



"Our vision is to be the extruder of choice for iconic projects by delivering products and services that reduce our customers' total cost of ownership. We do this through innovative technology and a commitment to sustainability, customer satisfaction, and operational excellence"



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.)

In-house Machining Facility with new CNC Machining Centres from FOM Industries, Italy

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)

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

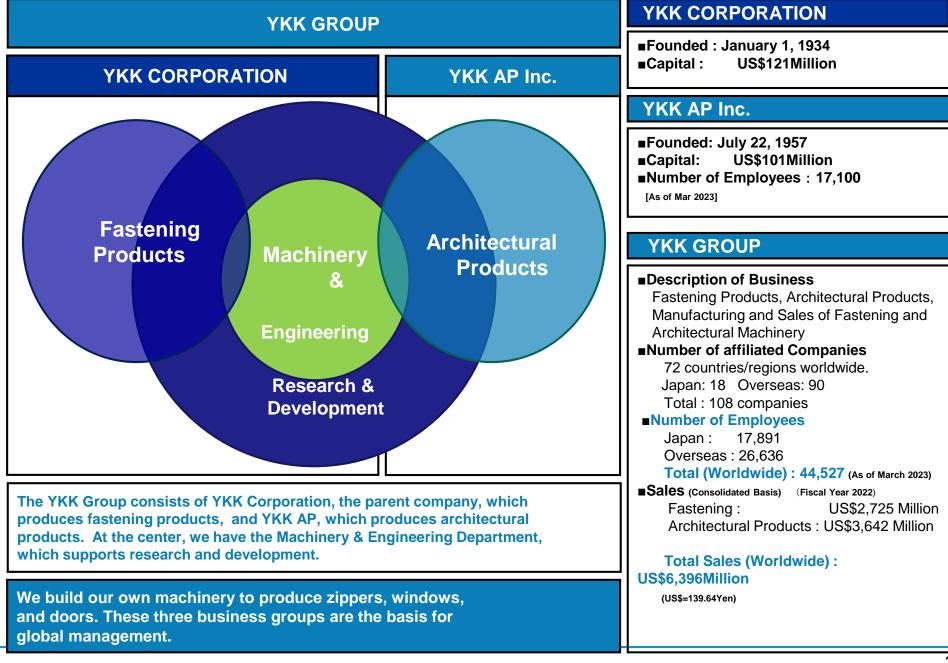
Branches: Bangalore, Chennai, Coimbatore, Delhi, Hyderabad, Mumbai, Mysore, Pune

Dedicated Enquiry teams - enquiries@bhorukaextrusions.com



YKK Group Structure







The Origin of Manufacturing of YKK 《YKK PHILOSOPHY》

CYCLE OF GOODNESS J





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**"

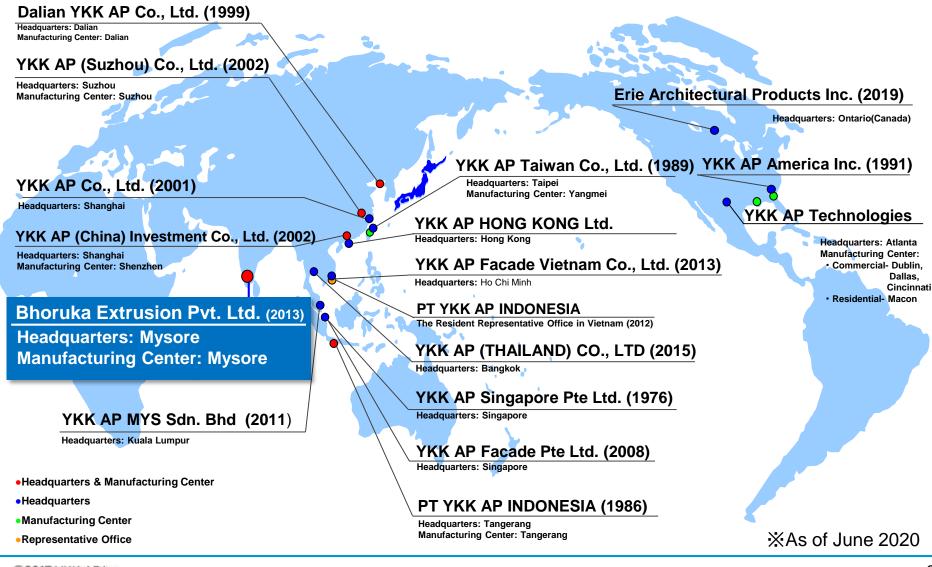


About YKK AP



Residential Business Main Products Windows Entrance Doors and Sliding doors Interior doors and partitions Window shutters	Exterior Business «Main Products» Balconies Carports Gates and fences Terraces Exterior materials	Renovation Business «Main Products» Window remodeling Door remodeling Building renovation Quake -resistance retrofitting	Commercial Product Business «Main Products» Office Building Windows Curtain Walls Windows and doors for Iow-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</main>
Offices and centers in Japan	Manufacturing bases in Japan	Employees in Japan	Global HQ countries/regions	Overseas manufacturing bases	Employees overseas
201	24	12,800	11	8	4,300

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





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.



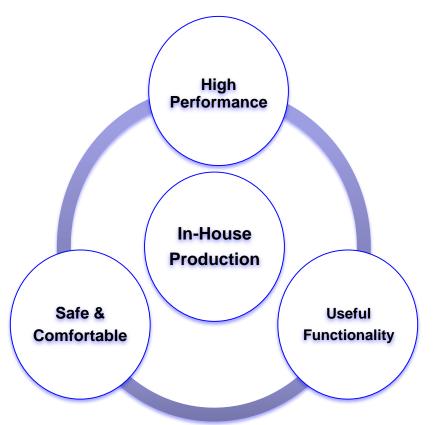


Product Characteristics



Quality with a Difference

Setting Standards of Residential Fenestration Quality in India



BHORUKA A YKK AP COMPANY IWIN Performance & Line Up

Performar	nce		Product Line Up	
Structural	(-a)	2500 Pa	Sliding	Fixed / Casement Door
(Wind Load)		Deflection: 1/175 [ASTM E 330]	Sliding 2 LEAF (2 Track)	Fix
Air Infiltration		1.12m ³ / (h ∙ m²) Maximum at 75 Pa [ASTM E 283]	Sliding 4 LEAF (2 Track)	Top Hung
Water Tightness		600 Pa [ASTM E 331 ▪ 547]		Casement
Sound Insulation		GradeT-2 [30dB] [JIS A 1416]	Sliding 3 LEAF (3 Track)	
Open-Close Testing		30,000 Cycle No Damage [JIS A 4706]	Sliding 6 LEAF (3 Track)	Door
Safety and op	n with Basic Pe eration measure mfortable living	es are considered		



Organization Chart



Mr. Rajat Agarwal Managing Director



Mr. Hamagishi Kodai Technical Director



Mr. Kumagai Kaoru Executive Director



Mr. Prasanna Venkatesh Factory Manager



Ms. Suma S Planning



Mr. Abhishek K Extrusion



Mr. Prashanth C Surface Coating



Mr. Mohan H C Quality



Mr. Praveen M H Accounts and Finance



Mr. Pradeep Rajshekar HR



Plant & Equipment at BEPL

	TECHNICAL FACT SHEET					TOOL ROOM		
Billet Casting	Parameters	Press-1	Press-2	Press-3	* *	Solid, Hollow, Semi-hollow Solid – 254mm; Hollow-230mm		
	MAKE	Wean United (USA)	Year Chang (Taiwan)	Cheng Hua (Taiwan)	# of sections			
Die Manufacturing	Strength of extrusion press (TONS)	1800	1100	2750		Solid - 15 days; Hollow - 21 days ORUKA ANODISING Italtecno, Italy		
	Diameter of billet	203 mm	152 mm	228mm & 203mm	Microns Colors	5 to 25 Silver, Champagne, Bronze , Black		
Extrusion	Diameter of container	210 mm	158 mm	236mm & 210mm	Maximum Length Finish	6400 mm Matt, Brush		
Anodising	Diameter of main Cylinder - Inches	37	29.5	44.48	Pre - Treatme	UKA POWDER COATING nt Chemetall, Germany		
	Diameter of small Cylinder - Inches	9	7.087	9.09	Powder Coati Spray System Thickness			
Powder Coating	Maximum pressure of Press (BAR)	210 BAR	210 BAR	230 BAR	Range Colors	60 To 120 Microns All RAL Shades		
	Mark of Billets	6063, 6005,	6105 6061	6063, 6060, 6101, 6005,	Type Gloss	Metallic / Non Metallic High Glossy, Semi Glossy, Matt		
Machining	(6063-6060)			6351, 6061, 6082	Finish Max Length	Plain, Texture, Structure 7500 mm		
	Conveyor Length	36Mtrs.	36Mtrs.	50.90 Mts	Machining	MACHINING FMC 340, Blitz Alva-550 Double		
Components	Type of Billet Oven (gas, diesel, induction)	Hot log shear	Induction	Hot log shear	Centres Make	Head Cutting FOM Industries, Italy Milling, Drilling, Boring,		
	Type of Puller	Track type	Track type	Track type	-	Countersinking, Angle Cutting, Turning & Tapping		

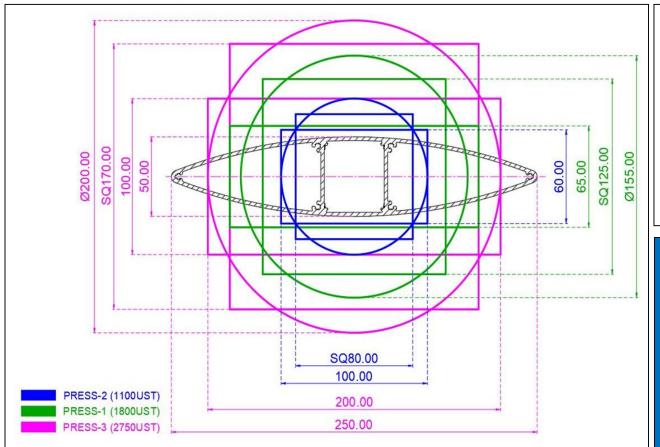


Chemical & Mechanical Composition of the Alloy 6xxx Series

	Chemical Composition as Per EN 573-3:2007									
Alloy	Si	Fe	Cu	Mn	Mg	Cr	· Zr	l	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	0.0	5 0.1	5	0.1	Remainder
6061	0.4-0.8	0.7	0.15-0.4	0.15	0.8-1.2	0.04-0	0.35 0.2	5	0.15	Remainder
6005	0.6-0.90	0.35	0.1	0.1	0.40-0.60	0.1	0.1		0.1	Remainder
6105	0.6-1.0	0.35	0.1	0.15	0.45-0.8	0.1	0.1		0.1	Remainder
6082	0.7-1.3	0.5	0.1	0.4-1.0	0.6-1.2	0.2	5 0.2		0.1	Remainder
6101	0.30-0.7	0.5	0.1	0.03	0.35-0.8	0.0	3 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
Me	chanical p	oropertie	s as per	DIN 75	5-2/IS-1285	;				
Allow/T	Tensile	Strength,	Proof St	ress min	Elongatio	n	Temp	ers	•	
Alloy/T	min	MPa	M	Pa	A50mm min	in %	• T4-Solution heat treated &			
6060	1	.85	15	50	7		• 14-50 natural			treated &
6101	2	200	17	70	8		nataran		600	
6063	1	.85	15	50	7	7		• T5-Cooled from hot working		
6005	005 255 200		15	and artificially aged (at e		d (at elevated				
6105	2	260	24	40	8		tempera	atu	re)	
6061	2	290	235 7		7		• T6-Solution heat-treated &		treated &	
6351	2	295	25	55	7		natural			
6082	2	.95	25	55	7					



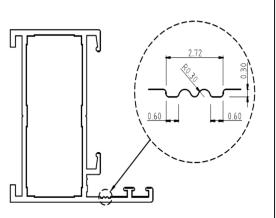
Extrusion Range Guidelines



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						

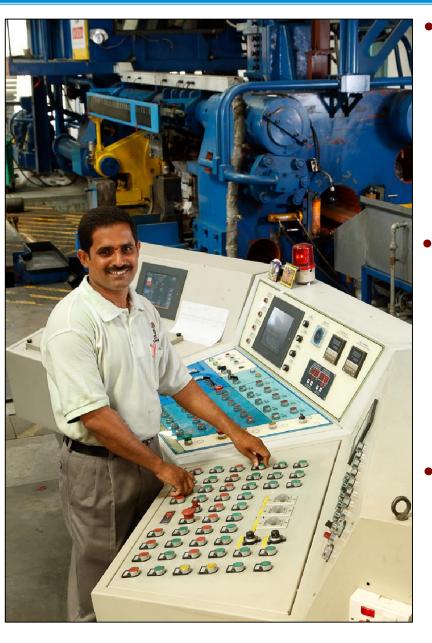


- Unique Identification mark in all new profile developments (since 2015)
- This Identification mark willbe prominent throughout theprofile length (utilizing only0.3mm thickness)

- It will be located at only nonfunctional and unexposed/hidden area of the profile.
- ID mark will be nonfunctional/ un-exposed area)



One of the Largest Integrated Plant's in India



Extrusion



Billet Casting



Die Tooling



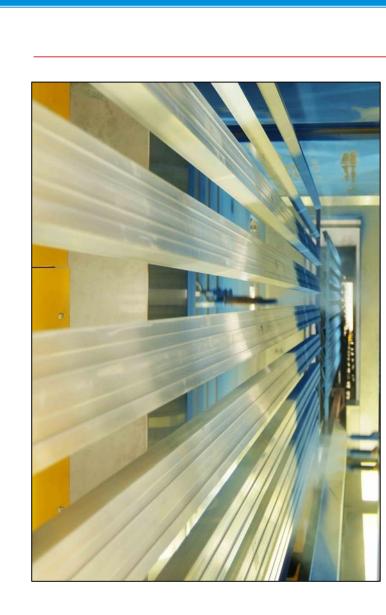




Powder Coating • Components







Quality

BHORUKA

- 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%

6No QC teams are needed, every

process has QC inbuilt 🎵

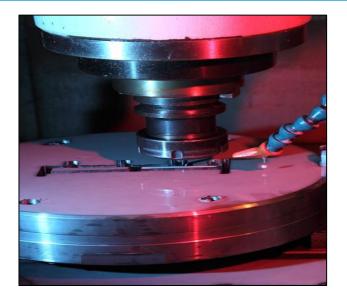


Mr. Mohan H C Quality control

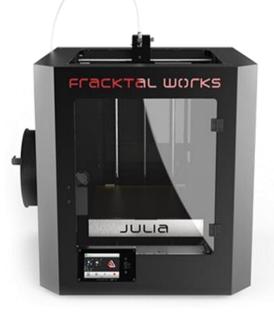




>14,000 customizing choices



- 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 Bhoruka 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

<u>E-Catalogue</u> 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



<u>OEM</u>

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.



Key Features of buying from Bhoruka

Factor	Bhoruka	Competito r	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	<pre>@Aging and Invoice blocked</pre>	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
Advanced Pro •Die check •Alloy check •Powder check Goal: 100% BOM in-place production	e for immediate	Material Moveme S2-10FG lead tim cking material ch al: Once extrude -wise movement	Monitor daily rejection booking booking • Post each dispatch, check -
Branches		S&OP	Production
Customer		Bhoruka 360	



Open SO	UIM ARCADE	Total MT Order	red	Invoid	ed Raised		360 for customers (100% automated via SAP)
11		1684 (from April 201	.93 MT	67 This	7 nonth	•	Invoices, test certificate and packing list are readily available in the portal
SO & Dispatch 120 100 80 90 90 90 60			120 100 80 60	SO SO Jo Dispa		•	Live updates on your orders are made available Real-time order status and expected orde completion dates PO Upload, PI Approval and Ticketing system to raise the Quality Complaints
40 20 0	Apr Jun Aug Oct Dec Feb	Apr Jun Aug C 2020-2021)	40 20 Oct Dec Feb 0			((Financial Ledgers of Transactions executed with Bhoruka Extrusions are made available. Multi-dimensional operational metrics gives me a 360°view
BHOR THE ALUMINE INV # : 0094422			Dated : 02 Mar 2021	Unloade	d Documents		



Interpon D1000 Interpon D3000 AkzoNobel Interpon. AkzoNobel Interpon. Interpon D Approved Applicator Interpon D Approved Applicator Interpon D1000 Series Interpon D3000 Series Bhoruka Extrusions Pvt Ltd Bhoruka Extrusions Pvt Ltd #01, KRS Road, Metagalli, Mysore-570016 India #01, KRS Road, Metagalli, Mysore-570016 India s fulfled AktoNobel's teets and impection regarding the preattled ActoNobel's tests and inspection reparding the pre-treatment the application, the isuality management standards, the procedures and Complete with the requirements of the Architectural Hange Approved Applicator schedule. o application. the quality management alandards, the procedures and complex with the requirements of the Architectural Range Aponeous Acclicator schedule. This certificate is effective from This orthoge is effective from 15th March 2022 to 14th March 2024 23rd September 2022 to 22rd September 2024 InterponD2000 PE-F Its Autom Alexa AA3001 for Aluminum Alleys - AA0000 te Pre-Indirect Type: Dromatory to Releasers Type Chonatong They balance READ REAL PROPERTY. P.V.R.Nacistreha Ran Managari, Praetar Coalings, India P V ft Nassalinna flas: Dales Manupel, Proder Coatinge India **¹JOTUN** AkzoNobel Interpon le 25^e Mech 2022 Historion Number: NO 114-22 37th September, 2022 Isotion Number, IND, 133-422 Interpon D Approved Applicator Interpon D2000 Series Bhoruka Extrusions Pvt Ltd #01, KRS Road, Metagalli, Mysore-570016 India The application, the quality management standards, the procedures and Complex with the regurements of the Architectural Range Approved Applicator schedule This contribute is effective from 23rd September 2022 to 22rd September 2024 is company fulfal the requirements set by later Nowder Carlings for membranes and application of ponder coatings. These include having the necessary equipment, process controls and technical inouriedge to comply with Jotus Ponder Castings standards. risum Alays, AA8303 Percentrart from Cromatizing Enderstand Annual States Enderstand States Enderstand States P.V.R.WasserineRee Same Variager Powder Champs Initia c 271 September, 2003 Academ Hummer, IND 134-22 Box ("Seeap Hill



Jus .

Amun India Put. 118



ISO 9001:2015		GRIHA
BHORUKA EXTRUSIONS PVT. LTD.		GRIHA Council
Bureau Ventas Centificaton Holding SAS – UK Branch centifies that the Management System of the above organization has been audited and found to be in accordance with the requirements of the Management System Standard detailed below. Standard		"Bhoruka Extrusions Private Limited" WIN Range of Aluminium Doors and Windows
ISO 9001:2015 Scope of certification		(Under Typology: Doors & Windows: panels and frames) have been included in the CRIHA Product Catalogue under the following categories GRIHA V.2015 criterion: 21 & SVAGRIHA criterion: 12 and
MANUFACTURE OF MILL FINISH, ANDDIZED AND POWDER COATED ALUMINUM EXTRUSIONS IN STATADARD AND FUNCTIONAL SHAPES FOR STRUCTURAL JARCHITECTURAL COMPONENTS TRANSPORT, TEXTILE AND ELECTRICAL INDUSTRIES		Aluminum Artusions (Under Typology: Innovation products) has been included in the GRIHA Product Catalogue under the following categories
Original cycle start date: 12 March 1995 Recertification cycle start date: 11 November 2021 Subject to the confinued astartladory operation of the organization's Management System, this certificate express on 13 December 2024	IGBC	GRIHA V.2015 criterion: 31 & SVAGRIHA criterion: 14 The products can be used in GRIHA & SVA GRIHA registered projects to meet the GRIHA & SVA GRIHA norms, respectively. This is valid only for the products which have been mentioned above.
Certificate No. IND.21.2152/QMU Version: 1 Revision date: 11 November 2021		The certificate for the above-mentioned products is valid from 24 th May 2024 – 23 rd May 2026
Signed on Industri of DRACE TAS UK Branch- Suggestions in KAMANA Mod CERTITY INTERPORT AND IN THE INFORMATION INFORMATION INFORMATION Contention INFORMATION INFORMATION INFORMATION INFORMATION Contention INFORMATIONI INFORMATIONI INFORMATIONI INFORMATIONI INFORMA		Simply Section Note President & Chief Executive Officer set in device the data specified product, it is consummed to consider that the private in setting the Calabit menditive symplex the ordering the data specified product, it is the simple specified product data specified product and the data specified product and product and the data specified product and product and the data
energewart gebre rügenlicht wijn de ditores ty vorsaftigte organization. Ni obeite filo ordinale weldely jewer wir + 11 23 8/74 2004.	IGBC Membership Certificate	
	This is to certify that Bhoruka Extrusions Pvt Ltd	
	is an Annual Member of Indian Green Building Council (IGBC) Bearing Membership No IGBCMM170151 This certificate shall be valid up to December 2024	
	K S Venkatagiri Dennen Diringer Diringe	
	Cit Schweit Goden Gemein Schweit Schweit, Schweit Schweit Schweit, Sc	

New Machining Centres at Bhoruka Extrusions

FMC 340

BHORUKA

- Make FOM Industries, Italy.
- Fully automated processing center
- 4 Interpolating axes for the machining of aluminium profiles with a cross section of 180×270 mm and tubes up to 3 mm thick.
- Can perform operations such as Milling, Drilling, Countersinking, Angle Cutting, Turning & Tapping.

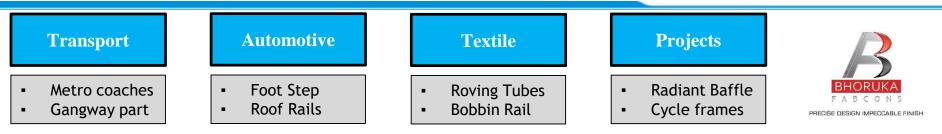




BLITZ ALVA - 550

- Make FOM Industries, Italy.
- A high-performance Double Head Cutting machine that is specifically designed for cutting operations.
- Equipped with advanced technology and features that allows for high precision and accuracy in cutting
- Maximum Cutting Capacity between 2 Heads- 6.6m

BHORUKA AYKK AP COMPANY Bhoruka Fabcons – Machining Partner



<u>Machining</u> – Inhouse machines from Emmegi, and Hurco

<u>**Project Management</u></u> - Developing the entire value chain and taking responsibility upto end delivery</u>**

 $\underline{\textbf{Designing}}$ – Working with customer to simply their designs for efficiency and cost reduction

<u>**Tools and Fixture Developments**</u> – To improve storage and packaging specific to projects

<u>Special Purpose Machine (SPM)</u> - 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 Web: www.bhourkafabcons.com









Government Clients







Aliports Authority of India



































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

Thank You