Optional Features:

- Automatic Greasing Station Providing Coverage to all Chute Pivot Locations
- Emergency Shut-Down System For Chute In Run-of-Muck Situations
- Mud Rush Gate on Chute Throat For Ore Passes With High Water Content
- Pneumatic Chute Control System

Wabi Iron & Steel Corp......a proud century of engineering innovation
Modular Design Allows For Operational Flexibility

- Full ore pass burden and entire chute weight carried by rock box support beams
- Loading chute module easily detaches from rock box and transported to another rock box installation
- Sequential ore pass haulage point development costs are greatly reduced by transferring loading chute module to new location once existing haulage point is decommissioned

Rock Box Floor Designs

- Inclined Style – 45 / 50 / 55 degrees
  - Mass Flow of Muck
  - Rapid Truck Filling Rates
  - Requires Lining System For Chute Protection

- Flat – Dead-Bed Style
  - Slower Truck Filling Rates
  - Low Maintenance Requirements In Rock Box
  - Cushions Shock Load When Muck Is Dumped Into An Empty Ore Pass

Liner Plate Options

Liner plate materials are offered in two options:

Quenched and Tempered (QT) plate – hardness range of 400 to 500 brinell offered in thickness range from 3/4” (19 mm) to 1 1/2” (38 mm) – beyond this thickness range, Wabi recommends its cast MET500 lining option. Due to the inherent characteristic of thick QT plate materials known as “core softness”, liner wear rapidly accelerates as the surface layer of the material is worn away exposing successively softer layers of material – core softness can represent a change of 100 brinell points of hardness in relation to surface hardness values.

MET500 Cast Liner Plates – a high nickel content provides significant toughness to this cast material while maintaining a “through-hardness” value of 500 brinell for section thicknesses between 2” (51 mm) and 4” (102 mm). Highly recommended for rock box lining systems where replacement of liner plates is difficult and hazardous once the chute has been in operation for a period of time.
Automated / Remote Chute Control Features

Ore Pass Level Detection Prevents Chute From Being “Pulled” Empty

Chute Over-ride Prevents Over Filling of Truck Box

Closed Circuit TV Camera For Visual Contact of Chute Throat and Truck Box

In-Cab Control of Chute Through Joy-Stick Chute Functions and Visual Monitor Display – Can be Routed to Surface Locations as well for Complete Remote Operation

In-Line Loading Chute Technology

Truck Positioning Sensor Provides Signal to Truck Cab Monitor For Display of “In-Place for Loading” Location

Press Frame Control Configurations Available

Direct Loading Actuator
- High Thrust Loading of Actuator Into Chain Curtain
- Lower Hydraulic System Working Pressure Required Due to Full Working Bore Exposure of Actuator (i.e. Cylinder Extends When Closing Press Frame)

External Mount Actuator
- Simple Replacement of Actuator From Outside of Chute
- Actuator Not Exposed to Muck Stream
- Higher Working Pressure Required for Hydraulic System Due to Annular Working Bore on Actuator (i.e. CylinderRetracts When Closing Press Frame)
In-Line Loading Chute Technology

Ore Pass Throat Design

Optional Lining:
Ore Pass Footwall Lining System
Consisting of 6 in. Thick Cast MET500 Liner Plate Extending 20 ft. Above Top Hat on Ore Pass Wall

Footwall Lining Attachment Frame
– Rock Bolted to Footwall and Grouted Prior to Installation of Footwall Liner Plates

Concrete Fill

Structural Top Deck Greatly Facilitates Locating Chute in Ore Pass Opening and Building of Bulkhead Structure

6 in. Thick Cast MET500 “Face” Liners on Top Hat Structure

Structural Beams Carry Load of Ore Pass Muck Column Directly to Drift Floor

Into Chute Rock Box

4 in. or 6 in. Thick Cast MET500 Liner Plates on Sides of Ore Pass Top Hat Structure

Top Hat Structure Protects Concrete Ore Pass Bulkhead From Erosional Wear