

SteelMint
Events



STEELVIA

WHAT BIG NEXT

Global Steel Innovations Forum

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Keyvan Jafari Tehrani
CEO & Senior Int'l Market Analyst



Content 1/3

1

Iran Required Capacity in Order to achieve 2025 Vision

2

Iran Steel Value Chain Balance in 2025 Vision

3

Different Scenarios of Iran Steel Export in 2025 Vision

4

Infographic of Iran Steel Exports in 5 months of Persian Year
(21 Mar-22 Aug 2018)

5

Infographic of Steel Production by Major Steel Companies in 5
months of Persian Year (21 Mar-22 Aug 2018)

Content 2/3

6 Impact of US Sanctions on Iran Steel Production & Export

7 ESP (Endless Strip Production) Vs. Conventional Methods

8 WinLink Vs. Conventional Mini Mills

9 Optimization of Cooling Water Processes with the approach of Reducing and Eliminating Water Consumption

10 Automation Level 2 in Iranian DRI Plants

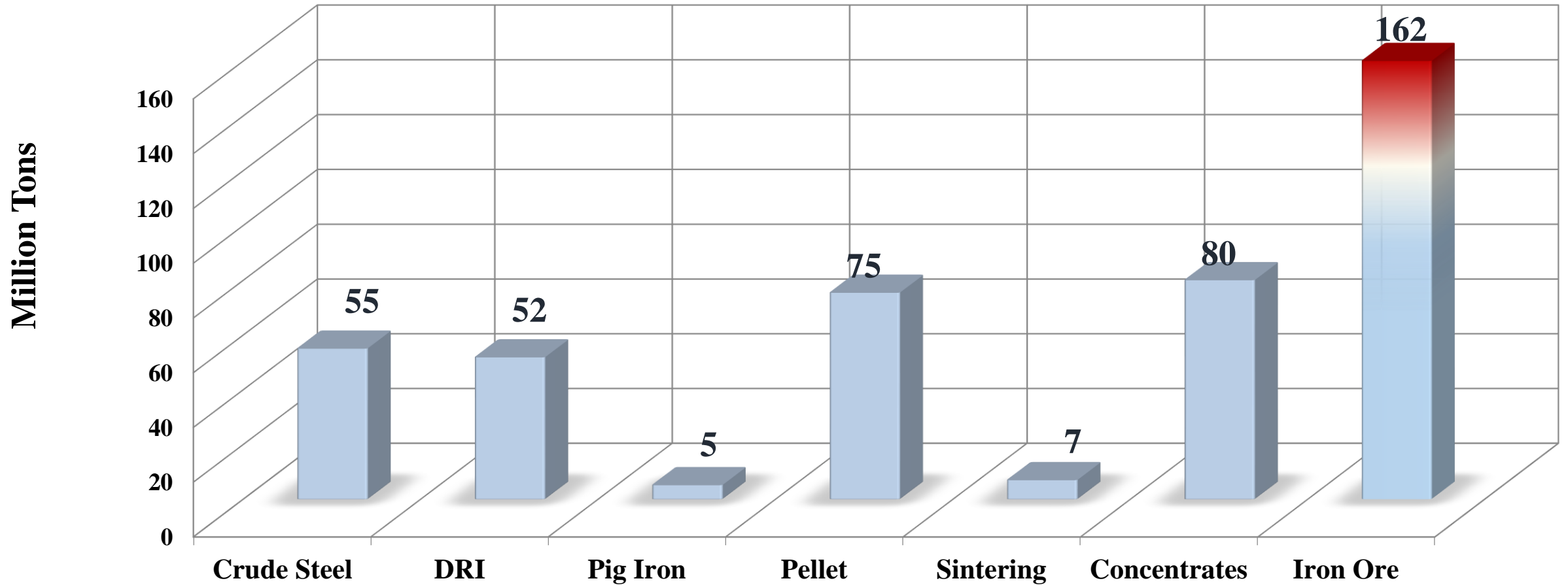
Content 3/3

11 Remote Management and Control of Industrial Plants

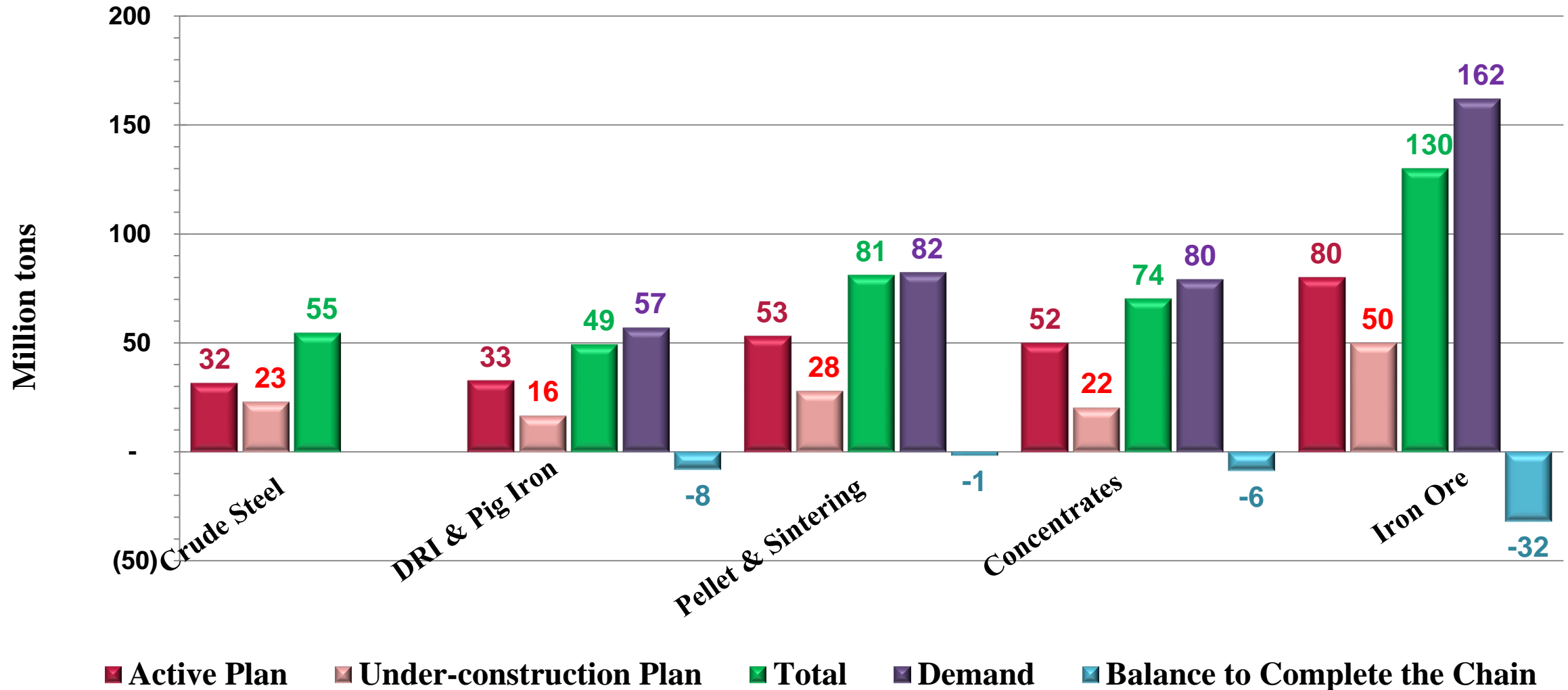
12 Predictive and Proactive Maintenance

13 Conclusion

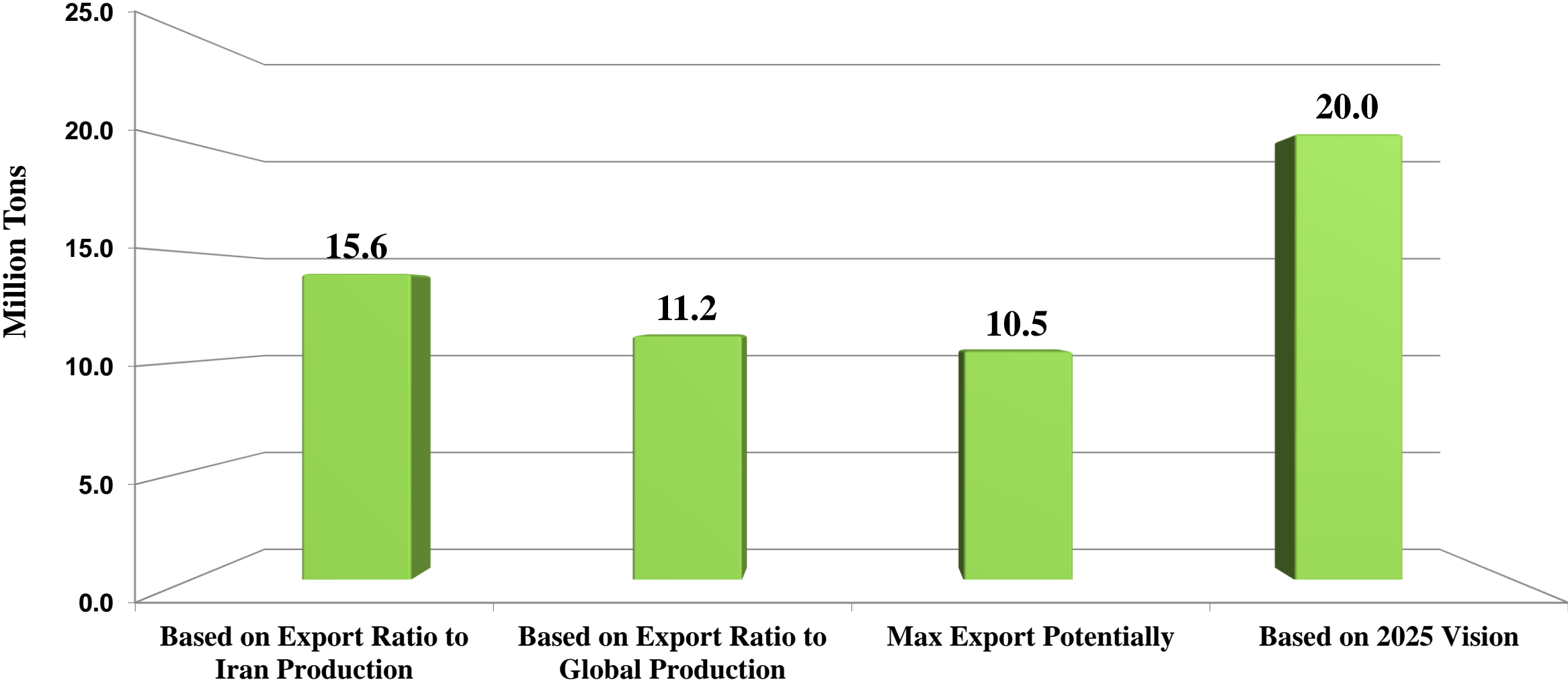
Iran Required Capacity in Order to achieve 2025 Vision



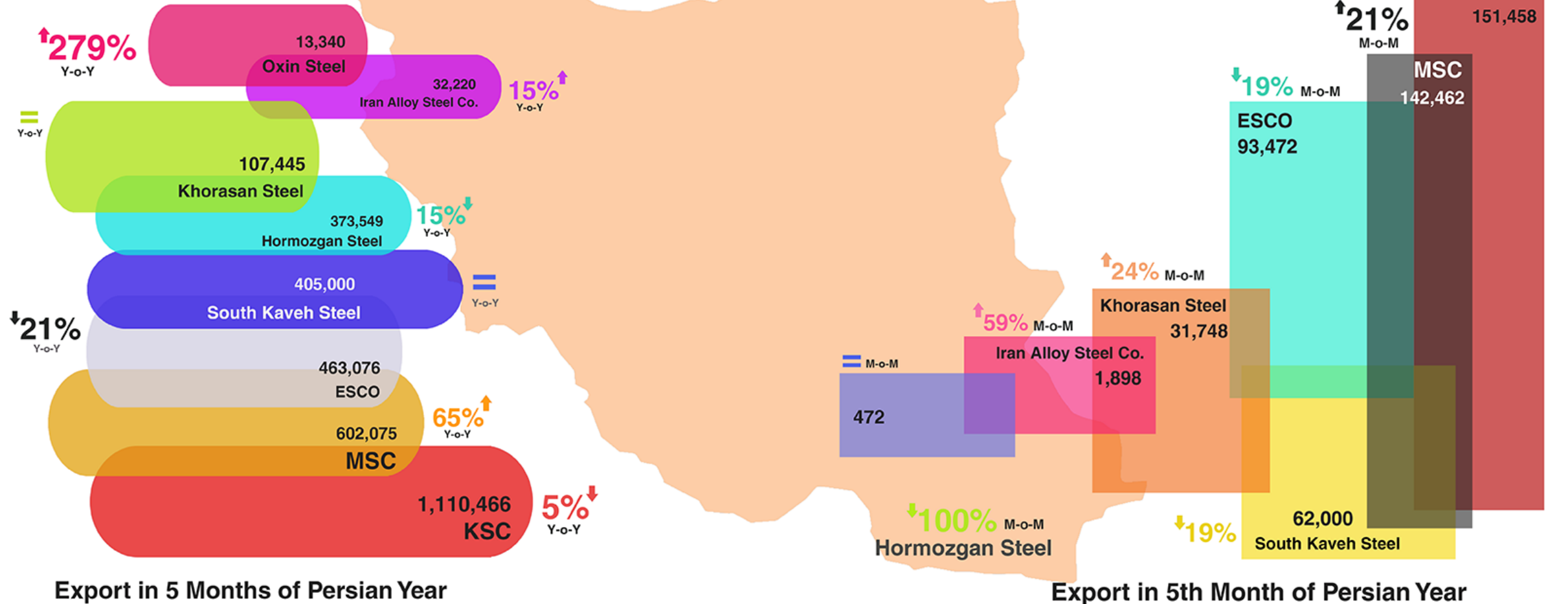
Iran Steel Value Chain Balance in 2025 Vision



Different Scenarios of Iran Steel Export in 2025 Vision



Iran Steel Export in 5 months



Export in 5 Months of Persian Year

Export in 5th Month of Persian Year

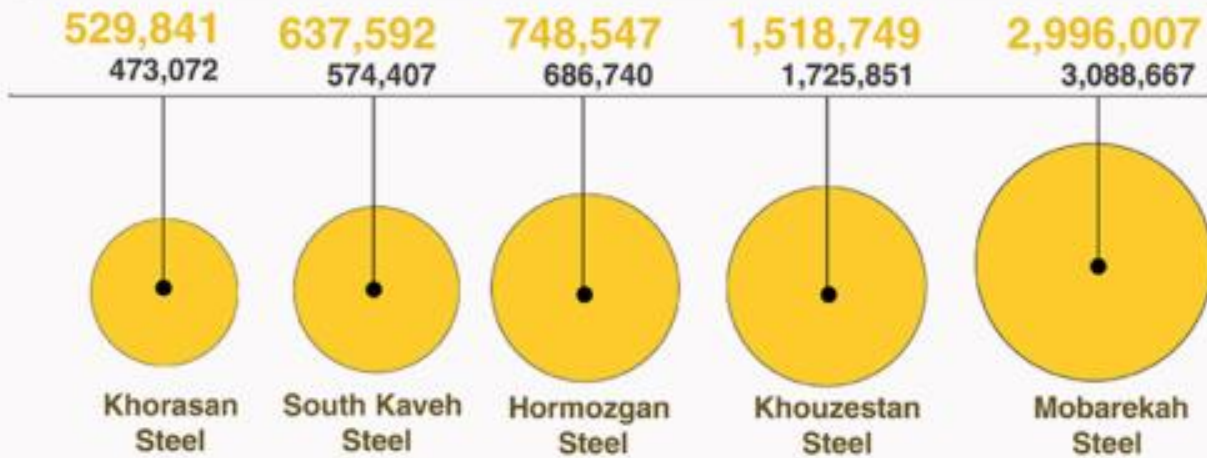
Quantity in Metric Tons

Steel Production by Major Steel Companies in 5 Months of Persian Year (21 Mar-22 Aug'18)

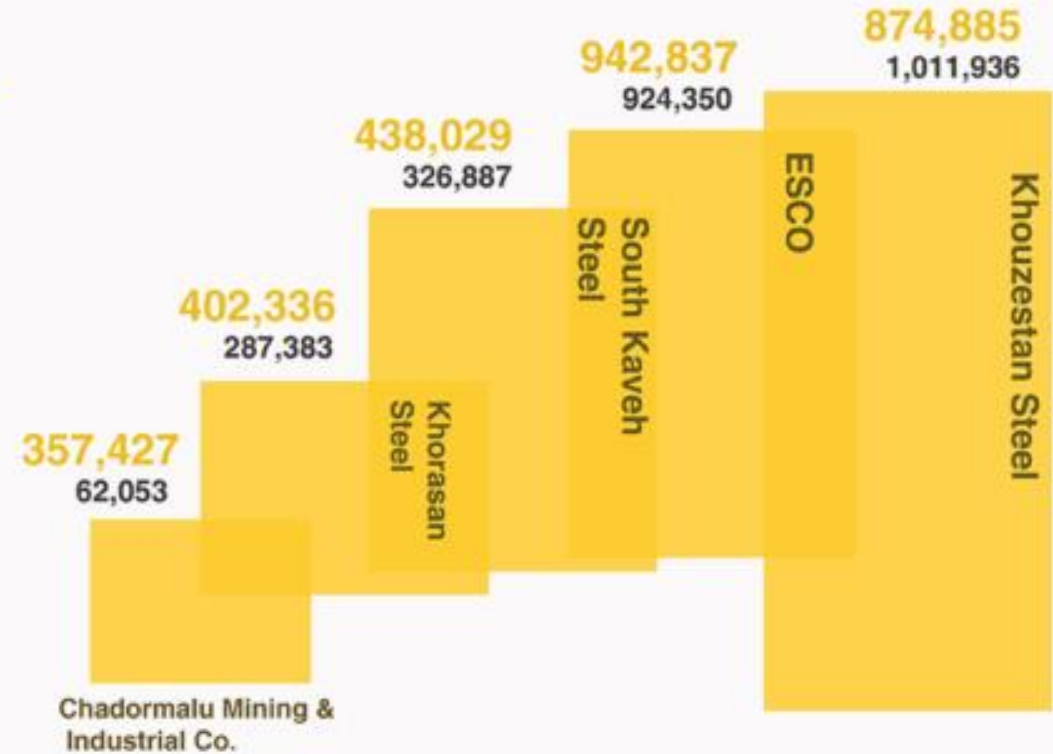
Slab Production



DRI production



Billet and Bloom Production



Current Persian Year ■
Last Persian Year ■

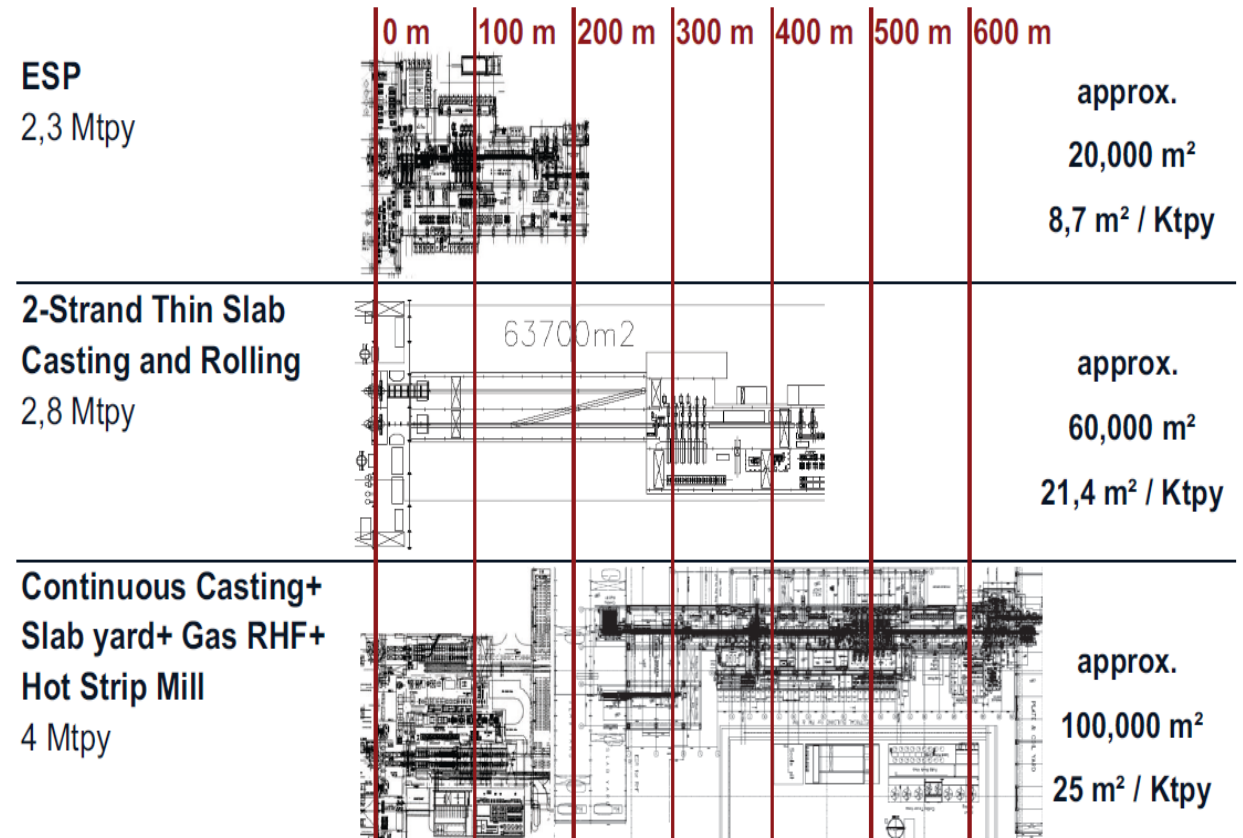
Quantity in MT

Impact of US Sanctions on Iran Steel Production & Export

- ✓ New sanctions have already affected on Iran Steel Export, however Iranian steel mills/traders chasing away new markets by supplying competitive prices.
- ✓ Iran hope during sanctions my have chance to continue with European Firms and enjoy their technologies.
- ✓ Also Iran look after joint cooperation and partnership with both European and Chinese Companies to invest in Iran to build the technical parts to support local steel mills during sanction.
- ✓ The main bottle-neck is increasing the freight rate for bulk vessels from/to Iranian Ports as well as unavailability of containers for export. The 2nd turn of sanctions which to be imposed on 4th Nov., 2018 will become this issue more complicated.

ESP (Endless Strip Production) Vs. Conventional Methods

- Quick and flexible response to market requirement
- Optimized production
- Lower Capex and Opex
- Highest environmental and safety standards
- ESP in Iran: Golgohar Iron & Steel Development Co.



WinLink Vs. Conventional Mini Mills

CAPEX

- Smaller footprint and reduced civil works
- Fewer equipment and lower infrastructure requirements

OPEX

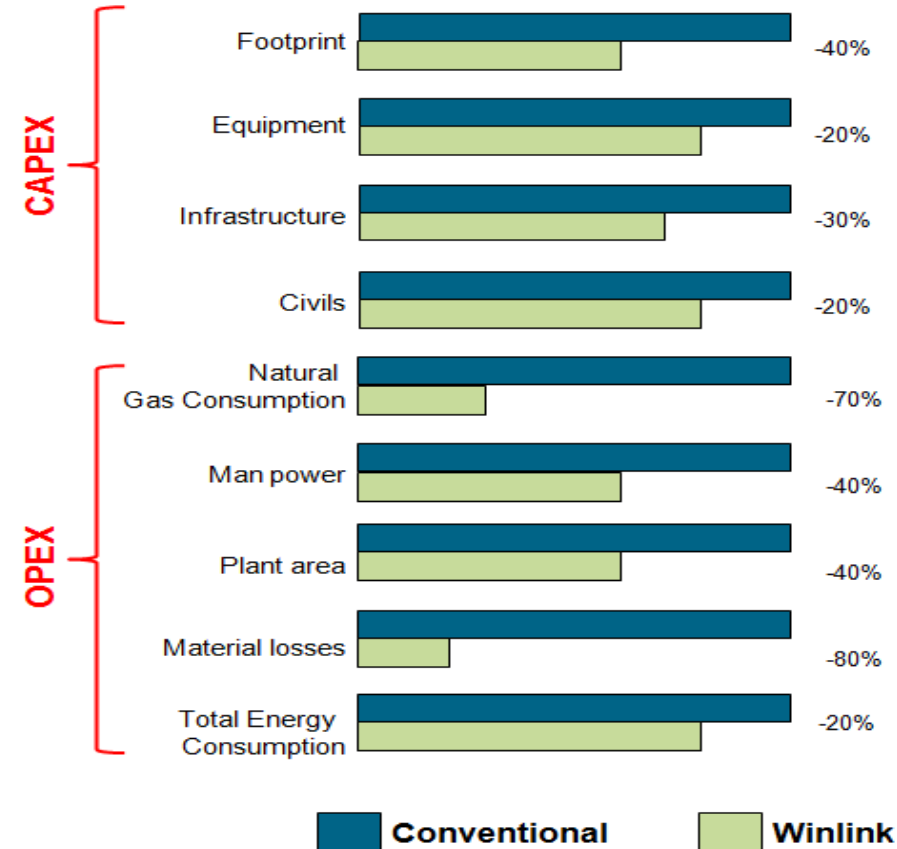
- Lower energy consumption
- Higher yield lower scale formation, no short bars or bar crops
- Lower inventories and working capital
- Fewer operating personnel

Environmental

- Energy savings
- Lower emissions of carbon dioxide and smaller water consumption
- lower usage of land

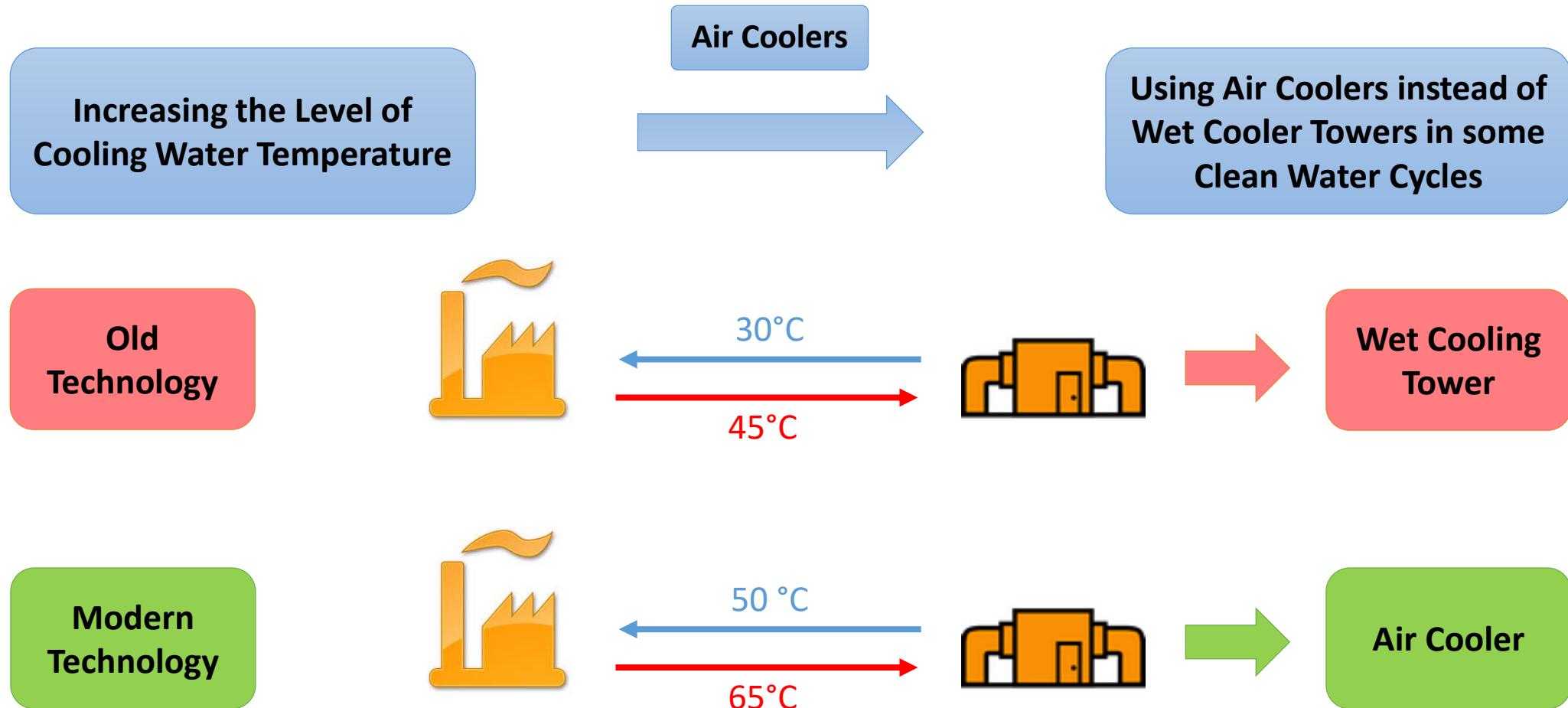
WinLink in Iran

- South Rouhina Steel Complex



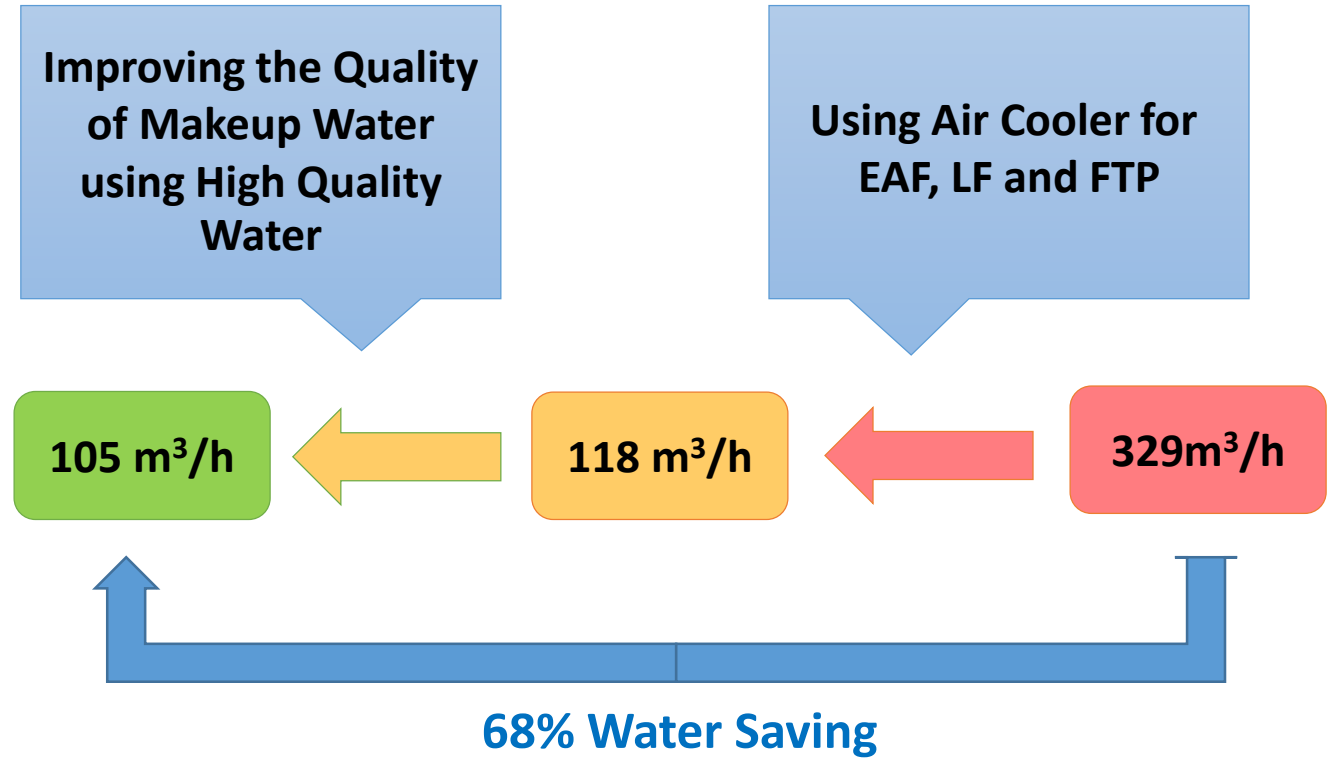
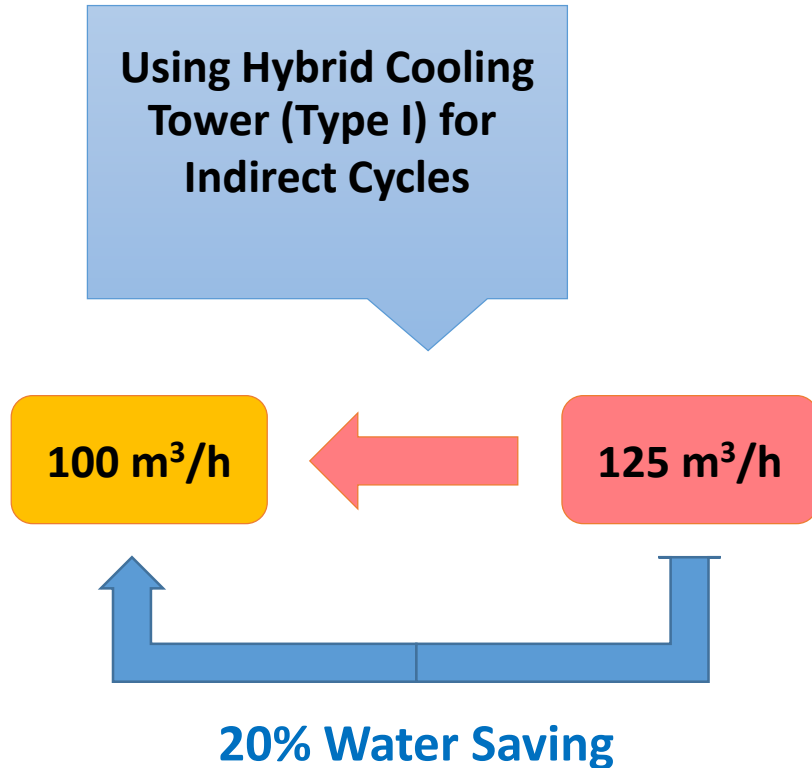
	Billet Size (mm)	Rebar Capacity (ktpy) of a single rolling line	Plant Length
WinLink 55	Sq 130 or 140	Up to 380	220 m
WinLink 70	Sq 150 or 160	380 to 500	250 m
WinLink 85	200 × 150	500 to 600	260 m

Optimization of Cooling Water Processes with the approach of Reducing & Eliminating Water Consumption



Project Type: Foolad Mobarakeh 5th Casting Machine
Project Capacity: 2,000,000 tons per year
Required Water Using Technology: 125 m³/h

Project Type: Neyriz Steel Making Using EAF
Project Capacity: 800,000 tons per year
Required Water Using Common Technology: 329 m³/h



1800KW Increased in Power Consumption

4 Million Euro Increased in Investment

In this Project, due to Environmental Conditions, using Hybrid Cooling Towers was not possible

Automation Level 2 in Iranian DRI Plants

Increase Efficiency

Decrease Energy Consumption

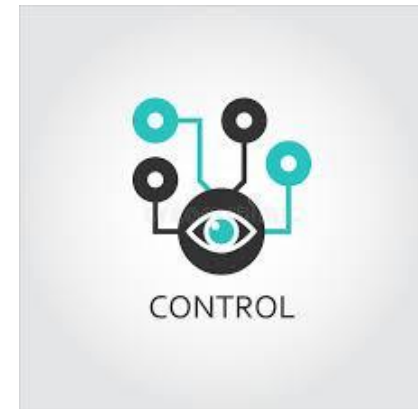


Reducing Shutdown Times

Environmental Protection

Fooladtechnic as a leader in industrial automation and especially in Iron and Steel Industry and in parallel but independent to the worldwide companies, is now working on the same above scenario in 2 Direct Reduction Iron (DRI) Plants in Iran and has been tested the simulated plant in different conditions with good results by using Artificial Intelligence (AI) and Neural Networks (NN) Methods.

Remote Management and Control of Industrial Management



Fooladtechnic has developed such a remote management system by using networks with security on multiple levels in a several industrial plants in Iran.

Predictive and Proactive Maintenance



Commissioning



PREDICTIVE
MAINTENANCE



Powered by Fooladtechnic Co.

Conclusion

- As per “ Iranian Steel Comprehensive Plan”, Iran plans to increase the crude steel capacity to 55 Mts by 2025 Vision .
- Performing of “Iran Steel Comprehensive Plan” is desire of all Iranian government & private sectors and it’s their ideal. Nothing may postpone it even imposing the new unfair sanctions.
- Iran has plan to invest more in mining section such as exploration, extraction, beneficiation and concentration to compensate the shortage of iron ore in Vision 2025.
- Iran have 2 Big Steel Hub Projects under construction in South of Iran in Bandar Abbas-Persian Gulf Free Zone, and in Makran-Chabahar Free Zone. The capacity of each project is 10 Million Tons. These projects are located beside the shore and can enjoy for importing of raw materials and exporting steel products as well as enjoying for competitive gas price and iron ore availability.



IRAN MAAD KOUSH PELLET PLANT

Iran-Hormozgan-Bandar Abbas

Thank You

www.kjtehrani.com/en
Email: info@jtc-ltd.com
Cell#: +98-9121013369

