

## Tomorrow's Mettle



### Bhoruka Extrusions Pvt Ltd.

“Extruder of choice for iconic projects, by offering value added products and services and reducing customer's total cost of ownership (TCO) by leveraging technology”

Established in 1979

100% subsidiary of \$8 Billion YKK AP Inc. Japan

Extrusion capacity of 1200 MT / Month (6"/ 8"/ 9" - extrusion press)

In-house Anodizing capacity of 250 MT / Month (Italtechno, Italy)

In-house Powder coating capacity of 350 MT / Month (Nordson , U.S.)

Approved PE-F/D-1036 and PE-SDF/D-2525 Applicator

Award winning SAP implementation ( ECC 6.0)

Approved extruder of systems – Airclos, Alu-K, Asahi, Dorma, EFP, IWIN-S, Lixil, Reynaers, Schueco

Online self-updating E-catalogue ( [www.bhorukaecatalogue.com](http://www.bhorukaecatalogue.com))

Online order tracking through SAP (Bhoruka 360 CRM portal) and Planning ( E-Planner)

Branches: Bangalore, Chennai, Coimbatore, Delhi, Hyderabad, Mumbai, Mysore, Pune

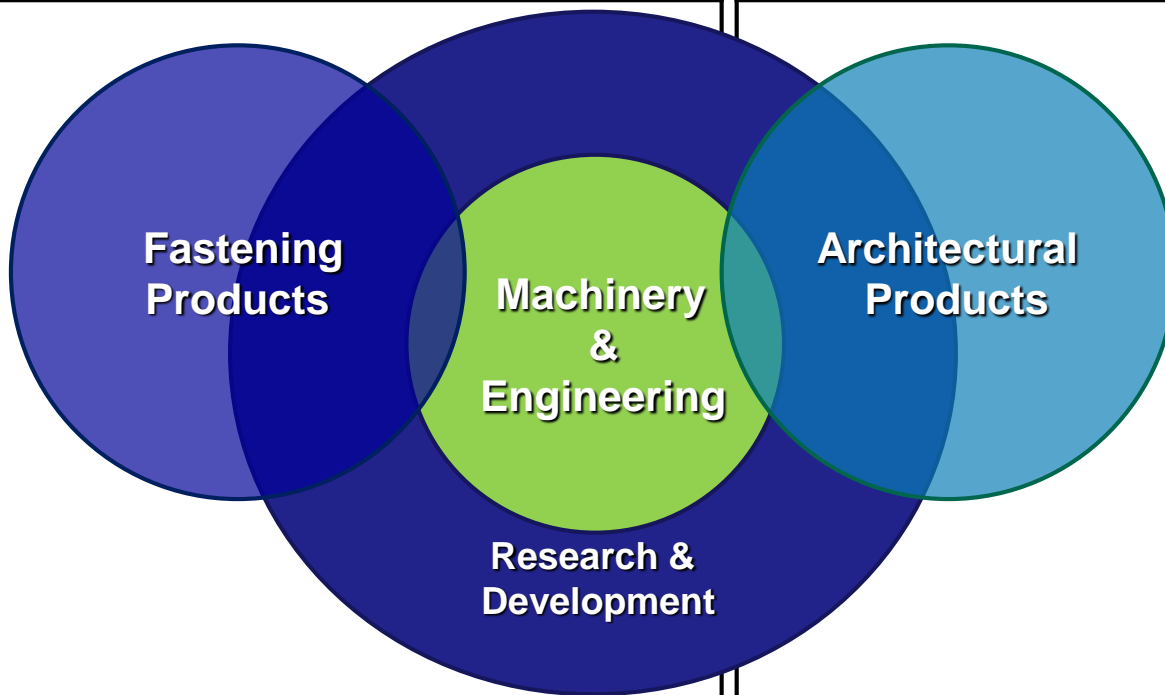
Dedicated Enquiry teams - [enquiries@bhorukaextrusions.com](mailto:enquiries@bhorukaextrusions.com)



## YKK GROUP

### YKK CORPORATION

### YKK AP Inc.



The YKK Group consists of YKK Corporation, the parent company, which produces fastening products, and YKK AP, which produces architectural products. At the center, we have the Machinery & Engineering Department, which supports research and development.

We build our own machinery to produce zippers, windows, and doors. These three business groups are the basis for global management.

## YKK CORPORATION

- **Founded** : January 1, 1934
- **Capital** : US\$121Million

## YKK AP Inc.

- **Founded**: July 22, 1957
- **Capital**: US\$101Million
- **Number of Employees**: 19,400

[As of Feb 2020]

## YKK GROUP

### ■ **Description of Business**

Fastening Products, Architectural Products, Manufacturing and Sales of Fastening and Architectural Machinery

### ■ **Number of affiliated Companies**

72 countries/regions worldwide.  
 Japan: 18 Overseas: 91  
 Total : 109 companies

### ■ **Number of Employees**

Japan : 17,789  
 Overseas : 28,472

**Total (Worldwide) : 46,261** (As of March 2020)

### ■ **Sales** (Consolidated Basis) (Fiscal Year 2020)

Fastening : US\$2,781 Million  
 Architectural Products : US\$3,919 Million  
 Others: US\$ 44 Million

**Total Sales (Worldwide) : US\$6,744Million**

(US\$=108.61Yen)

# 「 CYCLE OF GOODNESS 」



Typeface: Tenshiyo / Pen name: 「Rituzann」  
(It is named after the Tateyama mountain range that I looked up to forever)



Founding president Tadao Yoshida

“No one prospers unless they render benefit to others”

“If we keep creating **new values by innovative ideas** and **inventions** through our business activity, we can expand our business. That brings **prosperity to our customers** and business partners, and as a result, we can **make a contribution to society**”



### Residential Business

(Main products)

- Windows
- Entrance doors and sliding doors
- Interior doors and partitions
- Window shutters

### Exterior Business

(Main products)

- Balconies
- Carpools
- Gates and fences
- Terraces
- Exterior materials

### Renovation Business

(Main products)

- Window remodeling
- Door remodeling
- Building renovation
- Quake-resistance retrofitting

### Commercial Products Business

(Main products)

- Office building windows
- Curtainwalls
- Building entrances
- Windows and doors for low- and medium-rise residential buildings
- Remodeling products

### Facade Business

(Line of business)

- High-rise and complex curtainwalls
- Design, construction and sales of related products

### Industrial Products Business

(Main products)

- Components of machinery and equipment
- Auto parts
- Architectural components
- Eco-friendly products

No. of offices and centers in Japan

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# 198

No. of manufacturing bases in Japan

---

# 24

No. of employees in Japan

---

# 12,311

Overseas presence in

---

# 10

countries/regions

No. of major overseas manufacturing bases

---

# 8

No. of overseas employees

---

# 4,010

## Advanced into Overseas Market since 1976 Building Local Business (10 Countries / Regions 15 Bases)

### Dalian YKK AP Co., Ltd. (1999)

Headquarters: Dalian  
Manufacturing Center: Dalian

### YKK AP (Suzhou) Co., Ltd. (2002)

Headquarters: Suzhou  
Manufacturing Center: Suzhou

### YKK AP Co., Ltd. (2001)

Headquarters: Shanghai

### YKK AP (China) Investment Co., Ltd. (2002)

Headquarters: Shanghai  
Manufacturing Center: Shenzhen

### Bhoruka Extrusion Pvt. Ltd. (2013)

Headquarters: Mysore  
Manufacturing Center: Mysore

### YKK AP MYS Sdn. Bhd (2011)

Headquarters: Kuala Lumpur

● Headquarters & Manufacturing Center

● Headquarters

● Manufacturing Center

● Representative Office

### YKK AP Taiwan Co., Ltd. (1989)

Headquarters: Taipei  
Manufacturing Center: Yangmei

### YKK AP HONG KONG Ltd.

Headquarters: Hong Kong

### YKK AP Facade Vietnam Co., Ltd. (2013)

Headquarters: Ho Chi Minh

### PT YKK AP INDONESIA

The Resident Representative Office in Vietnam (2012)

### YKK AP (THAILAND) CO., LTD (2015)

Headquarters: Bangkok

### YKK AP Singapore Pte Ltd. (1976)

Headquarters: Singapore

### YKK AP Facade Pte Ltd. (2008)

Headquarters: Singapore

### PT YKK AP INDONESIA (1986)

Headquarters: Tangerang  
Manufacturing Center: Tangerang

### Erie Architectural Products Inc. (2019)

Headquarters: Ontario(Canada)

### YKK AP America Inc. (1991)

Headquarters: Atlanta  
Manufacturing Center:  
• Commercial- Dublin,  
Dallas,  
Cincinnati  
• Residential- Macon

※As of June 2020



## Grand Concept

YKK AP presents operational excellence built up around the world combining research and development through detailed study of the climate and characteristics of each region, to conceptualize new ideas creating comfortable environment for the people residing.

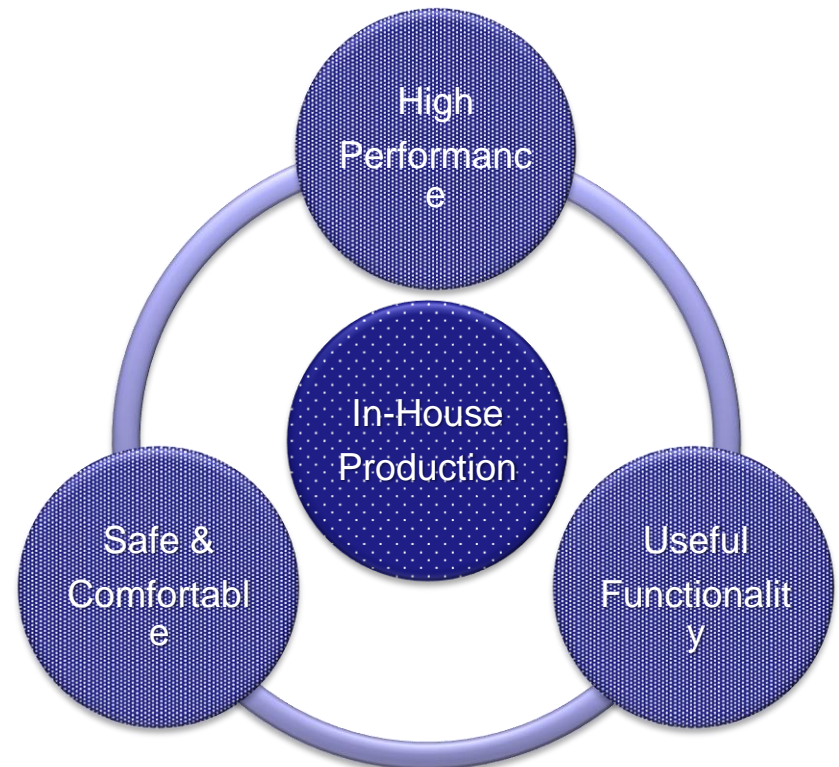


## Product Characteristics



### Quality with a Difference

Setting Standards of Residential Fenestration Quality in India



Performance

Structural (Wind Load)		2500 Pa Deflection: 1/175 [ASTM E 330]
Air Infiltration		1.12m <sup>3</sup> / (h·m <sup>2</sup> ) Maximum at 75 Pa [ASTM E 283]
Water Tightness		350 Pa / 300 Pa [ASTM E 331·547]
Sound Insulation		GradeT-2 [30dB] [JIS A 1416]
Open-Close Testing		10,000 Cycle No Damage [JIS A 4706]

Product Line Up

Sliding	Fixed / Casement Door
Sliding 2 LEAF (2 Track) 	Fix 
Sliding 4 LEAF (2 Track) 	Top Hung 
Sliding 3 LEAF (3 Track) 	Casement 
Sliding 6 LEAF (3 Track) 	Door 

Tested System with Basic Performance  
Safety and operation measures are considered  
to create a comfortable living environment





**Mr. Fumihiko Umamo**  
Managing Director



**Mr. Vijay N**  
Extrusion



**Mr. Akira Miyazaki**  
Technical Director



**Mr. Prashant C**  
Powder Coating



**Mr. Rajat Agarwal**  
Sales Director



**Mr. Syed Moinuddin Zaman**  
Quality



**Mr. Prasanna Venkatesh**  
Factory Manager



**Mr. Praveen M H**  
Accounts and Finance



**Ms. Suma S**  
Planning



**Mr. Pradeep Rajshekar**  
HR

Billet Casting

Die Manufacturing

Extrusion

Anodising

Powder Coating

Components

## TECHNICAL FACT SHEET

Parameters	Press-1	Press-2	Press-3
MAKE	Wean United (USA)	Year Chang (Taiwan)	Cheng Hua (Taiwan)
Strength of extrusion press (TONS)	1800	1100	2750
Diameter of billet	203 mm	152 mm	228mm & 203mm
Diameter of container	210 mm	158 mm	236mm & 210mm
Diameter of main Cylinder - Inches	37	29.5	44.48
Diameter of small Cylinder - Inches	9	7.087	9.09
Maximum pressure of Press (BAR)	210 BAR	210 BAR	230 BAR
Mark of Billets (6063-6060)	6063, 6005, 6105, 6061		6063, 6060, 6101, 6005, 6351, 6061, 6082
Conveyor Length	36Mtrs.	36Mtrs.	50.90 Mts
Type of Billet Oven (gas, diesel, induction)	Hot log shear	Induction	Hot log shear
Type of Puller	Track type	Track type	Track type

## TOOL ROOM

Die types	Solid, Hollow, Semi-hollow
Diameter CCD	Solid – 254mm; Hollow-230mm
# of sections	>14,000
Lead Time	Solid - 15 days; Hollow - 21 days

## BHORUKA ANODISING

Make	Italteco, Italy
Microns	5 to 25
Colors available	Silver, Champagne, Bronze (Light, Medium, Dark) & Black
Maximum Length	6400 mm
Finish	Matt, Brush

## BHORUKA POWDER COATING

Pre - Treatment	Chemetall, Germany
Powder Coating	Nordson , U.S.
Spray System	Automatic
Thickness Range	60 To 120 Microns
Colors	All RAL Shades
Type	Metallic / Non Metallic
Gloss	High Glossy, Semi Glossy, Matt
Finish	Plain, Texture, Structure
Maximum Length	7500 mm

## Chemical Composition as Per EN 573-3:2007

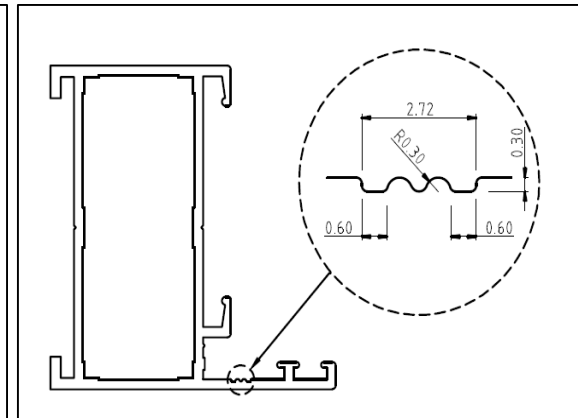
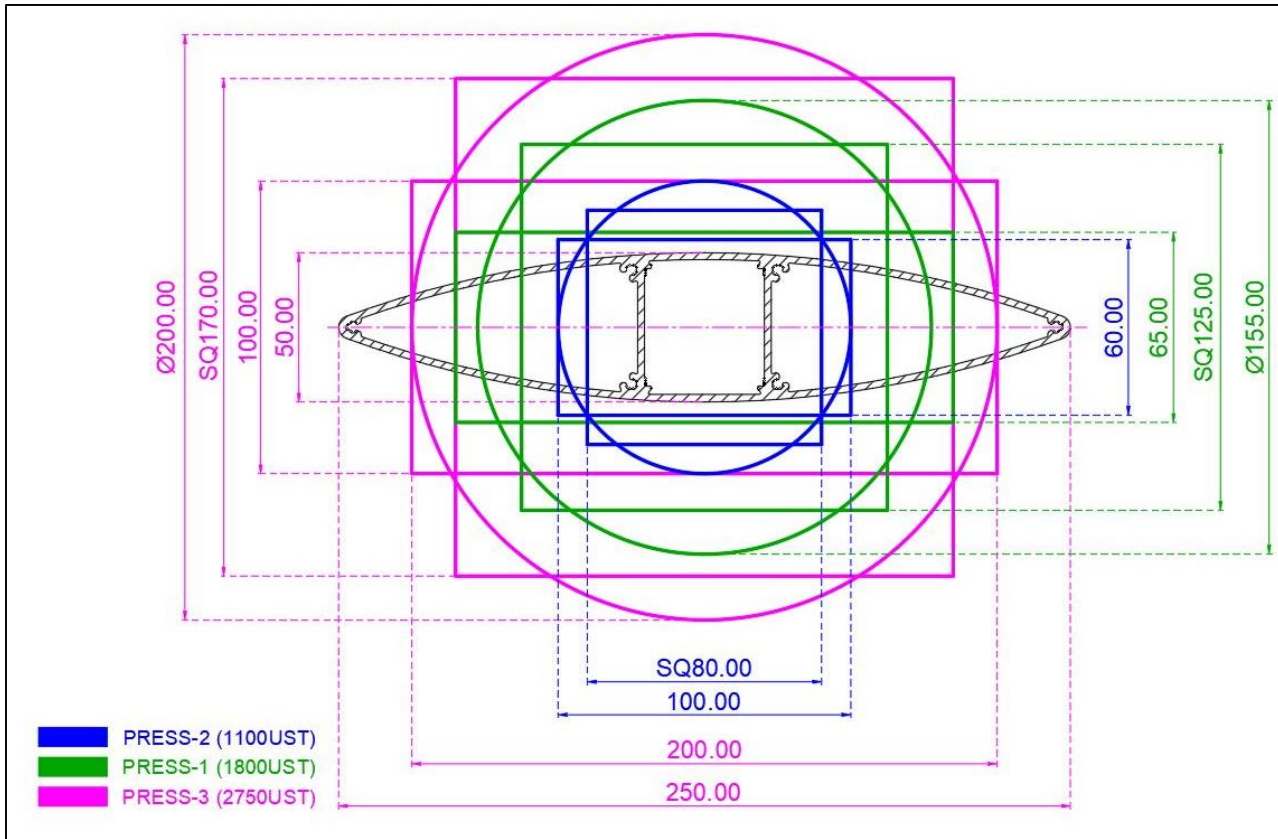
Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Aluminium Min
6063	0.20-0.60	0.35	0.1	0.1	0.45-0.90	0.1	0.1	0.1	Remainder
6060	0.30-0.60	0.10-0.30	0.1	0.1	0.35-0.60	0.05	0.15	0.1	Remainder
6005	0.6-0.90	0.35	0.1	0.1	0.40-0.60	0.1	0.1	0.1	Remainder
6082	0.7-1.3	0.5	0.1	0.4-1.0	0.6-1.2	0.25	0.2	0.1	Remainder
6101	0.30-0.7	0.5	0.1	0.03	0.35-0.8	0.03	0.1	0	Remainder
6351	0.7-1.3	0.5	0.1	0.40-0.8	0.40-0.8	0	0.2	0.2	Remainder

## Mechanical properties as per DIN 755-2/IS-1285

Alloy/T6	Tensile Strength, <i>min</i> MPa	Proof Stress <i>min</i> MPa	Elongation A50mm <i>min</i> in %
6060	185	150	7
6101	200	170	8
6063	185	150	7
6005	255	200	15
6061	290	235	7
6351	295	255	7
6082	295	255	7

## Tempers:

- T4-Solution heat treated & naturally aged
- T5-Cooled from hot working and artificially aged (at elevated temperature)
- T6-Solution heat-treated & naturally aged.



- Unique Identification mark in all new profile developments (since 2015)
- This Identification mark will be prominent throughout the profile length (utilizing only 0.3mm thickness)
- It will be located at only non-functional and unexposed/hidden area of the profile.
- ID mark will be non-functional/ un-exposed area)

8"--Press-1 (1800UST)	
Square	125x125mm
Rectangle	170x65mm
Circle	Ø155mm

9"--Press-3 (2750UST)	
Square	170x170mm
Rectangle	200x100mm
Circle	Ø200mm
Elliptical	250x50mm

6"--Press-2 (1100UST)	
Square	80x80mm
Rectangle	100x60mm
Circle	Ø100mm





- **Extrusion**



- **Billet Casting**



- **Die Tooling**



- **Anodizing**



- **Powder Coating** • **Components**





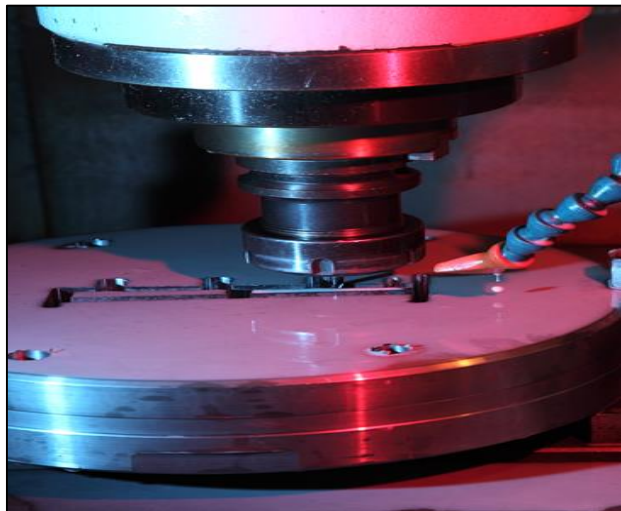


- Percentage on complaints is at all-time low!  
Well below industry norms
- Rework percentage was very low and achieved the lowest plant rejection rate of 3.5 % last year
- Customer rejection is less than 0.27%

“ No QC teams are needed, every process has QC inbuilt ”

*Syed Moinuddin Zaman*  
*Asst. Manager Quality control*





- With state of the art technology with latest machinery like CNC wire cutting, surface grinding etc, which helps improving die quality
- R&D is intrinsic to our process, we design exactly to your need
- We are consistently developing ~100 dies/month of which 75% are for new shapes



With our 3D-printing technology our customers can test the product for snap/slide fitment or gasket development prior to die manufacturing

- FFF printing technology with auto platform calibration.
- Print up a 60-micron resolution with a 0.25mm nozzle.

## Building and Construction

We are one of the **largest direct-sales suppliers** to **the building and construction sector** in India and offer various products ranging from Doors, Windows, Railings, Formwork, Shutters, Curtain Wall systems and more in a wide variety of shapes, sizes and finishes! Our value offerings can be broadly categorised as follows -

### Catalogue

Our catalogue contains more than 10,000 sections that Boruka has developed by virtue of being in the industry for more than 40 years. It offer a wide variety of readily available designs from various industries and sectors for you to choose from

### Made-to-order

Drawing from our vast experience, our Design and Engineering department excels at meeting specific customer requests as per the needs and demands of various projects and helps in turning your vision into reality

### Systems

We have the unique distinction of being the only extruder in India associated with many globally reputed systems such as Airclos, AluK, Dorma, EFP, Schueco to name a few. We will be delighted to offer their range of products through authorised channels

E-Catalogue Online self-updating catalogue with unique set of features

- Get instant access to thousands of profiles listed by different categories/sub-categories
- View product images & description along with other details
- Download drawings in PDF format right on your computer
- Send us an enquiry with complete details directly from the software
- Search by 'section number'
- More than 50 designs automatically added every month right on your computer
- Choose from our on-line as well as off-line module for on-the-go work

## OEM

Since our inception, Bhoruka has been catering to the growing demand and utilization of aluminum in various sectors ranging from – Electronics, Transportation, Textiles, Renewable Energy, Defense, Aerospace etc. We also specialize in the development of custom-made profiles under our made-to-order offering. We have extensive experience in working with various industrial alloys such as 1060, 6063, 6005, 6082, 6061. Some of the key sectors served by us are –

### Electrical & Electronics

One of the earliest uses of aluminum sections was in the Electrical & Electronics sector. Bhoruka has been supplying aluminium in this sector for over 30 years. Most of our sections are used for applications which require very good conduction, heat control, heat transfer etc. We manufacture a wide variety of sections using different alloys depending on the end-use of our customers

### Transportation

We have got a wide range of sections which are used in the Transportation Sector. Some of our product range includes sections for Bus Body & Truck Body. Bhoruka also manufactures sections for carriers, footsteps and other light SUV requirements

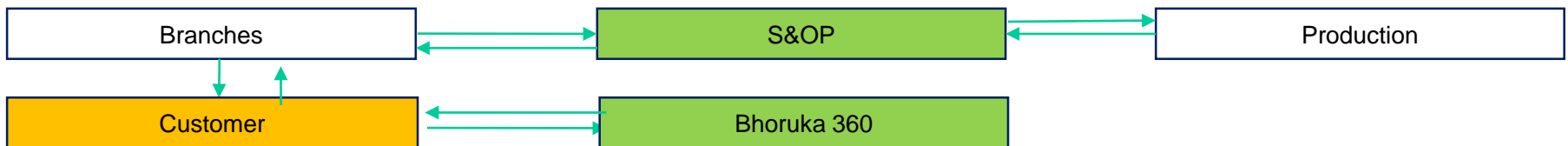
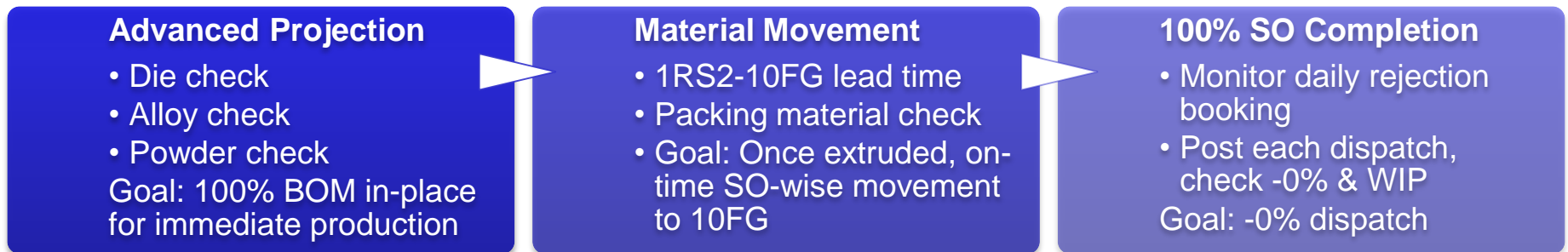
### Textile industry

We supply various sections for for the textile industry, which is an important part of the Indian economy. The quality & precision of these sections are of high importance & Bhoruka is committed in providing both the right quality & service to this sector

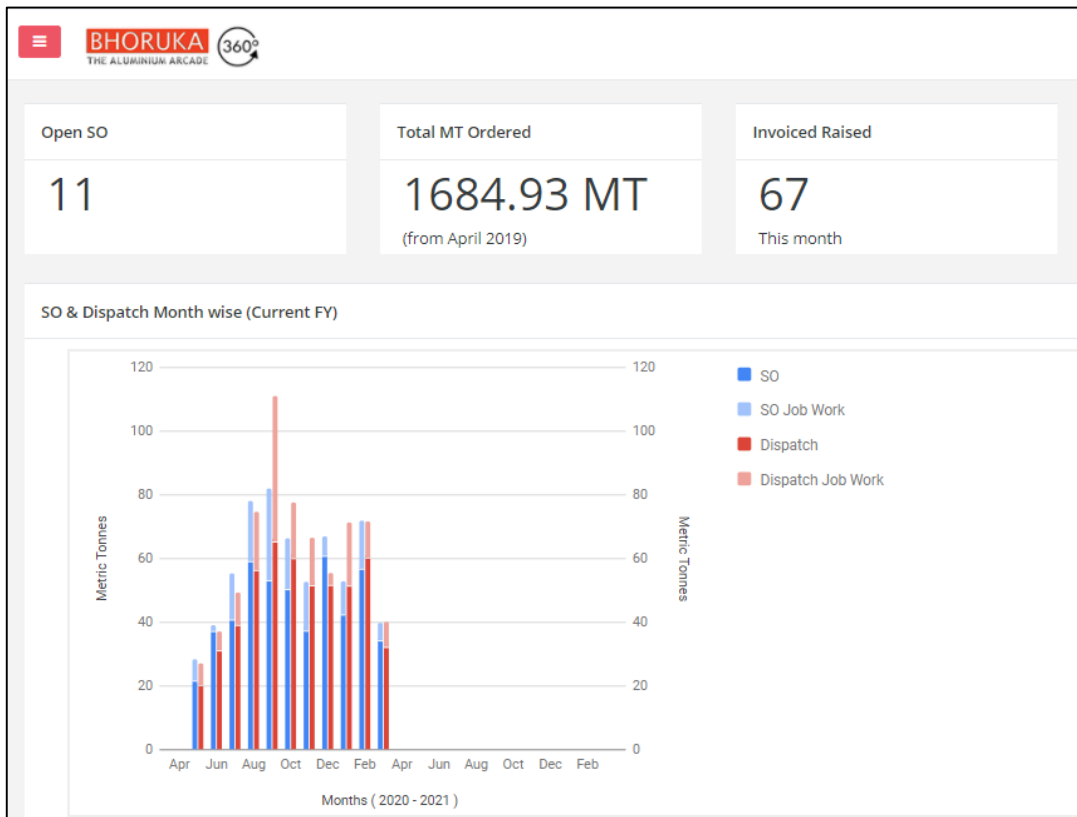
### Renewable Energy

Bhoruka has been always committed to a safer and better environment. Keeping this in mind we have dedicated offerings for our solar panel and windmill customers. These sections are often supplied in natural anodizing which are all done at our own in-house facility.

Factor	Bhoruka	Competitor	BEPL-Advantage
SO Release	Pieces	Kgs	Matches with FAB Cutting-list software
Weight Measurement	Drawing Mean Weight	Actual Weight	Matches with Tender weight, PO-Invoice consistency, ~3.5% savings on powder weight
Dispatch Tolerance	1-1000 pcs (-0%+5%)/ >1000 pcs (-0%+2%)	+/- 10% in Kgs	Reduced inventory and less total cost
Matching Section	@Aging and Invoice blocked	No check	Reduced inventory at customers
Order Status	Online	NA	Customer can track PO-Invoice online
Est Dt Dispatch	E-Planner (March 2019)	MS Excel	Customers can plan operations based on estimated date of dispatch







- Industry-first CRM Module Bhoruka 360 for customers (100% automated via SAP)
- Invoices, test certificate and **packing** list are readily available in the portal
- Live updates on your orders are made available
- Real-time order status and expected order completion dates

“ Multi-dimensional operational metrics gives me a 360° view ”

**BHORUKA 360°**  
THE ALUMINIUM ARCADE

INV #: 0094422632 Dated: 02 Mar 2021

SO #	:	Transporter Name	:	OTHER PARTY
PO #	:	Transporter LR #	:	
PO Date	:	Vehicle #	:	19 Feb 2021
Project Name	:	Driver Phone #	:	
Deliver #	:		:	
Text	:		:	

Uploaded Documents	
1	Warranty certificate
2	Test certificate
3	Photos
4	Packing List



Mr. Mathew Shijoy



Ms. Suma S

## Interpon D1000

**Interpon**  
POWDER COATINGS

**AkzoNobel**

**Interpon D Approved Applicator**

**Interpon D1000 Series**

**Bhoruka Extrusions Pvt Ltd**  
#01, KRS Road, Metagalli, Mysore-570016 India

Has fulfilled AkzoNobel's tests and inspection regarding the pre-treatment, the application, the quality management standards, the procedures and Complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from  
**30<sup>th</sup> June 2020 to 29<sup>th</sup> June 2022**


Approved for Aluminum Alloys: AA6063  
Approved for Pre-treatment Type: Chromating with Chromating



\_\_\_\_\_  
P.V.R. Narasimha Rao  
Sales Manager, Powder Coatings, India

Date: 7th July 2020  
Certification Number: IND 63-20  
AkzoNobel India (Pvt) Ltd. Plot No. EDP, 65A, 65B, 65C, Hindustan Industrial Area, Bangalore – 560114, India

## Interpon D2000

**Interpon**  
POWDER COATINGS

**AkzoNobel**

**Interpon D Approved Applicator**


**Interpon D2000 Series**

**Bhoruka Extrusions Pvt Ltd**  
#01, KRS Road, Metagalli, Mysore-570016 India

Has fulfilled AkzoNobel's tests and inspection regarding the pre-treatment, the application, the quality management standards, the procedures and Complies with the requirements of the Architectural Range Approved Applicator schedule.

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P.V.R. Narasimha Rao  
Sales Manager, Powder Coatings, India

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Certification Number: IND 65-20  
AkzoNobel India (Pvt) Ltd. Plot No. EDP, 65A, 65B, 65C, Hindustan Industrial Area, Bangalore – 560114, India

## PE-F

**JOTUN**

*Certificate  
of Approval*


*Bhoruka Extrusions Pvt. Ltd.*  
No. 1, KRS Road, Metagalli, Mysore - 570016

is certified as an Approved Applicator to coat  
**Jotun Façade Series**  
a product from Jotun Powder Coatings

This company fulfills the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings standards.

  
Date: 17 January 2021  
Indian Office of Representative  
Jotun India Pvt. Ltd.

## PE-SDF


**JOTUN**

*Certificate  
of Approval*

*Bhoruka Extrusions Pvt. Ltd.*  
No. 1, KRS Road, Metagalli, Mysore - 570016

is certified as an Approved Applicator to coat  
**Jotun Super Durable Series**  
a product from Jotun Powder Coatings

This company fulfills the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings standards.

  
Date: 17 January 2021  
Indian Office of Representative  
Jotun India Pvt. Ltd.

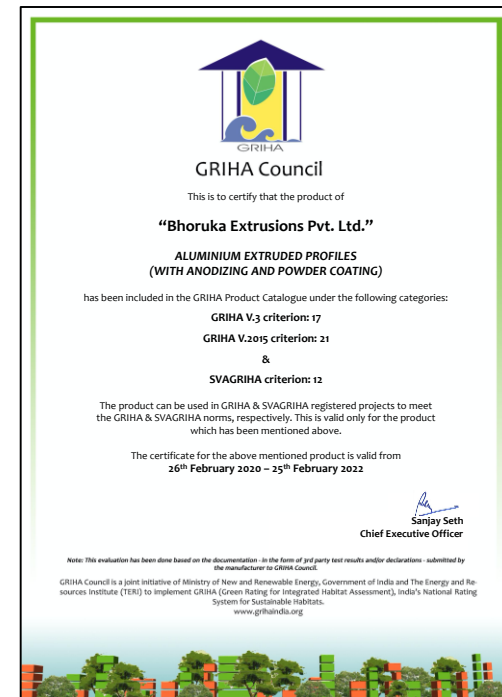
## ISO 9001:2015



## IGBC



## GRIHA



## Transport

- Metro coaches
- Gangway parts

## Automotive

- Foot Step
- Roof Rails

## Textile

- Roving Tubes
- Bobbin Rail

## Projects

- Radiant Baffle
- Cycle frames



**Machining** – Inhouse machines from Emmegi, and Hurco

**Project Management** - Developing the entire value chain and taking responsibility upto end delivery

**Designing** – Working with customer to simplify their designs for efficiency and cost reduction

**Tools and Fixture Developments** – To improve storage and packaging specific to projects

**Special Purpose Machine (SPM)** - Developed bending , and turning machines inhouse

**Sub Assembly** – Steel, plastic, wooden and electronic sub assembly



#427E, Hebbal Industrial Area  
Mysore – 570016  
Karnataka, **India**  
Phone- +91 - 821 - 2510351 / 2513876

E-mail: [marketing@bhorukafabcons.com](mailto:marketing@bhorukafabcons.com)  
Web: [www.bhourkafabcons.com](http://www.bhourkafabcons.com)













When you think extrusion, think **Bhoruka**,  
Your partner of choice

Thank You