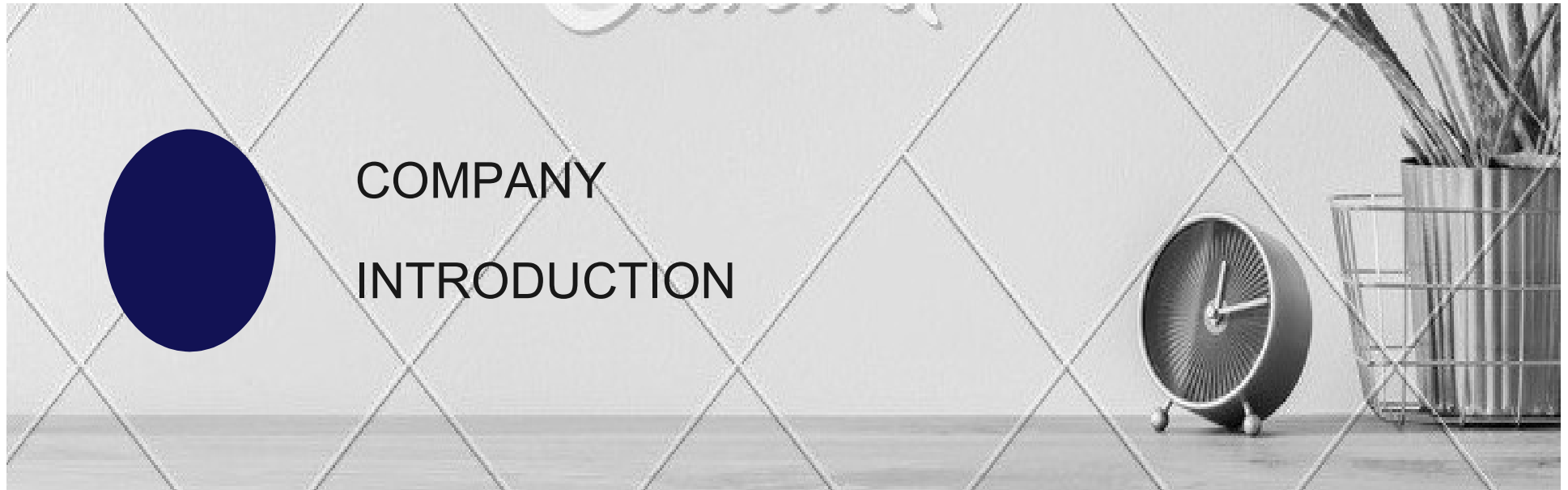




BIDADI METAL FINISHERS (P) LIMITED

EPOXY-BASED E - COAT FOR CORROSION
RESISTANCE

CATHODIC ELECTRODEPOSITION



- Bidadi Metal Finishers, founded in 2017 consists of a fully automated CED line spread over an area of 22000 sq ft located in Bangalore, India is equipped with the state of the art technology to deliver and provide high-quality service to different sectors of manufacturing.
- The company powered by a dynamic and spirited group of individuals, built on a strong foundation of transparency and ethics is committed to providing top-notch service with quality, delivery, and customer satisfaction as our main goal.
- With world-class infrastructure, We focus on shorter lead times, economic service solutions, and a complete solution for customer requirements.

BOARD OF DIRECTORS



A P HARISH

- Qualified Engineer and has over 30 years of industrial experience.
- Served as President Operations in Packaging Industry for over 25 years.
- Served as CEO in the engineering and coating industry

A P VENKATESWARAN

Qualified Chartered Accountant, with an Industrial Experience of Over 30 Years in Plastics and Engineering Industry.

S RAVISHANKAR

- Practicing Chartered Accountant having industrial experience of over 30 Years.
- Served in Engineering and Consumer Industry.

KEY MANAGEMENT TEAM

RAHUL A H

A qualified Engineer associated with the surface treatment industry for the last 4 years in various capacities and currently Heading the Operations at BMF

SIDHARTH V

Semi- Qualified (Chartered Accountant) heading Accounts, Administration and Commercial – Coordinator.

MANIRATHNAM

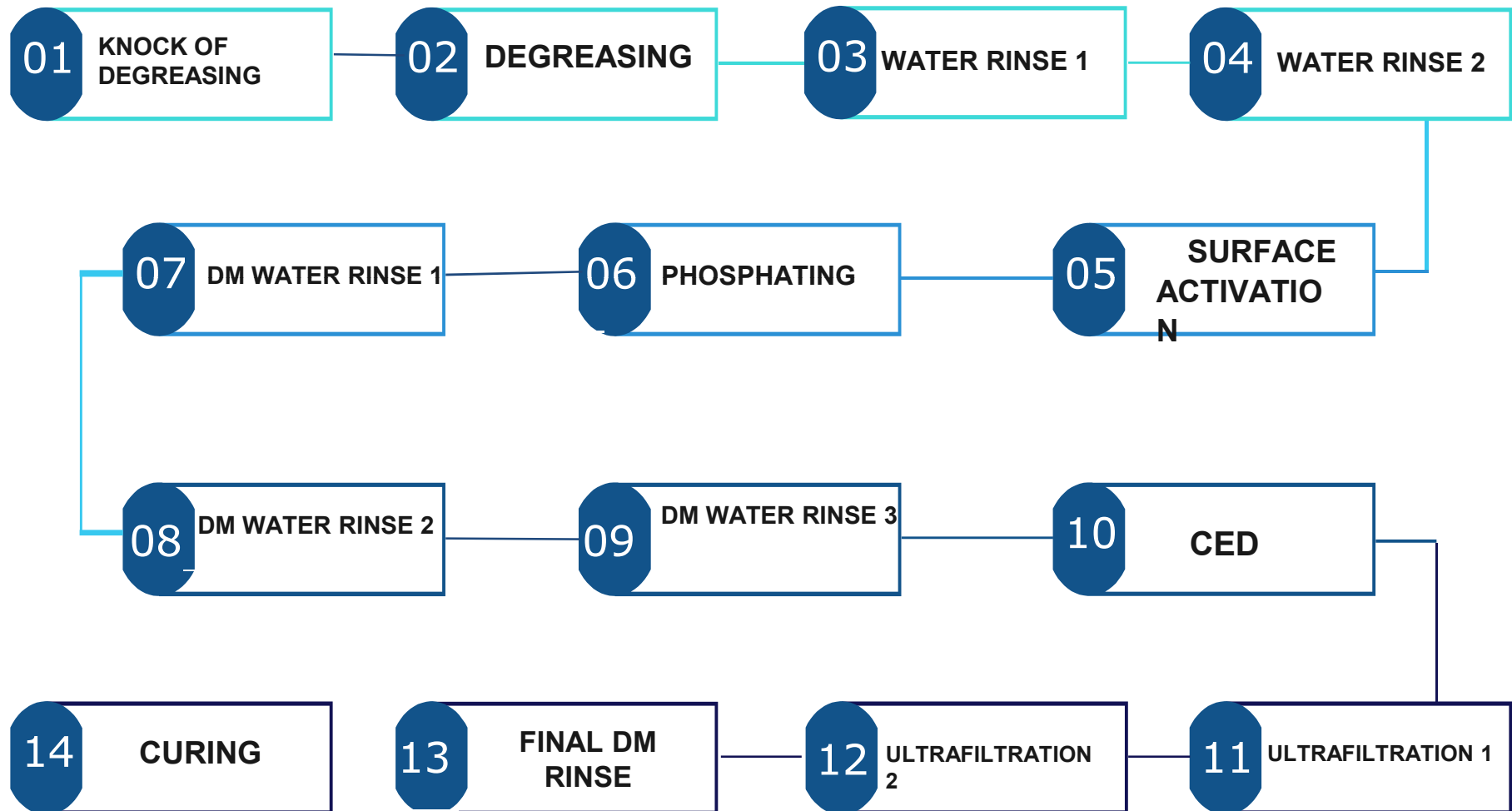
Associated with surface treatment industry in various capacity for over 5 years. Currently serving as Plant Head at BMF

SAGAR

Qualified Engineer serving as the production control executive at BMF

PLANT – INTRODUCTION

The plant consists of three zones : pre-treatment , CED coating and curing /baking.
This fully automated plant has no manual intervention thus , reducing the lead time and control methods.
The plant has a capacity to produce 35000 Square meters monthly of CED coated components

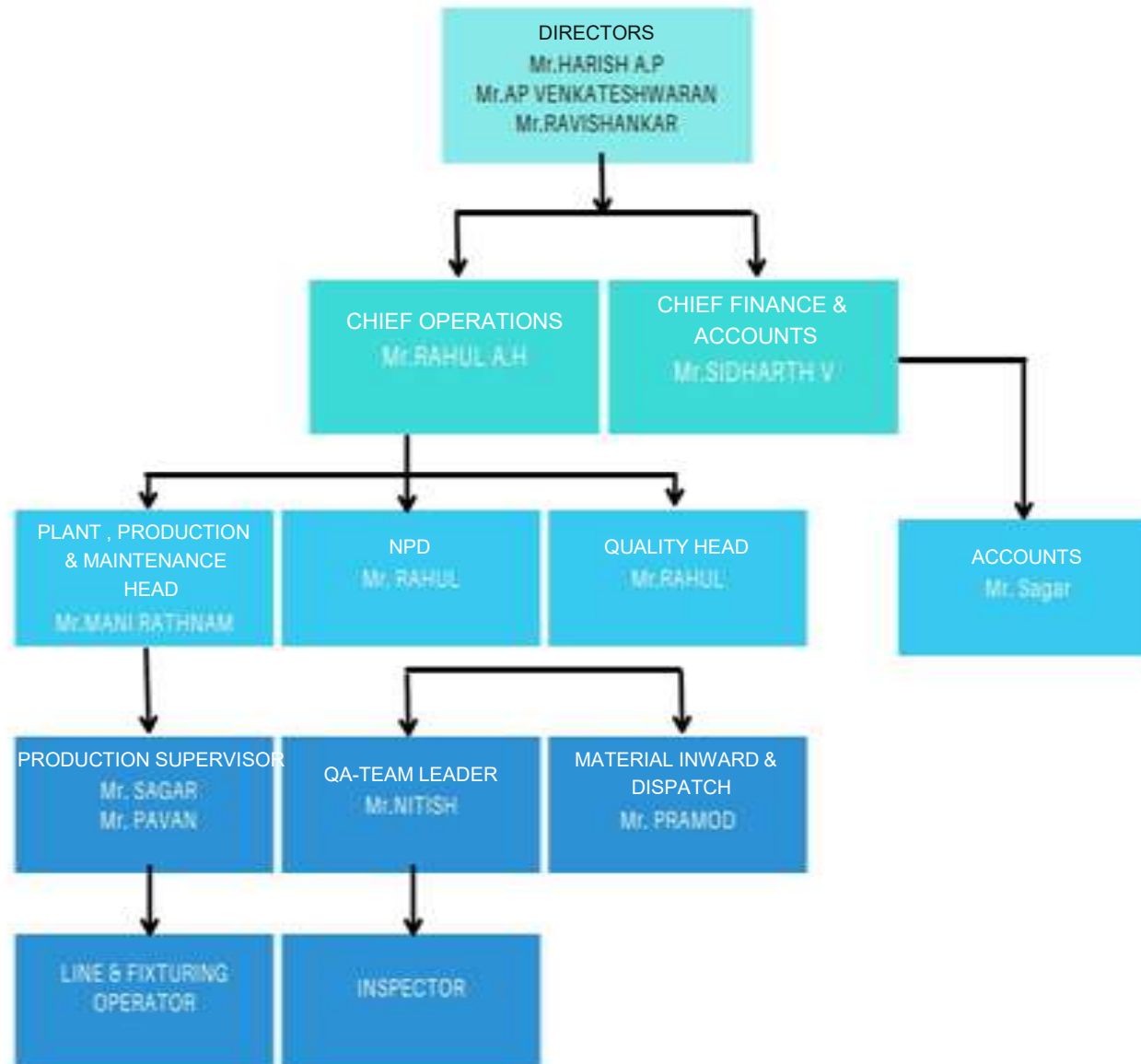


PLANT – PRODUCTION CAPABILITY

DETAIL	SPECIFICATION
TYPE OF PLANT	PLC CONTROLLED WITH SCADA
EACH LOAD CYCLE TIME	88 MINS
LOAD PER HOUR	08
AREA PER LOAD	8-11 SQ MTR
DIP PROCESS TIME	24 MINS
CURING PERIOD	64 MINS
EFFECTIVE CURING TIME	24 MINS
NO. OF TRANSPORTER	03
HEATING FUEL	LPG
MAX AREA ALLOWANCE FOR COATING	2000MM X 762MM X 480MM
CED BATH VOLUME	2500 LTRS



ORGANIZATION CHART



PROCESS FLOW – CYCLE TIME



PROCESS	PROCESS TIME
KNOCK OF DEGREASING	03 MIN
DEGREASING	03 MIN
WATER RINSE I	01 MIN
WATER RINSE II	01 MIN
SURFACE ACTIVATION	01 MIN
PHOSPHATING	03 MIN
DM WATER RINSE I	01 MIN
DM RINSE II	01 MIN
DM RINSE III	01 MIN
CED	03 MIN
ULTRA FILTER I	01 MIN
ULTRA FILTER II	01 MIN
FINAL RINSING	01 MIN
CURING / BAKING	64 MIN
<u>TOTAL CYCLE TIME – CED LINE</u>	<u>88 MIN</u>

PROCESS CONTROL -LABORATORY INFRASTRUCTURE



MUFFLE FURNACE
Function: Ash
content in CED bath



Hot air oven
Function: NVM in
CED bath
Oil content test



Titration Setup
Function : Setup to analyse the Alkalinity of the pre-treatment line (ie: Degreasing , activation and phosphate)



Weigh Balance
Function : weight of
CED sample during
NVM testing



pH meter and conductivity meter
Function : To check the pH and conductivity of the different baths

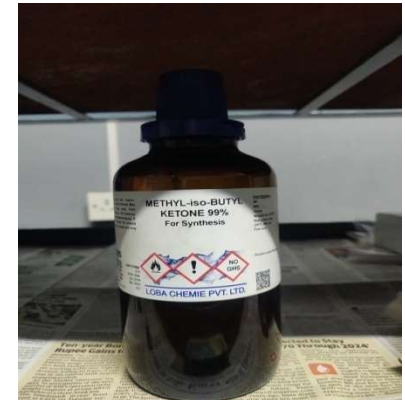
CED – QUALITY ASSURANCE



Salt spray test chamber



Coating thickness gauge



Rubbing test(MIBK)



Cross hatch – Adhesion test



Pencil hardness test



Visual Inspection

PROCESS AND PRODUCT TESTING

QUALITY GATE

COATING PERFORMANCE TEST(INHOUSE)	FREQUENCY
COATING THICKNESS TEST	DAILY DURING SETUP APPROVAL , BATCH QTY AS PER STANDARD
SALT SPRAY RESISTANCE	AS PER COMPONENT REQUIREMENT, ONCE IN 6 MONTHS AND DURING DEVELOPMENT
ADHESION TEST	DAILY
MIBK RUBBING TEST	DAILY DURING SETUP APPROVAL
PENCIL HARDNESS TEST	WEEKLY
WATER RESISTANCE TEST (BARC LABS)	HALF – YEARLY
SOC TEST (BARC LABS)	HALF YEARLY

Other specific coating performance tests like acid resistance , oil resistance , alkali resistance are based as per customer requirement

QUALITY CERTIFICATIONS

- Bidadi Metal Finishers has obtained a letter of conformance for the IATF 16949:2016 QUALITY CERTIFICATION from BSI

bsi.  **Letter of Conformance**
Quality Management System

This is to confirm that:

Bidadi Metal Finishers (P) Ltd
Plot No. 81, 2nd Phase
Bidadi Industrial Area
Bidadi
Karnataka
India

Operates a Quality Management System which conforms with the requirements of IATF 16949:2016 for the activities detailed below:

Cathodic Electro-Deposition Coating.

Permitted Exclusions: Product Design.

This letter of conformity has been issued in line with IATF 16949:2016 scheme rules to a site with less than 12 months records, to demonstrate the sites status in relation to IATF 16949:2016.

Signed on behalf of BSI:


Managing Director, BSI India, Venkataram Arabolu

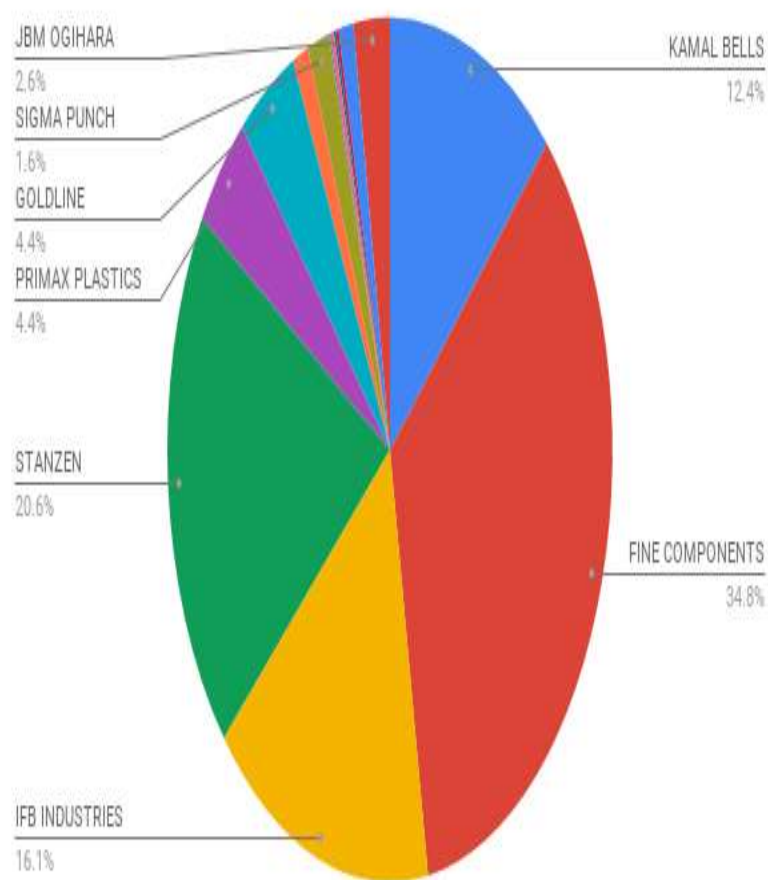
Letter of Conformity reference no.: LC 681895

Issue date: 09/12/2018
Expiry date: 08/12/2019

Page: 1 of 1

The letter of conformity will expire on the date shown above, or on issue of formal certification.
BSI Group India Private Limited
The Mira Corporate Suites (A-2), Plot 1&2, Ishwar Nagar, New Delhi 110 065, India
BSI Group India Private Limited is a subsidiary of British Standards Institution.
Contracted office: 12110 Sunset Hills Road, Suite 200, Reston VA 20190, USA
The British Standards Institution is incorporated by Royal Charter.
Group Headquarters: 389 Chiswick High Road, London W4 4AL, UK.

CUSTOMER DATA BASE



CUSTOMER	OEM / TIER 1	BUSINESS BREAK UP (IN %)
KAMAL BELLS	ASHOK LEYLAND	1.00
FINE COMPONENTS AND TOOLS	AUTOLIV / TRW RANE	35.6
IFB INDUSTRIES	AUTOLIV / TRW RANE / TOYOTA	16.5
STANZEN ENGINEERING	AUTOLIV / JOYSON SAFETY SYSTEMS	21.1
PRIMAX PLASTICS	AUTOLIV / TRW RANE	4.5
GOLDLINE MACHINING	HITACHI JAPAN	4.5
PM TECHNO	FORD CHENNAI	1.2
SIGMA PUNCH FORMS	CATERPILLAR	1.6
AUTO CLUTCHES	HONDA	0.89
SUPRAJIT AUTO	AUDI UK	0.28
N RACK	NET RACK	0.16
FP SEATING	ROYAL ENFIELD	0.54
VARROC – TEAM CONCEPTS	HONDA , TOYOTA	1.10
TOTYOTETSU INDIA -TTID	KIA MOTORS	0.1
JBM OGIHARA	TOYOTA MOTOS	11.73

PRODUCT MATRIX



TRUCK AND BUS COMPONENTS



AUTOMOBILE SAFETY COMPONENTS

SUPPLIERS – DETAIL

PRODUCT	SUPPLIER
CED PAINT	BERGER NIPPON PAINTS
PRE TREATMENT CHEMICAL	HENKEL INDIA & NIHON PARKERIZING
PRE CLEANSING SOLUTIONS	GROWEL AND CO
DM WATER	MV ENTERPRISES
HEATING FUEL – LPG	SUPER GAS
FILTRATION SYSTEMS	SAABSCO
PLANT SPARES	PON ENGINEERS
REPROCESSING CHEMICALS	SUPRAVENI CHEMICALS
FIXTURES	SUMO STEELS
TESTING EQUIPMENTS	TECHNO INSTRUMENTS
LAB CHEMICALS	VASA SCIENTIFIC
LOGISTICS	SRIKANTESHWARA LOGISTICS

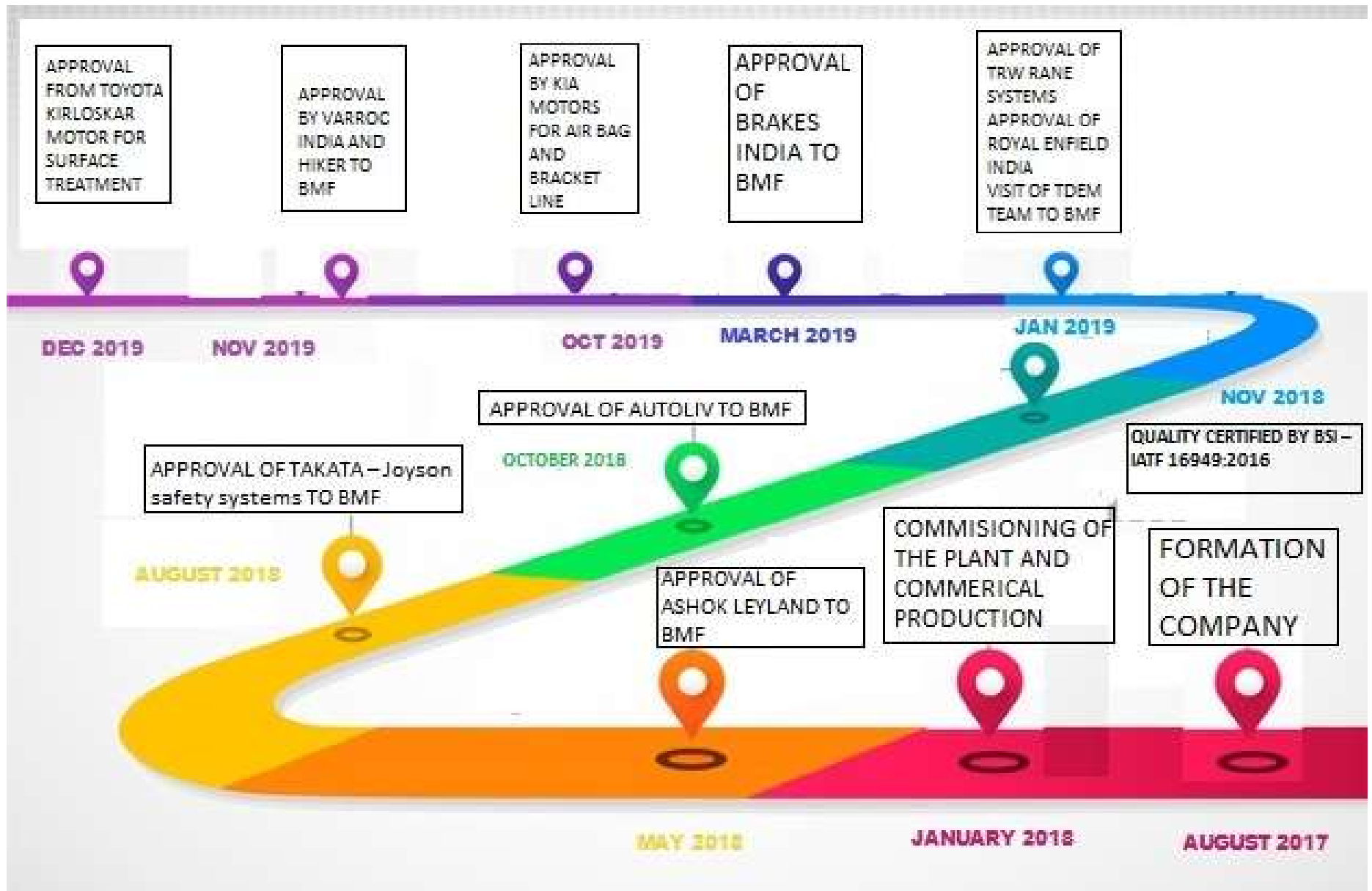
INVENTORY MANAGEMENT AND CAPABILITY



- Capability to store 4 day inventory of finished goods with a storage space of 2000 sq ft and unused area of 1200 sq ft
- Availability of 5200 sqft for expansion and establishment of storage zones in order to accommodate customer pulling requirement of finished goods.
- Development of rack system to store bins and designated trolley storage space for larger parts



PLANT - EVOLUTION





PLANT EVOLUTION

2019

Approval from
Toyota
Kirloskar

NOVEMBER 2020

Approval of
JBM Ogihara

DECEMBER 2020

Approval of Rane Madras

SEPTEMBER 2021

Certification of SQ Mark by
KIA
MSIL approved BMF
process as green

JANUARY 2022

BMF marked green in
system audit of MSIL –
approved as supplier for
CED
2. Denso kirloskar
approved BMF for CED
and 770B project awarded

FINANCIAL CAPABILITY



BMF FACILITY
ESTABLISHED
OUT OF
PROMOTERS'
FUND WITH
NO LOAN
AVAILED TO
ESTABLISH
THE FACILITY

PROMOTERS
HAVE
BOUGHT IN
55.0 LACS AS
CAPITAL
AND
142.29 LACS
AS
UNSECURED
LOAN INTO
THE FIRM

GROSS INTO
THE PLANT
AND
MACHINERY
INVESTMENTS
AS ON 31ST
MARCH 2020
SAT
94.10 LACS

BMF HAS
AVAILED
MARGINAL
WORKING
CAPITAL
FACILITY FROM
THE BANK
AGAINST
STOCK AND
BOOK DEBTS

ALL FUTURE
EXPANSION
CAPEX
REQUIREMENTS
ARE BEING
MET BY
PROMOTERS
EQUITY WITH
NO OUTSIDE
DEBT PROPOSED
TO
BE RAISED

FUTURE OUTLOOK

JAN 2022

1. Approval of MSIL for BMF – VSA system assessment
BMF certified by MSIL for CED process
2. Approval of Denso (DNKI) for BMF

APRIL 2022

1. Shed expansion of 8000 sqft to increase storage area
2. 2 acre land identified to purchase in Bidadi industrial area

June 2022

installation and commissioning of new CED line parallel to the existing ;line

OCT 2022

1. Modernization and up gradation of CED line 001
2. Reduction of cycle time of CED line

2023 – January

1. Acquiring and registration of new land for BMF in bidadi
2. Expansion into other surface coating requirements as per customer demand