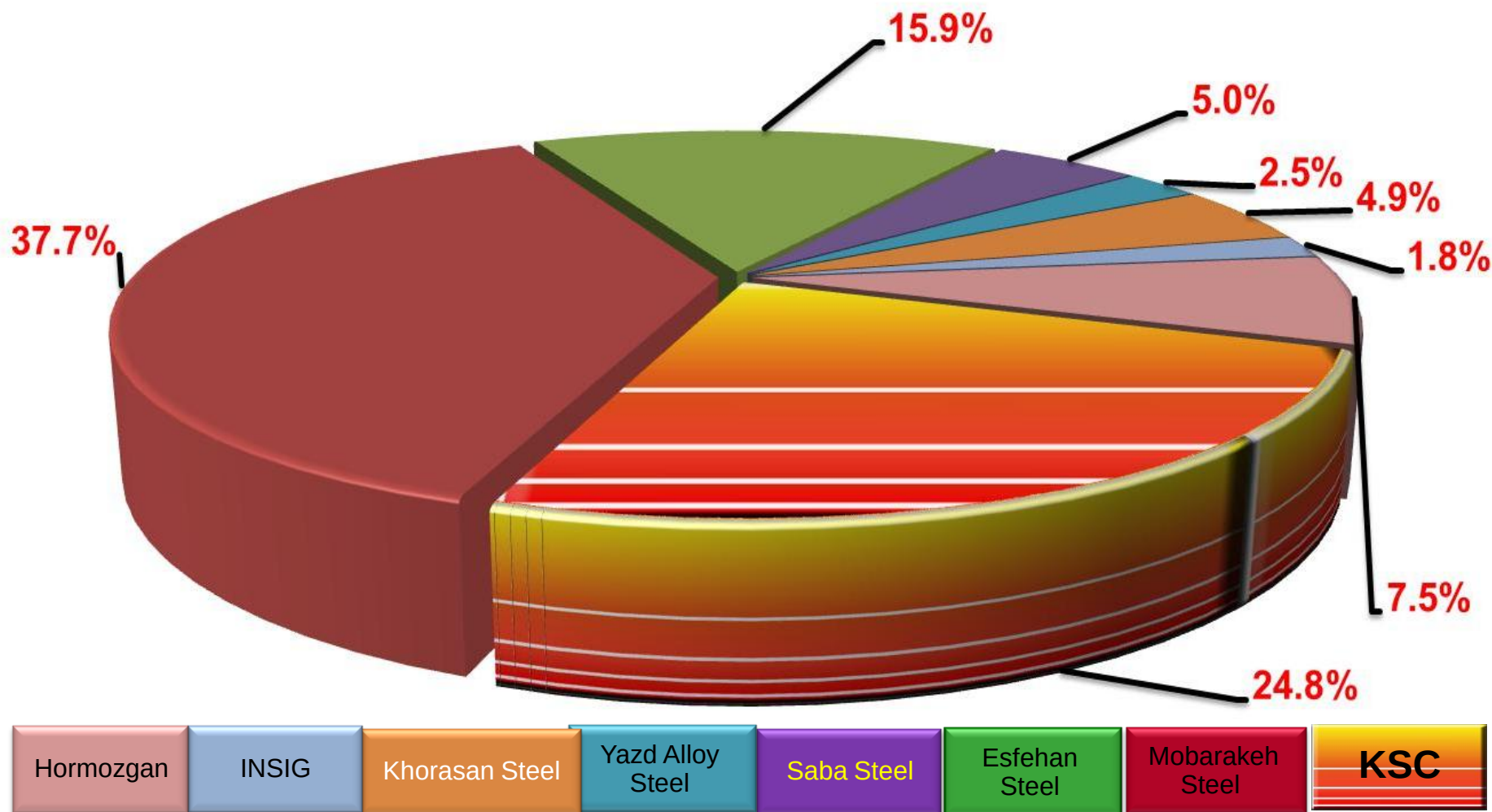
Source : World Steel Association

KSC Pellet & DRI Production

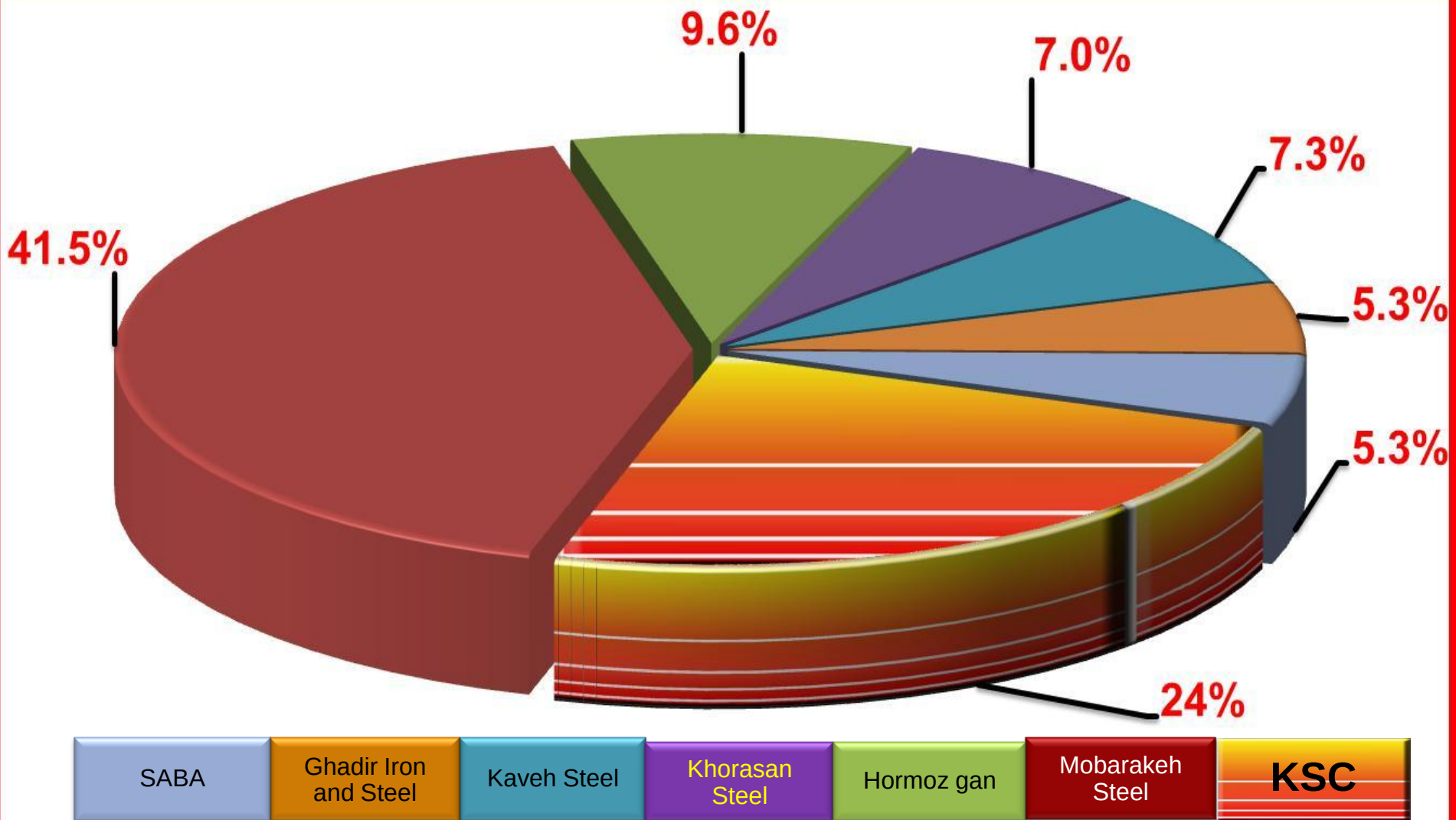


Steel Production Share(2013-2014)

Iranian Calendar



DRI Production Share(2013-2014)



TOTAL PRODUCTION 1989- 22 March. 2014

Production	Title	
72,182,943	Pellet	
30,884,961	Midrex	Zamzam1
4,147,594	HYL	
8,947,688	Zamzam1	
4,344,656	Zamzam2	
48,324,899	Total	
12,795,050	Billet	Crude Steel
10,856,698	Bloom	
20,804,607	Slab	
44,456,355	Total	

KSC Export Markets

England

EUROPE

Germany

Italy

Kuwait

Saudi Arabia

UAE

KSC

Pakistan

India

ASIA

China

Japan

Taiwan

2001-10

Indonesia

AFRICA

Export Clients



SLAB

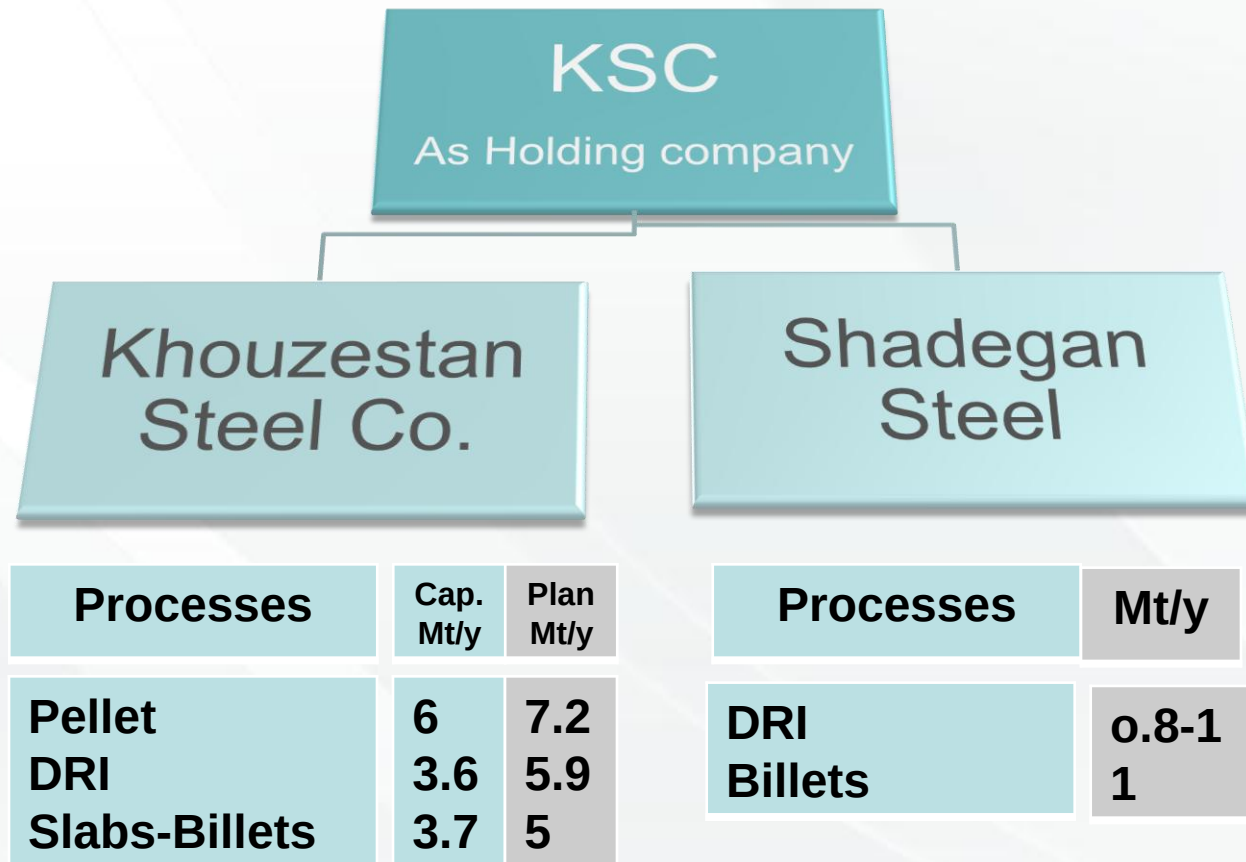
length (mm)	tolerance (mm)	width (mm)	tolerance (mm)	Thickness (mm)	tolerance (mm)
3800-10500	± 100	600-1250	± 10	195 245	± 5

Billet

Nominal length (mm)	Nominal length tolerance (mm)	Nominal thickness (mm)	Nominal thickness tolerance (mm)
8000-12000	± 75	100×100	± 3
8000-12000	± 75	130×130	± 4

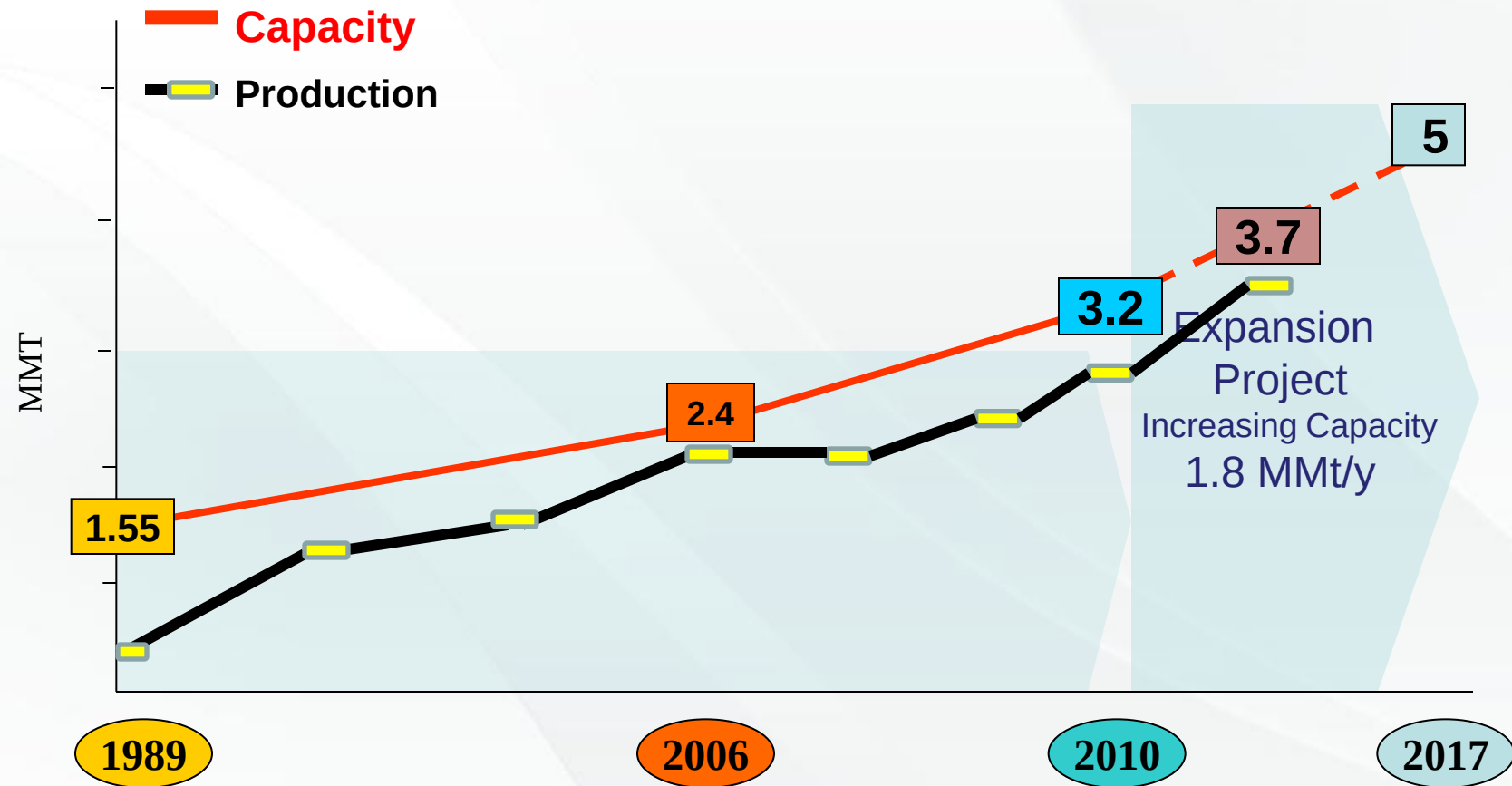
Bloom

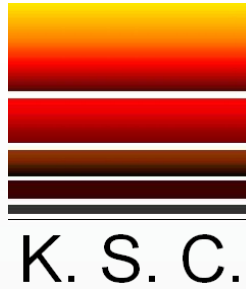
Nominal length (mm)	Nominal length tolerance (mm)	Nominal thickness (mm)	Nominal thickness tolerance (mm)
7000-12000	± 100	150×150	± 5
7000-12000	± 100	200×200	± 5
7000-12000	± 100	260×260	± 5



Trend of Production & Capacity

1989- 2017



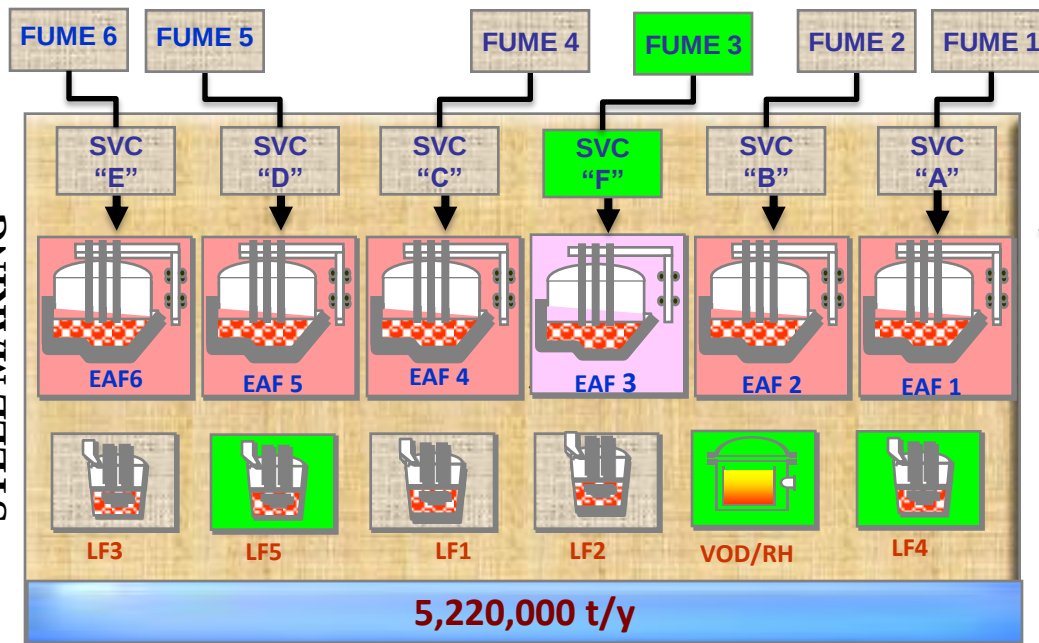


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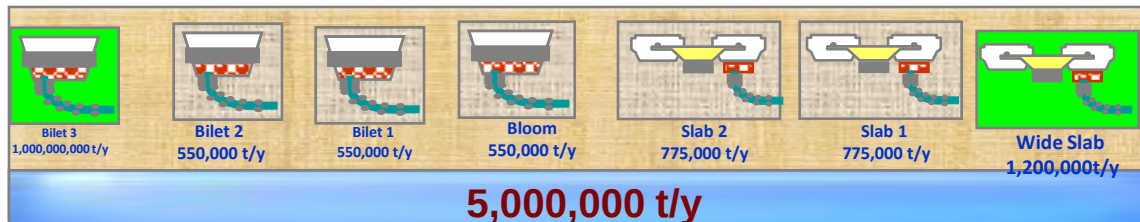
Increasing 1.8 Mt/y Capacity



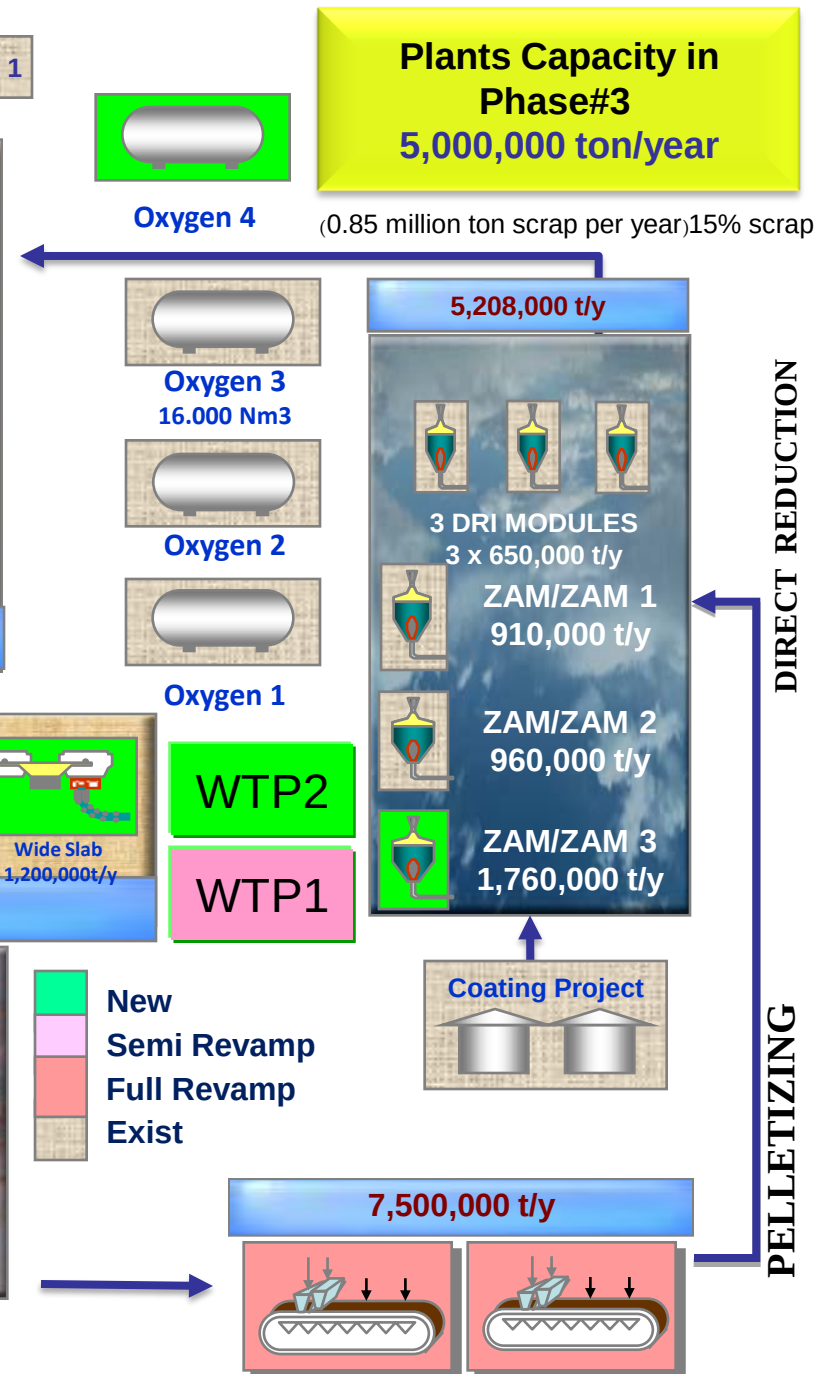
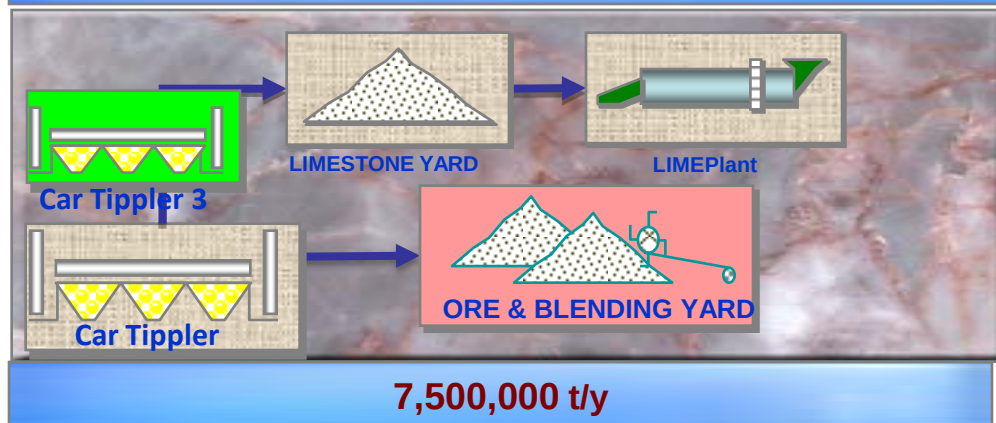
STEEL MAKING



CASTING



STACKING & RECLAIMING



Outline of Expansion Project

Increase in semi-finished products capacity from **3.2 mt/y** to **5 mt/y** by implementing:

- Iron ore handling system capacity enhancement
- Pelletizing plant capacity enhancement
- **New 1.76 mt/y direct reduction plant (ZamZam 3)**
- EAF capacity enhancement
- New billet caster
- New wide slab caster
- New oxygen plant
- New ladle furnace
- New water treatment plant
- Utilities revamp or capacity enhancement

