

RIO TINTO FER & TITANE INC. BERTH, Port of Sorel, Quebec

(The following information is provided by RIO TINTO, is to be used as a guide only and is subject to change without notice.)

Revised AUGUST 2019

Location: Longitude: 73 08' 06"
SECTION 21, 20 WEST & SECTION 20 EAST (NEW) Latitude: 46 02' 28"
Maximum length of vessel: 803'00" or 245 Meters

Maximum beam of vessel: Up to 105 feet or 32 meters
Wider vessels to be discussed with RIO TINTO's traffic department.

BOW THRUSTER: The use of Bow thruster is not allowed at Rio Tinto Fer & Titane Berth.

Depth alongside: **Section 21 - 8.8 meters and Section 20 West - 9.1 meters**
(vessel requires 30cm or 1 foot under-keel when manoeuvring, as per pilotage regulations) Full fresh, no tide, at "0" chart datum
Section 20 East (NEW)
10.10 meters (full fresh, no tide, at "0" chart datum)
++IMPORTANT++ ****DEDUCT 0.30 METERS FOR MANOEUVRING**

VESSEL MUST RESPECT AN UNDERKEEL CLEARANCE FOR THE ST-LAWRENCE RIVER SUBJECT TO COASTGUARD GUIDELINES. CHANNEL DEPTH IS ABOUT 11.3 METERS. MAX. SAILING/ARRIVAL DRAFT IS 11.3 M. AT "0" CHART DATUM MINUS VESSEL'S APPLICABLE REQUIRED UNDER-KEEL CLEARANCE, PER COAST GUARD GUIDELINES, OF ABOUT 0.92 METERS. THEREFORE, MAXIMUM ARRIVAL/SAILING DRAFT IS ABT. 10.38M, AT "0" CHART DATUM AND DEPENDING ON VSL BEAM, DEPTH CAN BE LESS AT LOW TIDE, BETWEEN QUEBEC AND TROIS-RIVIERES.

MAXIMUM Air draft: COAL, ILMENITE & PIG IRON: About 46'09" or 14.28 meters at "0" chart datum
SLAGS & "UGS" CARGOS: About 62'00" or 18.8 meters at "0" chart datum

MINIMUM HOLD/HATCH LENGTH : **7 METERS, TO ACCOMODATE THE LOADING SKIP.**
(FOR PIG IRON ONLY)

Working hours: 24 hours/day, 7 days/week

Discharging rate: COAL (bulkers): ABOUT 350-500 Mts / hour with one shore tower / clam
ILMENITE (bulkers): ABOUT 500 Mts / hour with one shore tower / clam

Loading rates: Pig iron: ABOUT 225-275 Mts/hr
**** Pig Iron is loaded with one shore tower / skip, traveling abt.130 Meters along the berth**
slag: "Sorelslag" ABOUT 300-500 Mts/hr
other slags: "UGS" & " RTCS" ABOUT 500 Mts/hr

-"Sorelslag", "UGS" & "Slag C" Titanium Slag are loaded with one shore tower chute/conveyor system which travels abt.100 Meters along the berth

Tide: No tidal influence. WATER LEVEL AFFECTED BY ATMOSPHERIC CONDITIONS

Water: Full fresh

Fresh water supply: Fresh water (not guaranty for consumption)
Deliver by truck. Ask the agent for the price.

Titanium Slag: Angle of repose: About 33-39 Degree
(Sorelslag, UGS, Slag "C") Humidity: 3 % (approx)
(non-hazardous and inert material) Stowage factor: About 17 CBF/long ton.

Beneficiated Ilmenite Ore: Angle of repose: About 38 Degree
(non-hazardous and inert material) Humidity: 2 % (approx)
Stowage factor: About 11.5 CBF/long ton.

Pig Iron: Angle of repose: About 35-40 Degree
(non-hazardous and inert material) Stowage factor: About 15 CBF/long ton.
Dimensions (L x W x H): About 11" x 5" x 2.5" per ingots
Size can vary depending on grade.

Anchorage: The Port of Sorel

CAUTION !!! : Facilities to supply bunkers, water, repairs, spares, doctor, dentist, etc., are available in the vicinity of vessel's berth, upon request and with certain conditions. **Bunkers at section 20West & 20East must be approved by RIO TINTO first.**

PERMITTED TO WALK OUTSIDE OF THE DOCKSIDE AREA AND RIO TINTO PROVIDES TRANSPORTATION TO EXIT AND RETURN TO THE VESSEL **Note: For Sect.21, Vessels fitted with cranes on port side, docking STBD no bunkering permitted.**

Access to RIO TINTO's installations are regulated by RIO TINTO's safety and ISPS Plan. All deliveries to vessels must be coordinated with RIO TINTO or the local agent

NO HEAVY VEHICLES ARE PERMITTED ON THE BERTH

PLAN OF SECT. 21, 20 WEST & 20 EAST:

