

Adhesive Solutions

CASE STUDY



CASE STUDY -1

The Client obstacles:

- customer does not able to bond through any welding process or using normal adhesive tape .
- Client wants to joints dissimilar material.
- The high-production component needs strong bonding solution with less application time to achieve desired bonding.

About Client:

ABC Pvt Ltd is involved in manufacture of transport equipments. They also manufacture Gear Knob for one of the best vehicle manufacturer xxx pvt ltd.

Client Team :

Mr. xxx
R & D Manager
&
Mr. XXX
Production Manager

Our Team :

Mr. Deepak Rawat
Application Manager
Adhesive Solutions

Mr. Rajesh yadav
Technical Advisor
RY Group of company

Action Taken

Step
1

- We use Double sided acrylic LSE tape .

Step 2

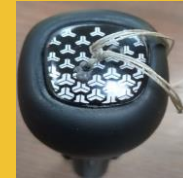
- We customized the product to increase the production capacity.

Step 3

- Double-sided tape is LSE-grade solution to provide high-strength bonding with flexibility.

The Final Result

The Polycarbonate was bonded nicely when used with LSE tape.



Conclusion:-

The Bonding was Successful & the Customer was very satisfied with our solutions.

CASE Study - 2

The client obstacles - Clients needs to bond charger box which is made by polycarbonate along with the bonding solution need to be clear IP-65 STANDARD.

About client- ABC Pvt Ltd is involved in manufacture of EV equipments like battery ,Top Gear Assembly & Stern Gear Assembly , EVA charger and stations for well known established company like TATA VALNO, kIA and HYUNDAI.. They also manufacture battery for one of the best vehicle manufacturer company..

Client Team :
Mr. xxx
Quality manager
&
Mr. XXX
Production Manager

Our Team :
Mr. Deepak Rawat
Application Manager
Adhesive Solutions

Mr. Rajesh yadav
Technical Advisor
RY Group of company

Step 1

Action Taken

- First we clean the surface then used the high performance double sided tape.

Step 2

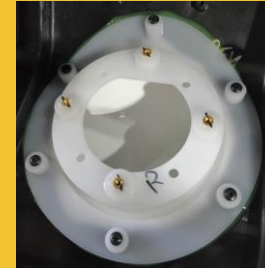
We customize the product to increase the production of the product and ease of application.

Step 3

- Closed cell product to ensure IP 65 standard will achieve

The Final Result

The Polycarbonate was bonded nicely by using LSE taps. By using this LSE tape we reduced the curing time and increase the production ,bonding and sealing was successful



Conclusion:-The Bonding was Successful with customized LSE Tape and the Customer was very satisfied with our solutions and achieved IP65 standard very nicely .

The Client Obstacle - Clients needs to bond dissimilar material such as mirror to a MDF(Minimum Density Fiber)

About client- **XYZ Ltd** has a unique set up in the handicraft industry with in-house , vertically integrated facilities for processing metal , glass and wood. They are capable of manufacturing all the best handicrafts using Metal, Glass and Wood.

Client Team :

Mr. xxx
R & D Manager

Our Team :
Mr. Rakesh Yadav
R & D Manager
A R Tech Solutions

Mr. Rajesh yadav
Technical Advisor RY Group

Action Taken

Step 1

- First the back surface of the mirror was cleaned with cleaner

Step 2

- Next adhesive promoter was applied upon the surface for better bonding.

Step 3

- And then we use PU double sided tape upon the part where Promoter was applied to bond the surface.

Step 4

- Next Mirror was placed gently after application of tape upon the MDF for Bonding.

The Final Result

The Mirror was successfully Bonded by using adhesive promoter and special type of tape which did not deteriorate the glass lacquering



Conclusion:-

The Bonding was Successful & the Customer was very satisfied with our product.our tapes and adhesives are providing permanent bonding and did not deteriorate the glass lacquering with high strength of bonding.

CASE STUDY 4

About Client:

MNO - XXX(India) Pvt. Ltd. is one of the largest Supplier, Exporter and Importer of Commercial Kitchen, Refrigeration, Bakery Equipments in India.

Our Team-

Mr. Rajesh Yadav

Technical head

RY Group Of Company

The Client Obstacle: Bonding of Copper Cooling Coil to Stainless Steel for improvement of efficiency in cooling system

Action Taken

Step 1

- First the Soldering which was done earlier was removed carefully.

Step 2

- Next Copper Cooling Coil has to be laid properly against the several layers of Stainless Steel.

Step 3

- Next Al Foil Tape is applied gently to copper cooling coil in middle and match the centre and bind the Stainless Steel Surface.

Step 4

- With the help of the Tape, the Copper cooling coil is left for binding to the S.S

Difference of Soldering & 3M Tape

The Final Result

The Copper Cooling Coil was Bonded Spectacularly with the help of the Aluminum Foil Tape to Stainless Steel. The Customer was very satisfied with the Product and also the result it brought forth and helped solve their problems.



Conventional Method:-

- There is greater chance of weak bonding in the area soldering/welding is done.
- When Soldering is done, there is a possibility of hot air bypassing soldering and reaching the cooling area and vice versa.
- We need electric power for welding process which increase the cost of bonding



Proposed Method:-

- Instant Bonding is performed with perfection and without increasing the cost of process or using any extra effort.
- There is no chance of weak bonding while applying xxx Al Foil Tape.
- xxx Al Foil Tape acts as a strong barrier where the hot air won't be able to reach the cooling area and it works without damaging the surface either cooling foil or refrigerator.



Conclusion:- The Bonding was Successful & the Customer was very satisfied with our product Aluminium Foil Tape. this process optimized the thermal efficiency and able to reduced the production time.

CASE STUDY - 5

About Client:

Xxx is an leading integrated solar power company with presence across the entire solar power value chain. A pioneer in the development of green technology solution that are environment friendly energy, efficient & cost effective. They redefine solar energy that touch life by providing it to very root level. Surya International have extensive experience in Solar Water Treatment plant installation.

Client Team :

Mr. xxx
Technical Head

Our Team :

Mr. Deepak Rawat
Application Manager, Adhesive Solutions

Mr. Rajesh Yadav
Technical Head, RY Group of Company

The Client obstacle:

Bonding a Metal to a LLDP Thread (Water Filter Part) to avoid water leakage and reduce the process time of joining

Action Taken

Step 1

- First upgraded the surface with the help of abrasive product.

Step 2

- Next the surface was cleaned for better bonding.

Step 3

- And then adhesives was applied between the metal & LLDP thread to avoid the water leakage.

Step 4

- Checked if there is any gap, completely applied the adhesives with the help of EPX Gun & Nozzle for perfect bonding to avoid leakage.

The Final Result

The Metal & LLDP was successfully Bonded without any gap to avoid water leakage using 3M Adhesives like with the help of EPX Gun & Nozzle.



Conclusion:-

The Bonding was Successful & the Customer was very satisfied with our adhesive products.

Case Study-6

About Client:

XXX is an leading integrated solar power company with presence across the entire solar power value chain. A pioneer in the development of green technology solution that are environment friendly energy, efficient & cost effective. They redefine solar energy that touch life by providing it to very root level. Surya International have extensive experience in Solar Water Treatment plant installation.

Client Team :

Mr. XYZ
Technical Head

Our Team :

Mr. Deepak Rawat
Application Manager
Adhesive Solutions

Mr. Rajesh Yadav
Technical Head
RY Group Of Company

The Client Needs:

Bonding LLDP to Fiberglass Resin(Water Filter for water treatment plant)

Action Taken:-

Step 1

First the LLDP Stand was upgraded using fine abrasive product.

Step 2

Next both the surfaces was cleaned properly.

Step 3

Next Adhesive Sealant was applied to both the surfaces for bonding.

Step 4

Then the Fibreglass with resin is placed on top of the LLDP stand for bonding.

The Final Result

The Fiberglass(Water Filter) with Resin was bonded well with the LLDP Stand using the adhesive Sealant.



Conclusion:-The Material adhesive Sealant was the best product that bonded the Fiberglass resin & LLDP Stand, which made the Customer very satisfied and reduce the curing time with increasing the production.

CASE STUDY-7

About Client:

XXX are recognized among the affluent vendors of an assorted gamut of Plastic Crates & Bins, Injection Moulded Plastic Pallets, Custom Built Plastic Crates, Corrugated PP Stackable & Foldable Boxes and Shop Floor Storage & Solutions. Besides, we also trade in Unoair Pneumatic Tools, Tirupati Make Pneumatic Accessories, Hydraulic Hoses & Assemblies, Alkon Plastic Products, Alkon Office Products & Mobile Waste Bins.

Client Team :

Mr. XYZ
Head-Tool Room
Mr. ABC
GM-Operations

Our Team :

Mr. Deepak Rawat
Application Manager
Adhesive Solutions

MR. Rajesh Yadav
Technical Head
RY GROUP OF COMPANY

The Client Obstacle:-

Needed to remove HDPE Welding which was done earlier in the tray and use different method to make sure there was no penetration and to keep the racks & tray intact.

Action Taken:



- First we applied Adhesive Promoter to the inner side of the tray.



- Next in the part where promotor was applied we used Adhesive Tape to fix the Side pillar to the inner side of the tray.



- And then placed the racks in between the pillars which was placed in the inner sides of the tray.



- And then we used Hot Melt adhesives upon the pillars to fix the racks so that they don't Pop out of the tray

The Final Result

With the Help of the promoter to make sure the Pillars to be bonded well with the tray using Adhesive Tape, so that the racks could be placed in between was successful. The Racks was well bonded to the tray using Hot Melt Adhesive so that they couldn't Pop out or penetrate.



Conclusion:- The experiment was successful and it could be done without penitarate or welding process.

CASE STUDY-8

About Client

XXX, New Delhi is a manufacturing company mainly focused on healthcare and life science sector. It is focused on developing cost-effective critical care equipments.

ABC has introduced ICU Ventilator to fight against COVID-19 .

Client Team :

Mr. XYZ
Industrial Design Researcher

Mr. ABC
Director

Our Team :

Mr. Rakesh Kumar Yadav
R & D Head
AR Tech Solutions

Mr. Rajesh Yadav
Technical Head
RY Group OF Company

The Client Obstacle:-

To attach android tablet with the ventilator machine comfortably with a very strong permanent bond without welding, drilling or screw.

Action Taken

Adhesive Promoter along with High Strength acrylic Double sided VHB Tape was used for the Process of binding Android Tablet and the Ventilator Machine Permanently.



Step 1
PROCESS OF CLEANING

To obtain optimum adhesion, the bonding surfaces was well unified, cleaned and dried.

Step 2
PRIMING

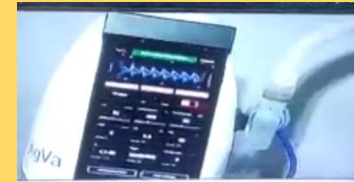
Applied Adhesive Promoter Using an disposable towel, followed by a dry towel. Promoter created a new surface to bond.

Step 3
TAPE APPLICATION

Placed the acrylic foam VHB Tape on the Ventilator & Placed the Android Tablet gently on top of Ventilator for Binding.

The Final Result

After the application of High Strength double sided acrylic VHB Tape along with the help of Promoter, The Android Tablet was bonded permanently with the Ventilator Machine. Without using any screw ,rivets,weld and other form of mechanical fastener.



Conclusion:-

The Result was so successful during one of the biggest Pandemic caused by COVID-19. We were very happy to be able to take part & help People through Healthcare product .