Libyan Iron & Steel Co. LISCO

LISCO Direct Reduction Plant (DRI) & Steel Melt Shop (SMS) Project

Introduction

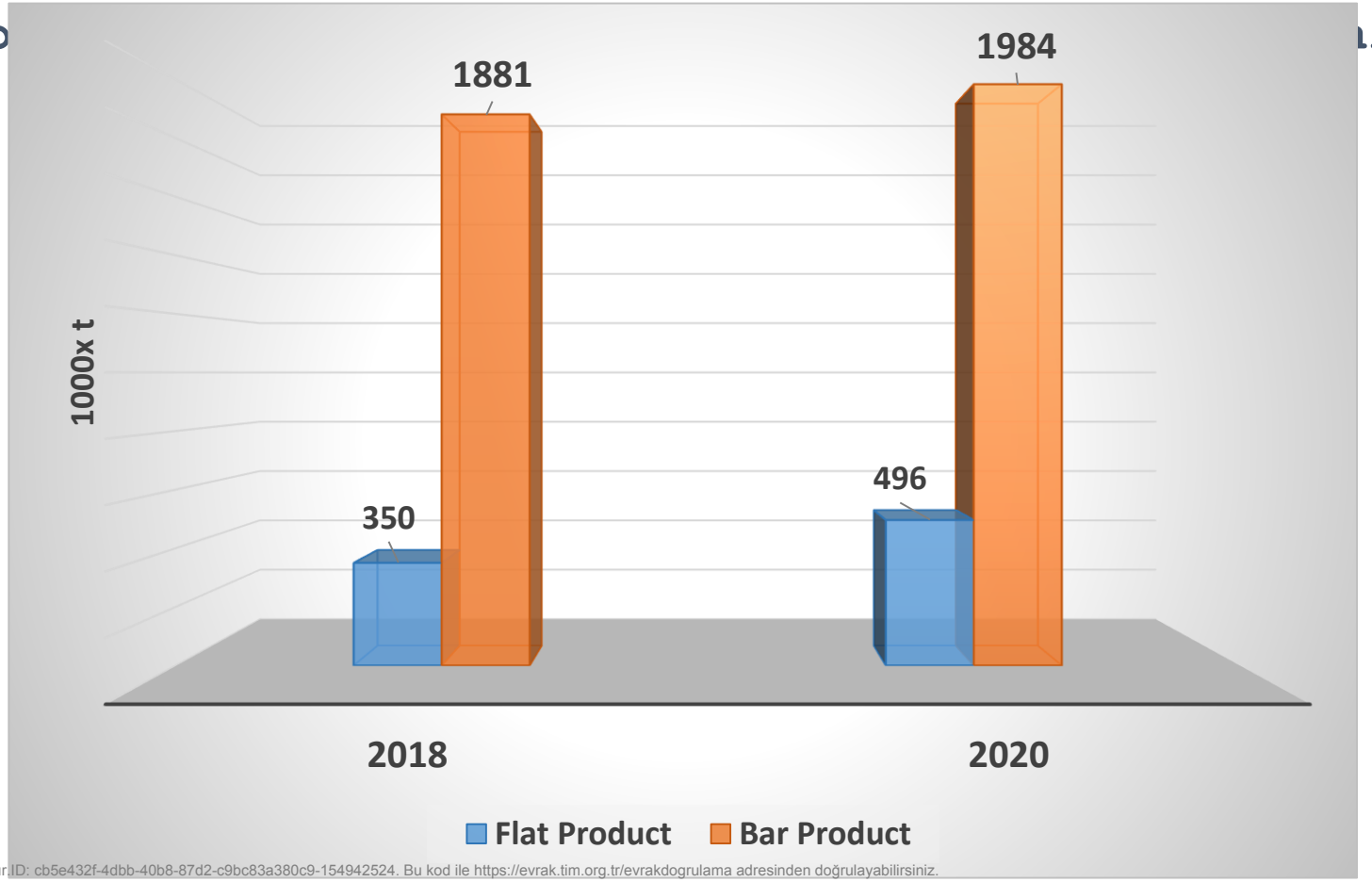
- Due to increasing domestic & regional demand on steel products LISCO has launched a Master Plan in 2008 to raise design capacity of its plants from 1.3 mpy to 4 mtpy of liquid steel in 2 phases . In November 2018 New Bar Mill 2 started commercial operation with a design capacity of 800000 tpy of rebars .
- To meet the additional raw materials demand of the new Bar Mill 2 .LISCO is considering a new integrated plant project comprising Direct Reduction & Steel Melt Shop Plant and its utilities & services which will supply the new bar mill 2 with the required tonnage of raw materials (billets & blooms) .
- This report briefly describes the DR-SMS Project main features.
- LISCO is in the process of calling for tender for the DR/SMS Project

The Main Objectives of the DRI-SMS Project

- Meet raw materials (Billets & Blooms) demand of the new Bar Mill 2.
- Meet raw materials (sponge iron) of new & existing steel melt shops .
- Export the surplus DR production , billets & blooms to earn valuable foreign currency

Libyan Market Steel Demand

- Due to increasing domestic & regional demand for steel products ,LISCO s new bar mill 2 entered commercial operation in November 2018 which will cover most of the demotic demand .
- The figure b…rket up to year 2020.



DRI-SMS Project Main Technical Features

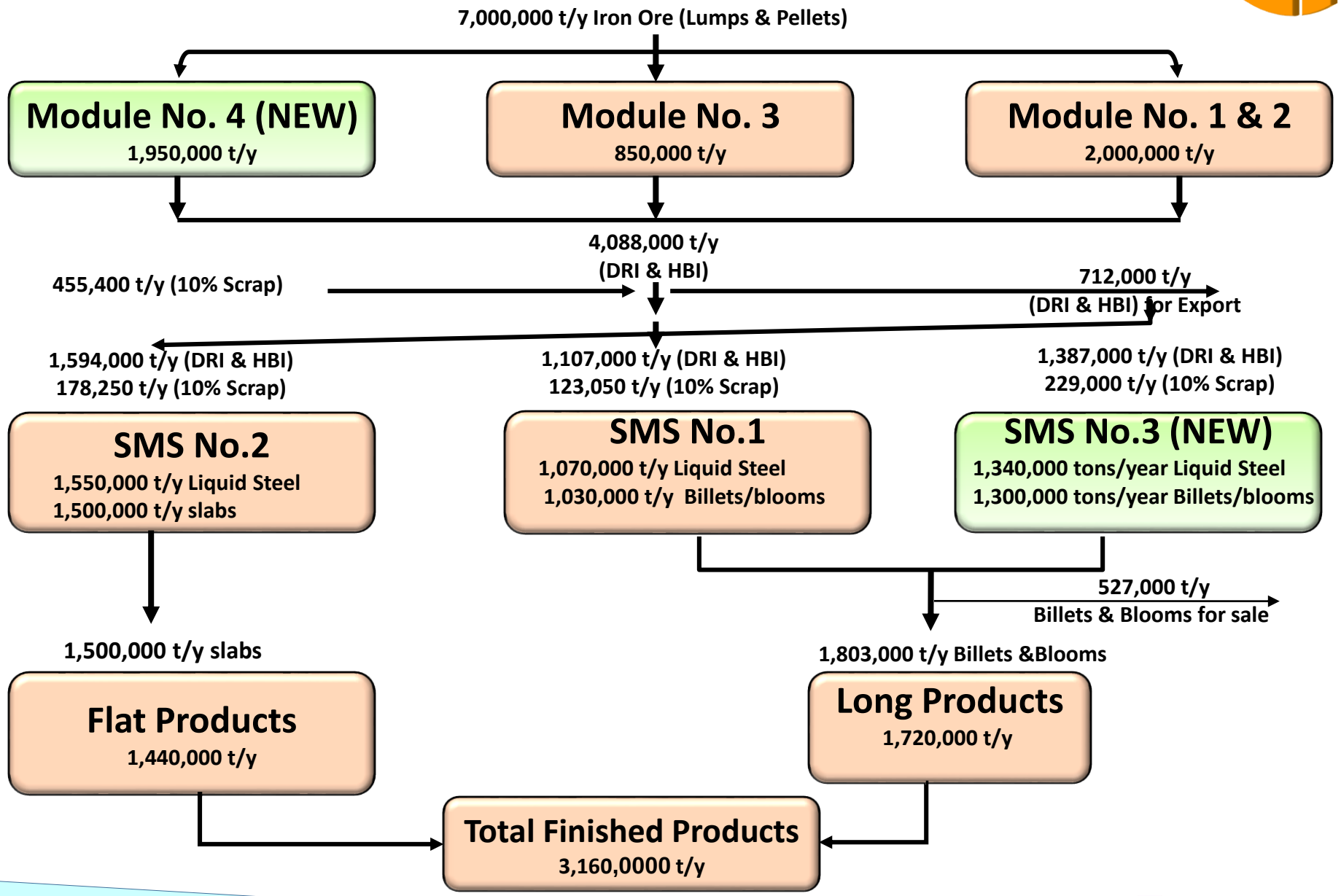
I. Main Production Plants

: Integrated DR & SMS Billet & Bloom Plant

The Project comprises :

- DR Module with a capacity of about 1.95 MTPY of DR pellets.
- SMS with a 150 ton EAF (150 MVA) .
- 150 ton LF & CCM to produce 1.3 MTPY of billets & blooms.
- Utility units to meet plant power, water & gases requirements.

MASTER PLAN – MATERIAL FLOW



DRI-SMS Project - Utilities

II. Utilities Plants

1. One new Main Receiving & Stepdown Substation (MRSS) and two new Load Block & Stepdown Substation (LBSS).
2. New air separation plant with a capacity of 25,000m^3/h O_2.
3. Water desalination plant with a capacity of 15,000 m^3/day.
4. Lime/Dolomite Plant.

DR/SMS PROJECT PRELIMINARY TIME SCHEDULE