



Welcome to Collins Bandung Operations

PT. UTC AEROSPACE SYSTEMS BANDUNG OPERATIONS



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SITE OVERVIEW

Site Location: Bandung, Indonesia
 Site Lead: Hani Pryangga
 BU: Global Ops
 ACE Level: Silver



Product Families



Gear Cell



Coupling Cell



Shaft Cell



Prismatic Cell

Capabilities

Complex precision machining (turning, milling, grinding, honing, ECM, barrel)
 Manufacturing of primary flight controls + utility actuation
 Special process / heat treatment (electropolish, cadmium, silver, anodize, passivation, nickel, chrome – thin dense & hard chrome)
 NDT (MPI, FPI)

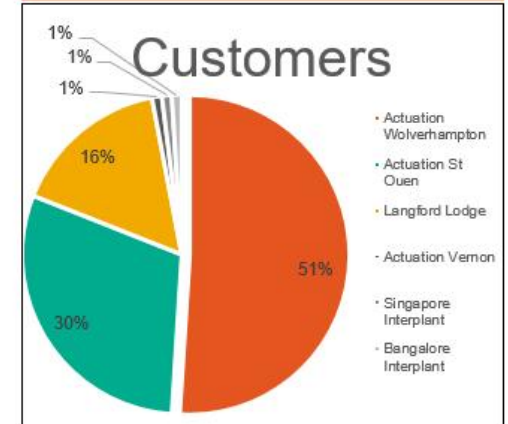
Facility Data 2021

DL headcount: 260
 IDL headcount: 135
 Facility size: 97 K Sq.Ft (Rent to Jabil)
 Manufacturing: 53 K Sq.Ft
 Annual Capacity (hrs.):
 60% Machining,
 40% Special Process

Volume & Cost



Customers



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SITE HISTORY

1997



Simple machined parts
28 people
No Special processing capability



2007



200 EE. Facility size doubles
Med / High complex parts
Expand Special process



2014



Transition to Ti and full in-house processing capability.
520 EE, 60k sqft



2017



Transfer from Pindad (OLD SITE) to New Site , 7 km to East Bandung.



Delighting customers



■ Bandung Ops

■ Other Collins Aerospace

BANDUNG CAPABILITIES

MACHINING

Turn-Mil 5 Axis



Internal Grinding



Gear Shape



Horizontal Mill 3 Axis



Deburr



Turning 5 Axis



External Grinding



Hob



Vertical Mill 3 Axis



Assembly



Honning



Broaching



Mill



Turn Mill



BANDUNG CAPABILITIES

SPECIAL PROCESS

Vacuum Nitrogen Quench
Furnace



Bottom Load Atmospheric
Water Quench Furnace



Flourescent Penetrant
Inspection



Magnetic Particle Inspection



Tribo finish



Electro-Chemical Machine



Plating
(Silver, Cadmium, Electroless
Nickel, Hard Chrome,
Thin Dense Chrome)



Chromic Acid Anodize



Electropolishing



Sulphuric Anodize



Passivation



Hard Anodize



BANDUNG CAPABILITIES

LABORATORY INSPECTION

Auto-Titration Analysis



Atomic Absorption Spectroscopy



Micro Hardness



Macro Hardness



Universal Testing Machine With
Extensometer



Salt Spray Chamber



BANDUNG CAPABILITIES

CALIBRATION

Supermic for Gauges



Gauge Block for Caliper



Optical Flatness for Micrometer
& Height Gauge



Dry Block for
Thermocouple



FTI For TUS & SAT



ULM for Gauges



Ring Gauge for
Holetest & Intertest



Keyence for Profile
Dimension



FTI for Rectifier

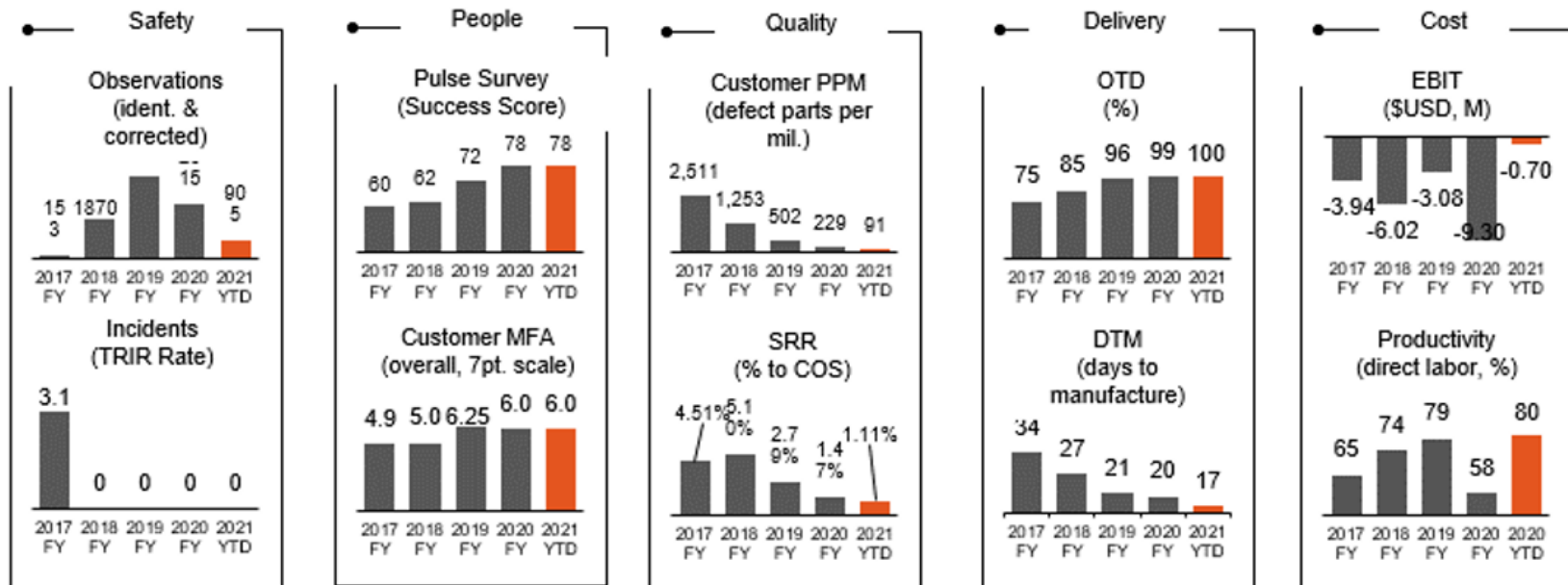


Secondary Standard for FTI



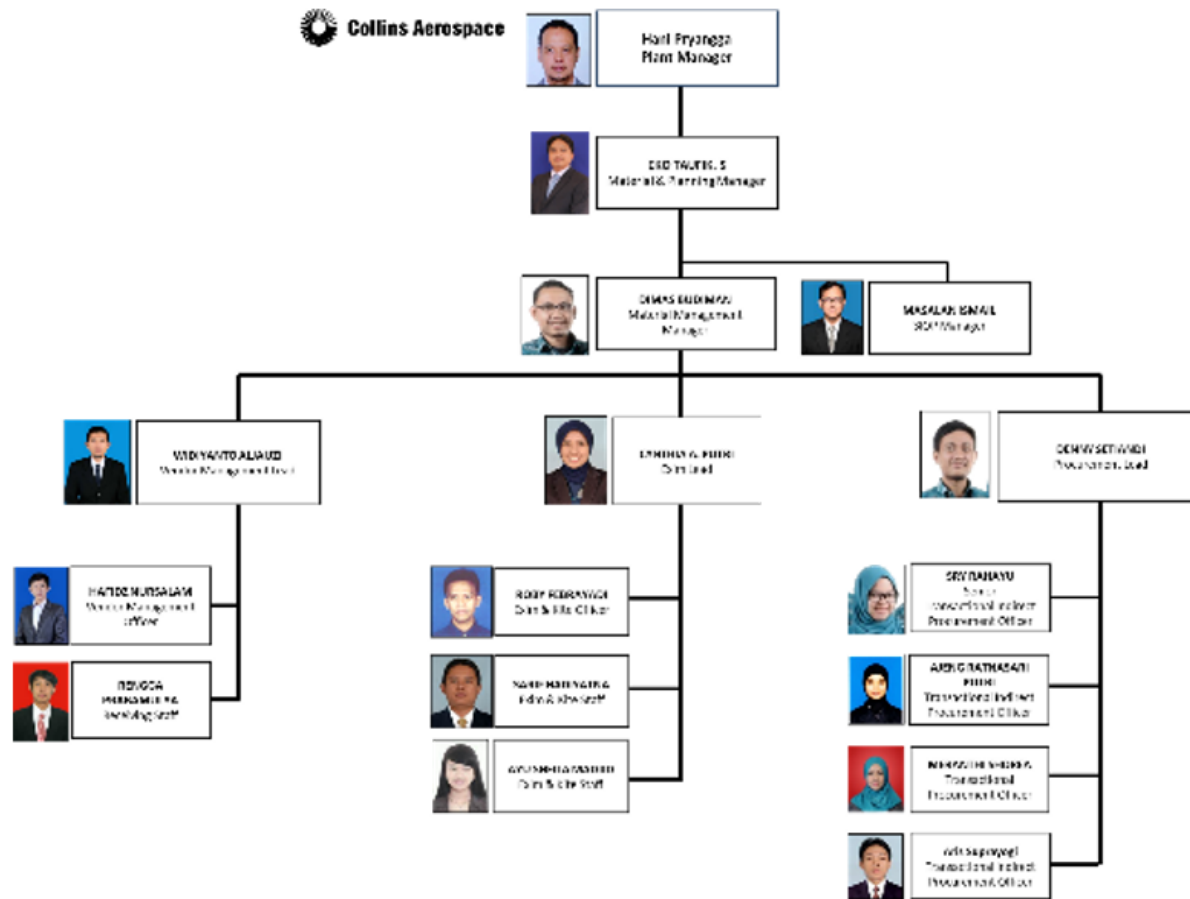
BANDUNG OPERATIONS

- Performance Results trends 2017- 2021 Plan & YTD Actual



Data as per Mar 2021

MATERIAL MANAGEMENT ORG CHART



SHOP FLOOR MANAGEMENT



Improvement
Events
ACE IT, LLW
create Improver



Pull Production
System



Tier Meeting
Daily Management
Review at Shop Floor



Walk around, TPM



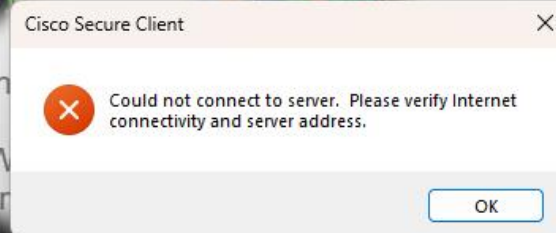
POU, Metal to
metal contact
protection



Shop floor controls
at the glance



Visual flows, 5S
expectation



Fundamental tools ensuring execution & continuous improvement

EMPLOYEE ENGAGEMENT

Employee Recognition



Best Employee Of The Month



Best Employee Of the Year

Employee Gathering



Tree Planting



Virtual Family Gathering

Woman Forum

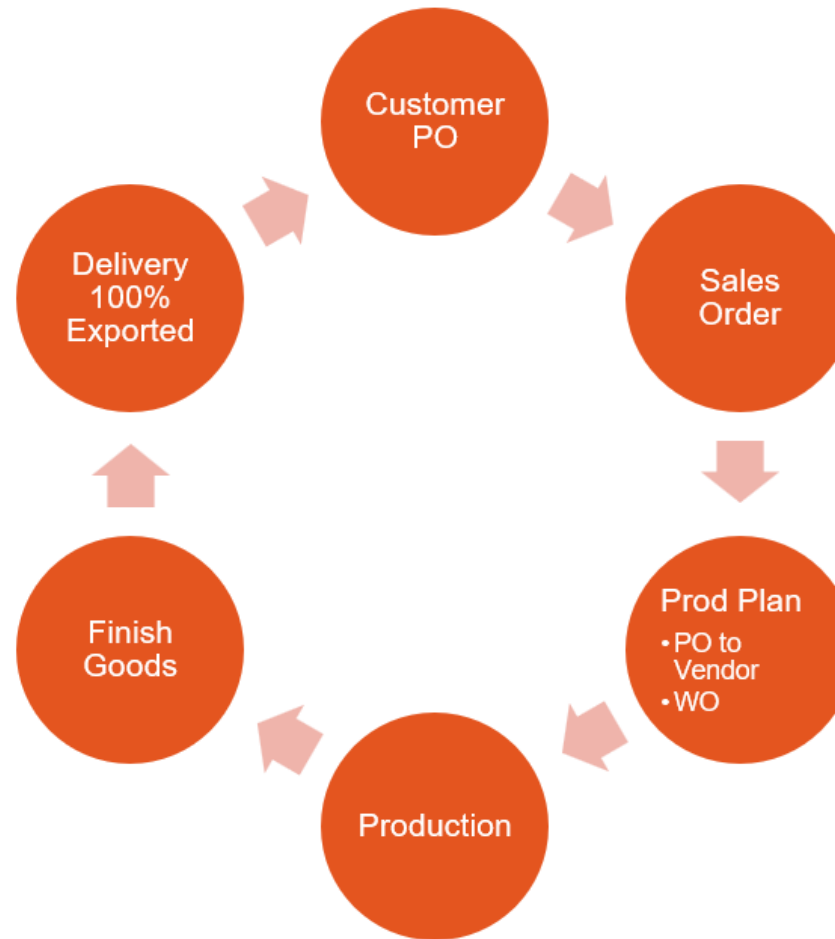


Kartini days Celebration



Coffee break with Our GM

SUPPLY CHAIN PROCESS



MATERIAL SUPPLY BASED

Purchasing



- Material Procurement
- Non Material Procurement

Material Inbound



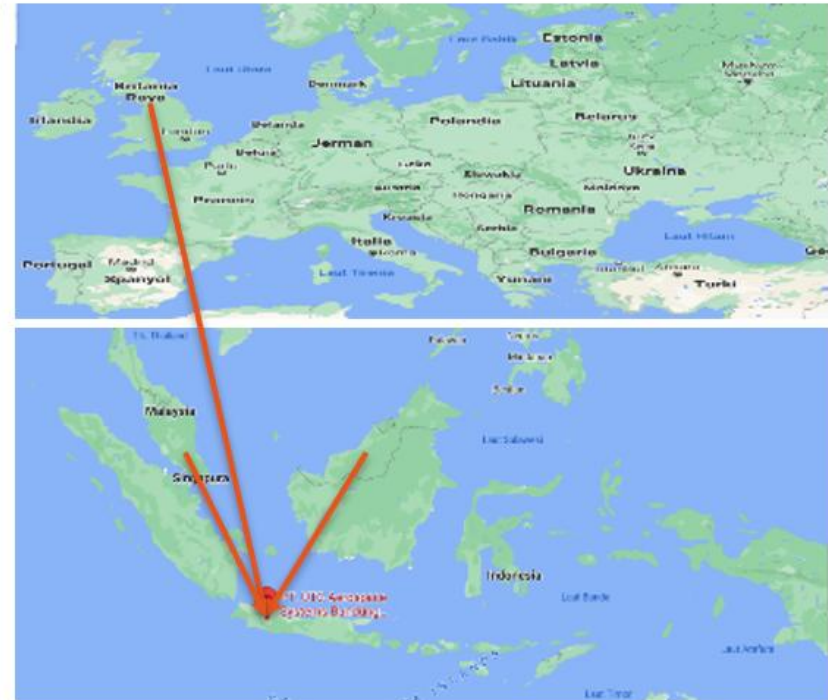
- Inbound
- Local

Non Material Inbound



- Inbound
- Local

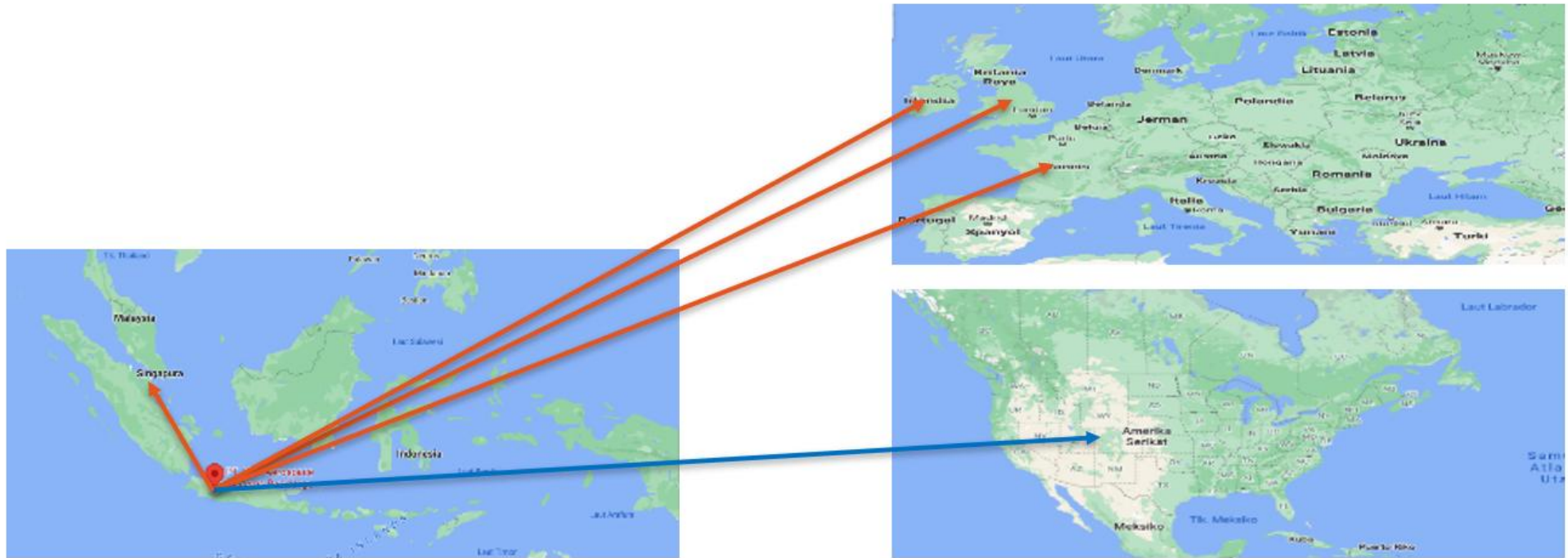
Our Core Partners



For Import Divide By 2 Category
KITE (material) and non KITE (non material)

OUR BIGGEST CUSTOMER

→ Existing Customer
→ New Project



Most of customer is Collins aerospace company, biggest customer 80% is come from UK and France, 20% mixed customer Singapore, India and irlandia

Thank You



Picture taken pre Covid