



Avery Dennison  
**INNOVATION &  
KNOWLEDGE CENTRE**

Visitor's Guide





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## This Guidebook

The Avery Dennison Innovation and Knowledge Centre Visitor's Guide is here to assist you with all the required information you need to maximize your experience during your visit. The ADIKC is a State-of-the-Art facility developed to support the Label Industry which is based in Pune, India. It crafts solutions to handle and ease the issues faced with invigorating efforts of analysis, research and testing. The ADIKC houses a knowledge centre that imparts full end to end label & graphics conversion and application training programs (both theoretical and practical) to support customers, end user and industry partners.

This visitor guide contains helpful recommendations of places to stay, visit, eat and shop to ensure your time in Pune is most enjoyable.

## Avery Dennison Innovation and Knowledge Centre

At Avery Dennison, we continuously invest in scientific research, product and innovation development designs and training with the intent to solve our customers' diverse challenges in areas of pressure-sensitive labeling materials to support our valued Customers, Brand Owners and Partners across the Label and Graphics industry.

- Established in 2012
- Located in Pune, India
- Comprises a world class Research & Development facility plus Training, Demonstration & Development Centres for Labeling, Graphics & RFID technologies.



## The Technology and Innovation Centre

As one of the six Innovation Centres situated across the globe, the Technology and Innovation Centre (previously known as India Research Centre or IRC, set up in 2012) was officially launched in 2017. It supports major innovation initiatives for Avery Dennison. These include extensive customer application, simulation testing, design of experiment testing, prototyping, as well as analysis and engineering of label and graphics materials. Our Technology and Innovation Centre houses research laboratories operated by experienced material engineers and scientists, to accelerate the product development of coatings, adhesives and materials through rapid prototyping and innovation development processes. Its, here where new ideas begin.

### > Analytical Lab

Product and Component Identification and Testing to determine how materials behave under certain conditions eg. Temp & Humidity / Converting & Application performance etc.



### > Ageing Lab

Complete study of label materials under accelerated climatic conditions such as temperature & humidity to enable us to establish converter recommendations / shelf life / storage conditions / service conditions etc).



### > Hot Melt Lab

Hot Melt PSA Development & Sample Material Coating for short run Prototyping and Performance testing under various conditions.



### > Emulsion Lab

Emulsion adhesive development plus adhesive physical property analysis to test performance under various conditions.



### > Silicone Lab

Formulation development and analysis of silicone systems to optimize and customize to meet specific application requirements.



### > Print Lab

Focus on improved print-ability and conversion of new suppliers, raw materials & laminates (Face Stocks / Non Top Coat / Top Coats / Primers).



### > Pilot Coater

After working on a single prototype, our highly experienced team of chemists engage in preparing pilot prototypes of top coated and laminated rolls to simulate the full production process. This enables our customers to evaluate product's production in real time on a range of paper and film products.



### > Physical Testing Lab

Study of Face (Paper & Film), Adhesive and Release performance to identify, qualify and develop new label material solutions.



### > Weathering Room

Capability to test materials and constructions for durability in our accelerated weathering room. Here, we simulate the weather using ultra violet rays and heat to push materials to their limits.



### > Graphics Print Lab

In addition to supporting effective Graphic materials & application training this Lab is used to for the development and qualification of new products.



## The Knowledge Centre

The Avery Dennison Knowledge Centre (ADKC) showcases State-of-the-Art solutions across the label converting and application process, offering practical and experiential learning to expand the skills and knowledge base for our customers in the pressure-sensitive industry. Originally established in Bangalore in 2012, the ADKC was created in collaboration with key industry partners Gallus, Esko, DuPont, Flint, X-Rite, Swedev, Royal Coat, Prati, Alpha Sonic, Zecher, Registrar, Univacco, Rotometrics, Reborn, Armour, Meech and HP. The ADKC demonstrates a real-time experience of what goes into the making of a label, beginning with pre-press, printing and converting, right through to label application optimization and trouble-shooting.

### Our Valued Knowledge Centre Partners





## Process Flow



## The Pre-Press Process

Pre-press is the term used in the printing for the processes and procedures that occur between the creation of a print layout and the final printing. It includes the manufacture of a printing plate, image carrier or form, ready for mounting on a printing press.

### ESKO

The Esko product portfolio supports and manages the packaging and print processes for brand owners, retailers, designers, premedia and trade shops, packaging manufacturers, and converters.

Esko solutions are used in artwork creation, structural design, prepress, 3D visualization, flexo plate making.

The Esko solutions consist of an extensive suite of software and hardware product line: CDI flexo computer-to-plate imagers.



CDI Spark 2530

CDIs can image digital (LAMS coated) flexo plates, letterpress plates (polyester- and, optional, metal based), chemistry free offset plates, digital silk screens and chemistry-free film.

### DuPont™

DuPont™ Packaging Graphics is a leading supplier serving the package printing markets with DuPont™ Cyrel® flexographic solutions. The Cyrel® systems for analogue and digital applications, which are available for solvent and thermal processing, comprise sheet photopolymer plates, continuous sleeves, plate making and equipment.



DuPont Cyrel 1000 ECDLF Exposure

DuPont™ Cyrel® 1000 ECDLF can exposes, dries, post-exposes and finishes the highest quality photopolymer plates up to a nominal maximum format of 900 x 1,200 mm (36 inch x 48 inch).





DuPont™ Cyrel® FAST 2000 TD

DuPont™ Cyrel® FAST 2000 TD is a plate making system that uses dry, thermal technology to process high quality photopolymer plates, thus eliminating all solvents and aqueous solutions from the plate room.

## Converting

Typical converting processes are Printing, Laminating, Foiling, Embossing and Die cutting. The most common printing techniques for Pressure sensitive label are Flexo and Letterpress printing. Both print processes are suited to high speed roll-to-roll processing.

**Gallus ECS 340**  
(Diverse Products.)  
(One Expert Solution)



- The Gallus ECS 340, a quiet, user-friendly and exceptionally cost-effective printing press to handle diverse range of materials from labels, tube laminates, unsupported films & aluminium foils.

### Features:

- Direct Servo Drives for high precision
- Shortest Web Path 1.1 meters
- Extremely cost efficient label production
- Equipped to meet demands of the future
- Job Data Recall for faster set up

- Dynamic Print Pressure Adjustment
- Anilox and Print Cylinder Sleeve
- Chilled Impression Cylinder

### Rotometrics:

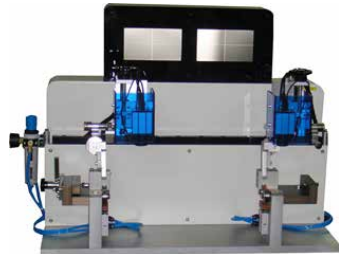
RotoMetrics is recognized as a pioneer in the rotary tooling industry and a global partner for the converting industry with unmatched manufacturing, product development expertise and customer service. They provide high-quality rotary dies, flexible dies, print cylinders and other rotary tooling.



### Royal Coat

A one stop solution for all your flexo requirements, Royal Coat has partnered with and represents several global manufacturers from Germany, Italy, France, U. S. A. and U. K. who are well known for their high quality products and services in the Flexographic Industry.

### Tarng Yun Co., Ltd



TY-25 Plate Mounting Machine

Suitable for use on all types of narrow web presses

- Two sets of high magnification CCD cameras for accurate vision registration
- Unique lens and illumination setup allows cross mark targets on flexo plates to be easily visible on screen
- Can be custom built to required cylinder dimensions

### **Zecher**

The Anilox Roller Pioneers Zecher's activities have always revolved around anilox rollers. After starting out with production of the world's first routinely engraved anilox roller, they have turned into a top-quality international supplier of innovative anilox roller solutions.



### **Alphasonics**

Alphasonics is the world's leading supplier and manufacturer of Ultrasonic Cleaning Systems. Alphasonics have developed a range of cleaning systems used for Anilox roll and flexo plate cleaning that will provide the highest cleaning standards and completely safe.



### **HP Indigo Digital Press**

Print any label in a simple, more productive and profitable way. Print anything and open new market opportunities by leveraging Indigo's outstanding versatility. Be productive—increase productivity and put automation to work for you, no matter the job, no matter the run length. Stand out by relying on Indigo's renowned print quality.

#### **Say YES to unlimited applications**

Produce nearly any packaging application, including labels, flexible packaging, and shrink sleeves on film or paper. Print added value applications with the widest white ink portfolio and other special inks

such as Silver, Fluorescent Pink, UV invisible and security inks.

#### **Say YES with improved resistance**

Address high-performance applications and exceed industry standards using Pack Ready for Labels, designed to enhance the labels' resistance against water, chemical, and mechanical exposure through cross-linking between the upper and lower layers of the label's construction.



HP Indigo press ws4500

### **Flint Group**

Flint Group Narrow Web is a true one-stop shop in narrow web, label and packaging printing.

They offer a complete range of the latest inks for any narrow web printing technique and take great pride in the high and consistent quality of press-ready products.



### **Swedev**

Swedev is a Swedish company with many years of experience in product development and production within a highly specialised industry. We supply the market with printing doctor blades for flexographic and gravure printing machines. Swedev offers special/own composed steel and knowledge in achieving highest possible quality that fits your demands and expectations. The SWED/CUT® doctor blades are made of genuine Swedish steel and the best there is to get, worldwide.

### UNIVACCO

UNIVACCO Technology Inc. markets its products to the foil stamping industries worldwide under the brand name UNIVACCO. UNIVACCO, which stands for UNIque VAcuum COating, is a brand dedicated to its technical edge and core competencies—precision coating, vacuum metalizing, and chemical formulation—to create a wide array of foil and film products: cold foils, hot stamping foils, holographic foils, textile foils, plastic foils, lamination films, silver release films, hairline foils, and digital foils.

### Meech Shavotech

Meech manufacture and supply a wide range of electrostatic products that provide anti-static and ESD protection and measurement, static generation, electrostatic control and elimination. ADKC has installed hyperion range of ionising bars are the latest, revolutionary, industrial static control products offered by Meech.

### Finishing

The operations which are taking place after printing Specially in case of Label printing, Foiling, Die cutting, Slitting, Label application etc.

### Reborn



RBJ 330 Flatbed Die cutting Machine

Its speed is up to 350-420 times/minute, which help label manufacturers to reduce consumption and cost, improve and keep production at high and stable quality, and increase in profits. Due to our high quality machine with long life time, valuable customers can feel at ease to run their label die cutting and hot foil stamping machine fast and smoothly!

### PRATI

Since 1973, PRATI has played a leading role in the label finishing industry at a global level. Centred on innovation, quality and lifelong reliability, our aim is to empower our customers through cost-

efficient solutions which enable a strong competitive advantage.



Slitting and Rewinding machine

### Label Application

In this process, the liner from the die cut PS label material is peeled away automatically and the label is applied on product. At ADIKC you would be able to understand the method of automatic labeling done on product along with common trouble shooting.



### Inkanto Thermal Transfer by Armor

Thermal Transfer is the world's most popular printing technology for the marking of variable information on labels and exible packaging: barcodes, logos, text, expiry dates and batch numbers. This data is important in order to identify a product, to ensure its traceability throughout its life cycle and to provide all important information for end users.

Inkanto is the brand that the ARMOR Group has chosen for its Thermal Transfer ribbon offering.



## The Graphics Print Lab

With its testing capabilities, the centre provides support to the Graphics R&D team in terms of qualification process for new product development, enabling faster go to market launch for new product innovations. This centre will also support the Customer Care Centre in troubleshooting with the help of experienced R&D team and Technical Marketing team.



Calderon Eco Solvent Digital Printing machine

Four-color printing, 1.8 m wide format output. Different kinds of ink can be chosen, made the picture more gorgeous and lifelike. Printing resolution can reach to 1440 dpi,



HP Latex 560 Printer

Water-based HP Latex Technology is unique, delivering a combination of true application versatility, high image quality and high productivity, and a sustainable approach that's better for operators, and the environment.

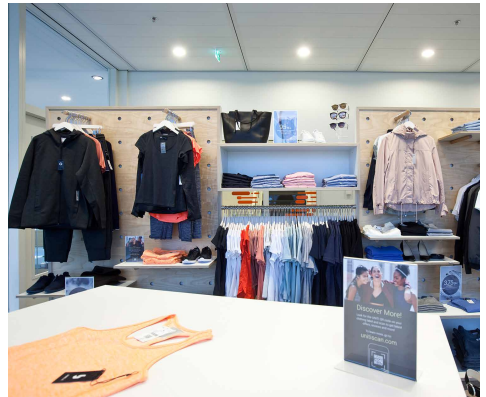
Produces highly saturated prints with up to 50% more ink density, using vivid print modes

Print colors right the first time with the i1 embedded spectrophotometer and HP Custom Substrate Profiling.

Prints are dry and scratch resistant instantly after printing.

## The iLab

- > iLab is an RFID experience zone, which shall create space for innovation, creativity and hands-on experiences, driven by technology for customers and partners alike.
- > iLab represents the collaboration between Avery Dennison Materials Group, RFID and Retail Branding and Information Solutions. Bringing together our materials science business to leverage both our technical expertise as the world's largest UHF RFID partner and our unique materials knowledge and scale worldwide.
- > iLab is about a journey through various processes, from supply chain to point of sale and beyond, from multiple industries, to explore how Avery Dennison's intelligent labels are transforming the world that we live in today.
- > Interact with live demonstrations, meet with our experts and get hands on experience with our intelligent labelling solutions.



## About Pune

Although technologically and ideologically at par with any modern city, Pune has not forgotten its heritage and history with the people being religious and honoring traditions well. Throughout the city we see glimpses of its culture. It has won itself numerous accolades such as the 'Queen of The Deccan'.

The eighth most populous metropolis in India, it thrives with a multicultural and multilingual society which prides itself as honouring its culture heritage as well as being in touch with an ever transitional modern society.

Take light clothes for the summer months and warm jackets when you are going in the winter.

## How to Get There?

If you are enroute from Mumbai, you can either take a flight or even a train as it is a short trip. Road trip to Pune is also preferred, which should take approximately 4-5 hrs from Mumbai Airport.

Pune International Airport is situated at Lohegaon. It provides international and domestic flights to nearly all major cities of India.

For more information, contact : +91-2067270400

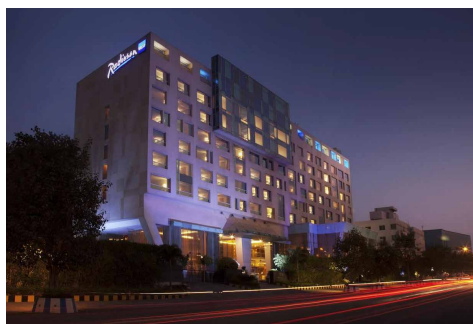


## Where to Stay

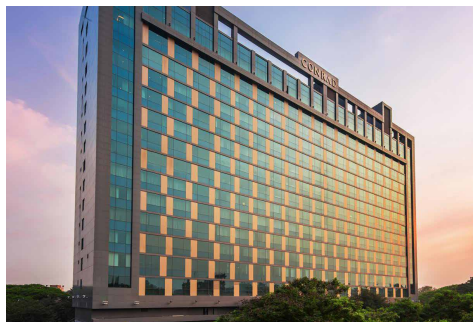
- Four Points By Sheraton  
Distance from ADIKC 15 km, 30 min



- Radisson Blu  
Distance from ADIKC 14 km, 25 min



- Hotel Conrad Pune  
Distance from ADIKC 20 km, 45 min





## Top Places – What to see?

Pune has numerous attractions throughout the city, with most of them being glimpses into its history. Once the seat of the Maratha Empire, it has numerous monuments and forts throughout the city. Pune and its surroundings are rich in cultural commodities and it's an alluring destination for travelers. Locations to visit include the Bhimashankar Temple, The Raja Dinkar Kelkar Museum, Panshet dam, Laxmi Road, Krishnai Water Park, Nucleus Mall and many others.

### *Aga Khan Palace*

The Aga Khan Palace, also known as the Gandhi National Memorial, was built in 1892 by Sultan Muhammad Shah Aga Khan.



Opening Hours: 09:00 to 18:00

Location: Aga Khan Palace, Nagar Road, beyond Fitzgerald Bridge.

### *Konark Park*

One of the most popular locations around Pune, this aviary is a collection of birds from around the world from the personal collection of Dr. Suhas Jog. Photography is not allowed inside.



Location: Around five kilometres from Pashan.

### *Shaniwar Wada*



Constructed by Peshwa Baji Rao in 1729, the Shaniwar Wada was a palace of remarkable architecture that burned down in 1827.

Remarks: Light and sound shows are held every day. The English - language show is held every day from 20:15

How to get there: Take the Pune Darshan Bus.

### *Shivneri Fort*

Shivneri Fort is 3,500 feet above sea level and credits itself as being the birthplace of the founder of the Maratha Empire, Shivaji, on 19th February 1630. The fort houses statues of Shivaji in his youth and that of his mother Jijabai.



Location: Situated 105 km away from Pune.

How to get there: Head to the base village of Junnar.

This is a place has great trekking as it is somewhere around 4,000 feet above sea level and the actual journey there is very enjoyable. It is located past Bhaje on an offshoot of a road, one of which leads to Lohagaon and the other to Visapur Fort.

How to get there: The best way in which one can get there is by a private car and then one can go on foot to the fort. It is advisable to take extra food when you go there.



### Pune Activities – What to do?

Anyone looking to find things to do while in the city will find that Pune does not disappoint in terms of activities.



### *Osho Commune International*

Osho Commune International is a place highly recommended for people looking for a bit of an escape from stress and was founded by Rajneesh Chandramohan Jain, also known as Osho. Essentially a meditation centre, visitors can avail themselves of various services like massages, sauna, beauty parlor as well as activities such as swimming and basketball.



Opening Hours: 09:00 – 17:00

Remarks: Negative HIV test results and photos are necessary to gain entrance

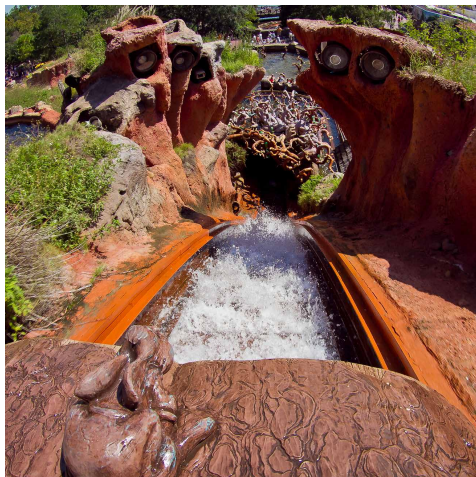
Address: 17, Koergaon Park





### *Splash Mountain*

Designed according to international standards, Splash Mountain is a water park situated 27 km away from Pune at Lohagaon. The water park itself covers an area of about 15 acres and is the largest in India. Hygiene is given primary concern with lab-tested water being used.



Opening Hours: 10:00 – 17:30

Address: Splash Mountain Water Park (Diamond Water Park), Water Park Road, Lohagaon, Pune, 411007

### **Restaurants – Where to eat?**

#### *Blue Nile*

Blue Nile is counted as one of the most eminent eating houses in Pune and serves quality Mughlai food, especially biryani.



Opening Hours: 10:00 - 23:00

Address: 4, Bund Garden Road, opposite Poona Club.

Tel: 020-26125238

Cuisine: Indian

Price Range: Affordable

#### *La Pizzeria*

If you visit this restaurant then trying their ravioli, whole-wheat pizzas and tiramisu is a must.



Opening Hours: 11:30 to 15:00 & 19:00 to 23:30

Address: 361/5, Bund Garden Road, Opposite of Pune Central Shopping Mall

Tel: 020-26133535, 26136565

Cuisine: Italian

### ***Mainland China***

Mainland China serves authentic and delicious Chinese dishes and at weekends one can enjoy the buffets.



Opening Hours: 12:00 to 15:00 & 19:30 to 23:00

Location: City Point, Ground Floor, Dhole Patil Road, Near Boat Club

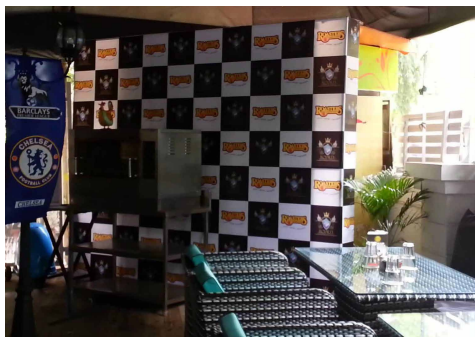
Tel: 020-66013030

Cuisine: Chinese

Price Range: Pricey

### ***Silk Route Restaurant***

Silk Route serves Indonesian, Vietnam, Japanese, Korean and Chinese food and is the first restaurant in Pune that offers Japanese cuisine.



Opening Hours: 12:00 to 15:00 & 19:00 to 23:30

Address: 357/1, Pingle Corner, Bank Lane, Koregaon Park

Tel: 020-26135793, 9822448730

Cuisine: Pan-Oriental Price

Range: Affordable

### ***Hard Rock Café***



Opening Hours: 12:00 to 23:30

Address: 81/82 Pyramid Lawns, Koregaon Park Extension, Koregaon Park

Tel: 020-4015 8811

Price Range: Expensive



### Soho Bar



Opening Hours: 19:00 – 01:00  
Location: Metro Traders Compound  
Kalyani Nagar, Next to Bishop's School  
Tel: 020-26681987

### Kiva Bar



Opening Hours: 19:30 – 24:00  
Location: Range Hill Road, Ashok Nagar  
Tel: 020-25538339

## Shopping - Where to Shop and What to buy when you are in Pune ?

M.G. Road boasts to be the ultimate shopping destination in the city. Laxmi Road, Fashion Street, Hong Kong Lane and Juna Bazaar (hub for antiques) are amongst other attractive shopping destinations in the city. Men's Avenue, logically enough, is where you can get the best men's wear. Along with that there are places like the Fabindia retailers and Kakde Mall which is also popular. Nearly all the malls operate from 10:00 to 22:00.



### *Laxmi Road*

Considered as one of the heartlands of shopping in Pune, Laxmi Road is popular as an area for street shopping. There are a variety of items available in this area; among them clothing, jewelry, bangles and also household necessities. It's not high-end so go prepared.



Location: Laxmi Road

### *Pune Central Mall*

The Pune Central Mall is located in the heart of the city and is a good place to shop as well as a good place to chill out with friends and family. With five floors of stores selling casual wear to sportswear and featuring dining locations, this place has it all.



Location: Bund Garden Road

Add about Phoenix mall Viman Nagar, Nagar Road

### *City Mall*

This Central Pune mall contains enough shops to keep any shopaholic busy for a while and the food outlets ensure that one does not go hungry.



Address: 6 Lane, Ganeshkhind Road, Pune  
University Main Gate



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