

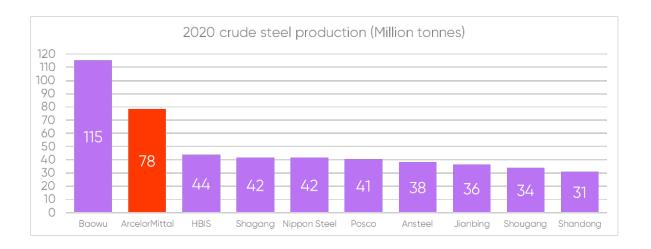
### **ArcelorMittal Group overview**

#### The Group

- Second biggest steel producer in the world
- 158,000 employees in more than 60 countries, and industrial presence in 16 countries
- Crude steel production: 47% in Europe, 38% in Americas, 15% in other countries (Kazakhstan, South Africa, Ukraine...)
- R&D: 11 sites worldwide, 1500 full-time researchers, main focus in Europe( (83% of spent in 2020)
- XCarb®: target of -30% CO2 emission by 2030, carbon neutrality in 2050

#### Europe

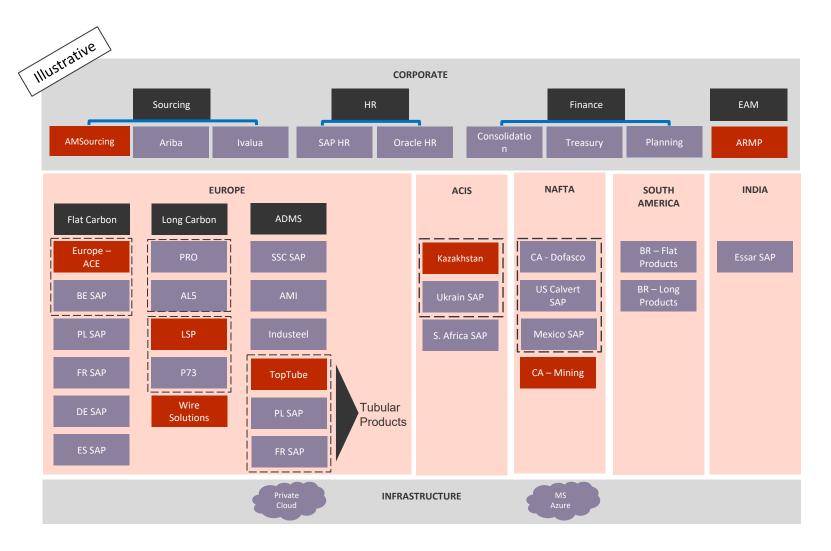
- 32.9 millions tonnes shipments in 2020
- 71,000 employees in 400 locations in 18 countries in 2020
- Divisions
  - Flat Products: 12 integrated minimills and primary facilities in 5 countries, largest producer in Europe of flat products: HP, HRC, CRC, HDG, coated, tinplate, enamelled, electrical steels
  - Long Products: 26 production sites in 10 countries, leader in sections, sheet piles, rails, wire rod, bars & rebars
  - Downstream Solutions: downstream activites of Flat and Long, and value-added/customized steel solutions. Includes: Distribution Solutions (SSC), Construction, AMI, AMTP, and Industeel







### ArcelorMittal is on a journey to digitalize its business application platform



Standardization and rationalization at corporate, segment, cluster and mill level following a

best-of-breed strategy

- Journey to S/4
   using a mix of brownfield and
   greenfield migration approaches
- Journey to cloud at Infra (IAAS), App (SAAS) and platform (PAAS)
- Maximize synergy and leverage through collaboration across segments





# **ArcelorMittal Tubular Products – Europe**

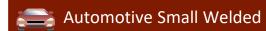
1 Mt producer

15 mills in 6 countries

Pan-European footprint for best proximity to the market

Largest offer: most diversified producer of tubes in Europe







Precision tubes

Components



#### Industry Small Welded



#### Structural

Civil eng, foundations, offshore



#### Utilities

Water distrib, HVAC, sprinklers



#### Mechanical Eng.

Yellow goods, cylinders



#### Agriculture

Greenhouses



#### Mining

Drill rods, cire barrels



#### Others

Scaffoldings, fencing, storage



Seamless (Energy)



### **ArcelorMittal Europe Tubular Products – Main applications**



Automotive

- Suspension systems, engine tubing, drive train systems, airbag parts
- Seat parts, instrument panel beams, engine cradles, shock absorbers
- Chassis parts twist beam axles, drive shaft parts, crash components



Construction,
Mechanical &
Industrial

- Structural steel for Civil and Industrial constructions
- Heavy machinery Cranes, Hydraulic cylinders, Yellow goods, Oil Tools
- Gas Cylinders
- Utility installations for water, gas, air conveyance



Energy

- OCTG (Oil Country Tubular Goods) extracting Oil & Gas
- Linepipe conveying Oil & Gas
- HPI (Hydrocarbon Processing Industry) Refineries & Petrochem. plants
- Power Generation Thermal Power Plants, Renewables

Seamless and Welded tubes and pipes are used across all these industries



### **TopTube Approach**

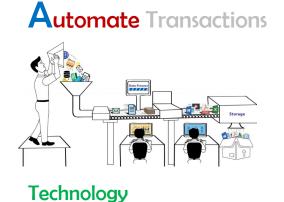
### Empower the team with tools to ensure speed and agility



#### Simplify, Standardize, Automate









## SAP S/4HANA Core System + Industry specific web applications











SD, MM, FI, CO, QM, PP





**Production Planning** 



MES



Help Desk Change Request Management



**eProcurement** 

**TUBETransport** 

**Transport Management** 

**Transport Tendering** 





## **TopTube Order to Delivery**

- Sales Orders
  - Make to Order Configurable Finished Goods Materials
  - Make to Stock Variants of Finished Goods Material
- Material
  - Definition of Raw Materials, Finish Goods Variants, Semi-finish Variants
  - Material requirements for Make to Stock process
  - Receipt and Dispatch
- Sales Orders with specification of:
  - **BOMs** (Bill of materials)
  - Routings (Production flow description)
- Campaign planning
- Production Orders creation and scheduling
- Reporting & Visualization & Controlling data & ...
- Tracking of production:
  - Slitting
  - Rolling
  - Finishing and Drawing
- Warehouse management (Raw Materials, Semi-finished and Finished Goods)
- Downtime management

SAP

**ERP** system



**Production Planning system** 

**MES** 

**Production Tracking System** 



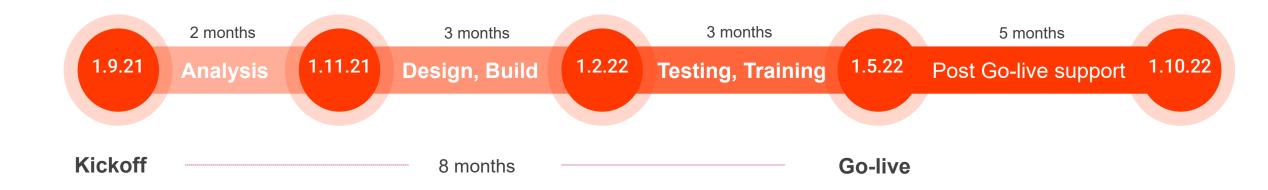
### **Tubular Product Definition, Make to Stock, Make to Order**

Complex Product Definition with more than 300 characteristics

- Full product configuration including quality testing requirements
- Make to Stock approach for standard products (60%, 600 FG Variants) using Availability to Promise (ATP)
- Make to Order approach with Variant Configuration for nonstandard products
- Product Definition Wizard using dependencies tables



## TopTube S/4HANA rollout timeline and project team



### **Project Team**

- Project Management 1 FTE
- SD + Product Definition 3 FTE
- FI rollout with local change requests 1 FTE
- CO design of allocation cycles 0.5 FTE
- MM pure rollout + master data 1.5 FTE

- MES + Planning full design 2.5 FTE
- Reporting 0.25 FTE
- Integration 0.25 FTE
- Data Migration 1 FTE



## **Project Lesson Learned**

- Business team involvement is key for project success
- Project planning should be aligned with possible speed of change management
- Project bottlenecks are usually on business side and should be identified as soon as possible – ideally even before project started
- Data migration requires business participation from very beginning







## **SAP S/4HANA Main Benefits**

- FIORI applications
- Integrated Business Warehouse
- SAP Analysis for Office
- Simplified and Standardized Integration
- Direct connection of Microsoft Power BI
- High performance of HANA database



