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CLEVELAND-CLIFFS INC.

# Product Capability and Feasibility During Order Entry

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## AGENDA

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**1 – The Company**

**2 – Motivation**

**3 – The Solution**

**4 – Architecture**

**5 – Technical Background**

# THE COMPANY

## Key Highlights

Headquartered in Cleveland since 1847

**\$17.1 billion**

Pro-Forma FY 2019 Revenues<sup>(1)</sup>

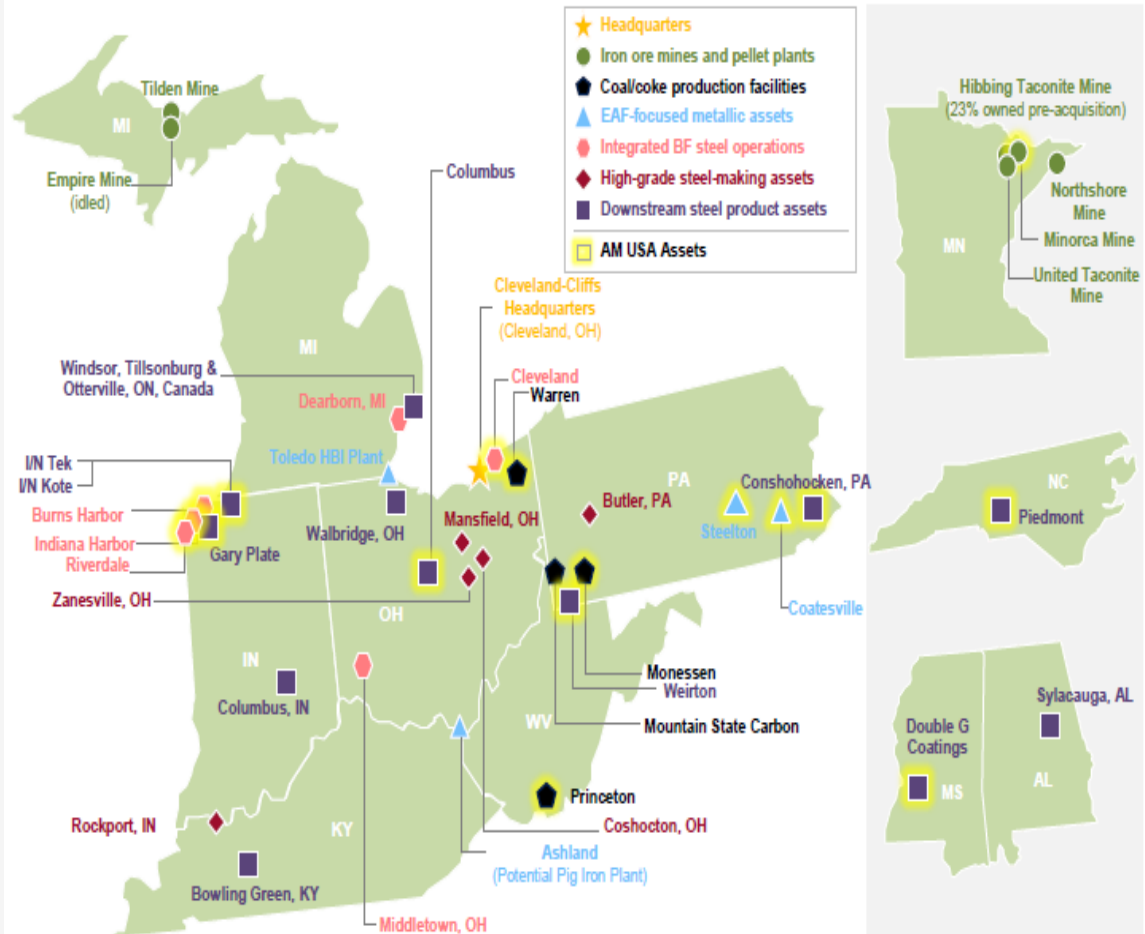
**\$1.6 billion**

Pro-Forma FY 2019 Adjusted EBITDA<sup>(2)</sup>

**25,000**

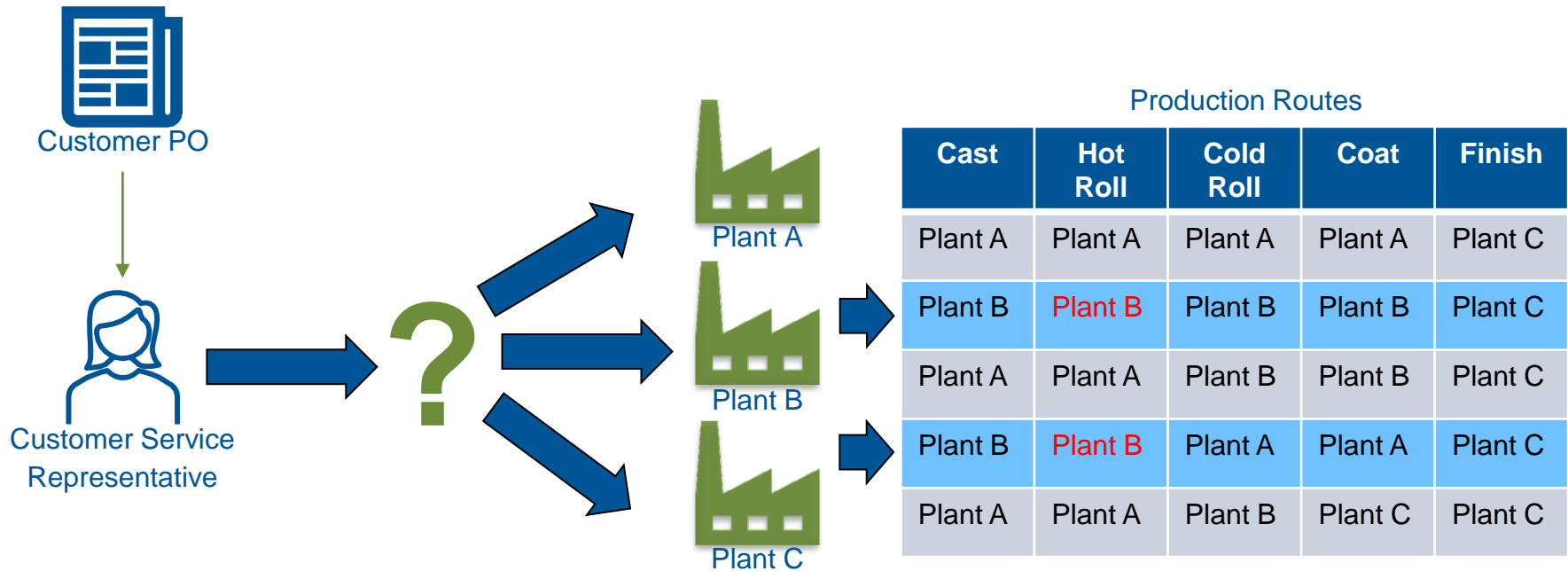
Employees as of December 2020

**NYSE:CLF**



Source: Cleveland-Cliffs and AK Steel filings.  
 Note: Revenues and Adjusted EBITDA are approximate figures  
 (1) Pro-Forma LTM revenues exclude intercompany sales.  
 (2) Pro-Forma Cleveland-Cliffs includes \$150m in anticipated synergies.

## MOTIVATION



As an example, the routes highlighted would be selected, due to mill limits constraints.

## Order Entry Process

- CSR receives a Purchase Order from the Customer.
- When defining the product attributes, Quality may need to review the product specification to determine if it is feasible to produce it, and if it is, what plants are capable.
- This process is called **Technical Review**, and it is required before the order can be confirmed and a delivery date can be determined.

# THE SOLUTION

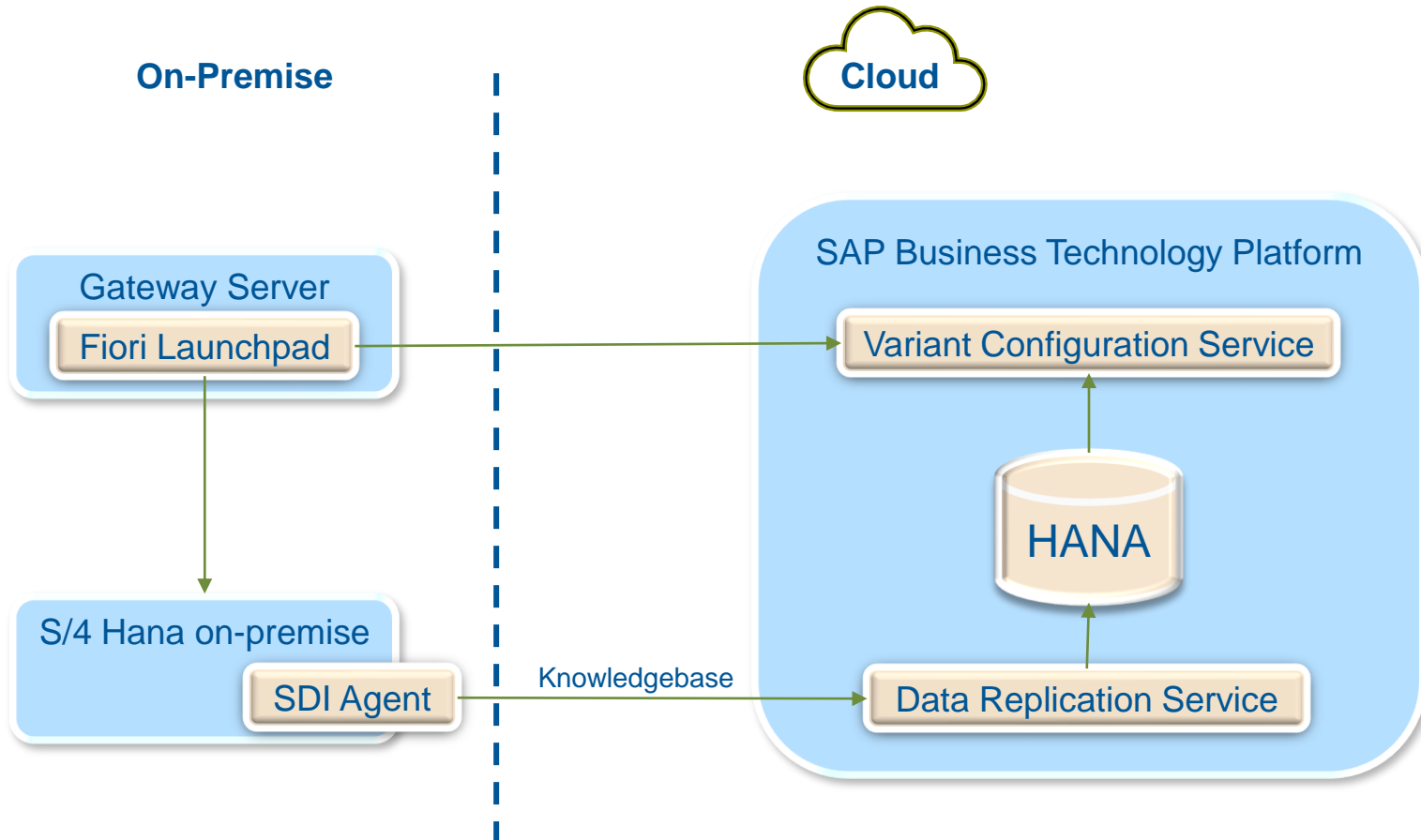
## The Order Spec Analyst (OSA) Panel

The screenshot displays the SAP OSA Order Panel interface. At the top, there is a navigation bar with the SAP logo and a search icon. Below this, the main header area contains the title 'OSA Order Panel' and several action buttons: 'Edit', 'Lock Fields', 'Validate', 'Complete', and 'Hold'. The main content area is divided into several sections:

- Header Information:** Includes fields for Sales Order, PO Number, Part Key, Local Parent, Sales Customer, Order Ship City, Order Ship State, Chem/Prop Ind (N), Trial Flag, End Use (MISC PARTS), Legacy Order Number, EOR Pending, OCM Pending, Second Review Failed, Inquiry (Complete), Number (000000000), Entered Date, Time, Complete Date, and Time.
- Navigation Tabs:** A row of tabs for different configuration views: CONFIGURATION, ORDERED DIMENSION DETAILS, CONVERTED DIMENSION DETAILS, SPEC PANEL, AIM COMMENTS, ROUTE PANEL, RESTRICTIONS PANEL, OCM COMMENTS, ORDER HISTORY, and PDF DOCUMENTS.
- Configuration Fields:** A large grid of input fields and dropdown menus for detailed specifications, including:
  - Cust Part Number, Cust Order Facility (BURNS HARBOR), Sales Order Product (HOT ROLL BLACK), Cust Prime Side (PRIME SIDE UP), Form (COIL), Coil Weight UOM (POUNDS), Oil Type (DRY), Process (NONE), Ord Cust Edge (MILL EDGE), Ord Cert Stmt Code (NONE), Additional Test Reporting, Chem Prop Review Ind (N), Flat Tol Plus, Shape/Flatness Critical L...
  - MPDB Part Key & Seq, Enduse Category (Misc Parts), Exposure Code (UNEXPOSED), Clean Surface No Smut (N), Max Coil Weight (lbs) (48000), Unit Of Measure (IN), Oil Amount Desc (NONE), Surface Finish (NONE), Ord Cust Inclusion (NONE), Customer MTO Trial (No Value), Additional YTE Reporting (Yield, Tensile, Elong MPa), OP Pickle (N), Flat Tol UOM (IN).
  - Aspect Code, Order Weight lb (192000), Max Coil Weight (kgs) (21772), Coil ID Eng (30), Coil OD Eng, Oil Brand (NONE), Surface Treatment (NONE), Inside Storage Indicator (No), Ord Test Rpt Req (TEST CERTIFICATION REQUIRED), Other Test Reporting, Order Flat Tol PO Text (IN), Surface Critical Indicator (No), Coilbreak Indicator (Yes).

*This application is a representation of the Sales Order in Fiori, with complete Variant Configuration functionality.*

# ARCHITECTURE



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## TECHNICAL BACKGROUND – HIGHLIGHTS

- **7 Groups of Products**
- **Around 60,000 Materials**
- **Over 250 Characteristics per Material**
- **15+ Steelmaking/Finishing Plants**
- **400+ Production Routes**

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## TECHNICAL BACKGROUND – PROJECT IMPLEMENTATION

### Implementation

- Partnership with SAP
- Timeline: part of a bigger scope project that took 18 months to implement

### Benefits

- Reduce time to enter orders
- Business Process streamlined, by reducing systems complexity
- More accurate Order Entry
- Reduce the number of manual order reviews
- Data standardization

### Additional information

- Technology used: [SAP Variant Configuration and Pricing - SAP Help Portal](#)
- Check on note [2695561 - Standard Variant Functions for common use cases - SAP ONE Support Launchpad](#)



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THANK YOU

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