



**THE VEHICLE TESTING AND
ANALYSIS GROUP**



➤ **Complete Vehicle Testing**

- Durability Testing
- Component or specific tests
- Tests drives in extreme weather conditions
- Preliminary Concerns Analysis

➤ **Manpower Solutions**

- Skilled Driving & Analysis Team
(Technical & Non-Technical)
- Vehicle Service Support & Audit Team
- Vehicle Breakdown Support Team
- Back office/Employee Relation Team

 **Amiet Sonar**
 **Viraj**

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Introduction:-

- AMIET REISEN is a well-known company in the field of Testing & Transportation industry The Company Started in the Year 2000 With the Name of AMIET TRAVELS And Began the Journey in the Travel & Transportation Industry. The Business Was Started With One Single Car (a Honda City) But Later within the period of 3 years there were 14 Cars Purchased By the company and today's company's car fleet is 550+
- The Company Turned in to a Registered Partnership Firm Named AMIET REISEN, Which Came In To Life In The Year 2009 Till The Time The Company Had 6 Multinational Clients – Expanded its business Criteria in The Field of Vehicle Testing, High Class Premium Car – Employee Transportation – Economy Car Segment – Man Power – Sourcing, and Engineering etc.

WHY AMIET REISEN....?

- Core testing **experience of more than 7 years** with world's best automakers.
- Experience of **largest volume of vehicle tested per shift**, i.e more than 40 vehicles with large number of staff 150 number.
- **Testing expertise in NVH, Fuel Consumption Test, Tire Test, Brake Pad test, Wiper Test, Oil Consumption test** by the help of Test Engineers.
- **Well Experienced Technical staff**, education qualification condition as per position- Engineers as Shift Engineers, Diploma holders as Shift Supervisors and ITI or with Technical experience as Test Drivers.
- In experience **“No major Accident and No Human Injury”** is the Award of Amiet Reisen.
- Our prime motive **“Never compromise with Confidentiality, Safety and Security”**
- Always been **Best Achiever** of the provided target in given time with no complaint.
- Tie-up with 18 consultancy for manpower recruitment and more than 2000+ manpower data Technical and non-Technical, for urgent requirement of projects and its fulfilment as soon as possible.
- Rented Property in **Mumbai City** for Test Center, Service and staff usage, also have tie up in **Kolkata, Chennai and Delhi**.
- **Well established Legal and Local network** which is helpful while Vehicle Brake down and other legal support.
- **Big setup of Back office** to handle Employee Relations, Financial Matters and Legal Affairs.

Our Experience with Worlds best automobile manufacturers:



Volkswagen India:

- Work Profile (2007-2013) –
 - Amiet Reisen started working in the year 2000 and Vehicle Testing since 2007 – with the experience of 8 years We Are proud suppliers of Volkswagen India Private Limited since the Day One we are serving the huge organization with our services. We feel the proud moment of **“The First Car bought to India was driven by us and then it continuous..”** It is always been a pleasure to serve the great organization like Volkswagen India since 2006
 - Starting from the 1 car and highest number of vehicles were handled are **40nos per shift with 3 shift working and containing High Premium and Economy vehicles**, we maintain the same Capacity, capability and reliability till date for business without any interruption.
 - One Engineer, one Supervisor and other drivers and completion of 350kms per shift for daily 3 shifts sometimes 2 shifts running.
 - Core tests we conducted under guidance of engineers are, in NVH, Fuel Consumption Test, Tire Test, Brake Pad test, Wiper Test, Oil Consumption test.
 - Testing in any were India is the instruction provided by Volkswagen and we always fulfil those in terms of extreme weather tests, Different City Route tests and Long Drive tests.
 - The **Confidentiality and Safety** are our prime motive, while **POLO and VENTO launch** we had special security team to maintain confidentiality, NO camera phones, only driving in night condition, only special drivers and engineers on board, special monitoring and checking etc. special features we maintained during our tenure.
 - We established **testing facility in Mumbai region** with vehicle servicing and inspection station and did POLO GT testing more than 1.5 years, more than 15 staff including engineer, technicians and drivers was working continues on the project.
 - Most Major concerns which helped the product to improve which were highlighted by our engineers and also part of analysis.

- **Testing Project's done by AMIET REISEN in Volkswagen India Private Limited – Duration:** all Project's from 2007 to 2013

- **Local Durability Testing:**

1. LC4, LC5	2. LC-8, LC-9	3. LC-10
4. LHD Localization.	5. Fabia – Petrol/Diesel	6. Jetta –Petrol/Diesel
7. Rapid Petrol/Diesel	8. Vento –Petrol/Diesel	9. Passat Petrol/Diesel
10. Central America	11. Polo GP (Current)	12. Polo GT TSI Pune
13. Toureg Testing.	14. Airbag Testing	15. Polo Cross

- **Special / Extreme Weather Condition Trails**

- EGR Testing Gujarat (7days)
- Wiper Testing (8 months)
- Polo GT Mumbai (1.5 Yr)
- Delhi City & Highway Drive LC-10, Polo Cross, Polo GP (12 days)
- Long Drive Test Nepal (20 days)
- Kullu-Manali Drive (17 days)
- Leh-Ladak-Kutch Drive (22 days)
- Bangalore / Kanya Kumari (9days)

- **Major Management Drives (CAF-MAF):**

1. Lavasa Management Drive	2. Amby Vally Management Drive
3. Lonavala Management Drive	4. Pune Airport Management drive
5. Mumbai-Pune Highway Drive	6. Chakan Drive
7. Mumbai to Pune Management Drive	8. Pimpri Management Drive

- 1) Experiences Supervisor's – We Deputed only qualified and experienced supervisors from the background of automobile sector
- 2) Scheduled Payments, and accounts and billing

Glimpses:



Cold Region Test

**Shimla-Kullu-Manali-
Rohtang**

High Altitude Region Test

Leh-Laddk



Hot Region Test

Rajasthan



FIAT India

▪ **Work Profile (2014) –**

- You can easily find out the difference between Italian Automaker and German Automaker, basic difference in the design directs work in different direction, but the basic vehicle testing remains same. Manufacturers claims their durability as per the results found in durability testing.
- Vehicle testing done in FIAT was almost same like Volkswagen, only the basic difference was testing used to be done on fixed route and not on new cities routes. Special tests and Extreme Weather tests also not done, Automaker use to test vehicles in closed chambers.
- 6-8 vehicles per shift, 2 shift working, automatic and manual transmission vehicles, and Premium and Economy vehicles was the general vehicle trend.
- Vehicle testing use to be done local only, no different city drives, City rout, Ghat section, Off road rout were fixed by the testing team and we were bound to follow it.
- Daily running 350kms per shift, 2 times in a week Test Engineer to attend the testing and to check the concerns, daily one engineer and one supervisor was the basic working. At the end of shift engineer will circulate the concern report and mileage tracking report to the team members.
- After returning from the testing engineer will show concerns to Test Engineer, he will check concerns and finally will do the analysis with CFT.
- Analysis reports will be again verified by the Test Engineer and then actions are implemented.
- Monthly reports also shared with the team for monthly mileage and concern tracking.

What is Vehicle Testing?

- An increasingly competitive automotive industry requires constant innovation in reliability, durability and quality. Systems and components must function properly and safely for the entire vehicle life cycle.
- Although automotive testing has been around for over a hundred years, the automotive testing environment changes every year. Engineers require more advanced test applications and innovative approaches for new high-performance equipment.
- This high rate of innovation means that test professionals must react faster to market changes, launch new designs more quickly, offer more cost-effective testing and also adapt to advances in technology and regulatory changes. Complex requirements for testing technology require the highest reliability and efficiency, from research and development to assembly. Success often depends upon being the first to market with new designs taken from concept to customer faster than other manufacturers and suppliers
- **Design Validation Testing**
 - Development of New Prototypes and Designs – Testing can help evaluate alternative designs including material selection, weight reduction and functional performance. It can also assist in the assessment of trade-offs in manufacturing processes, such as heat treating and machining methods
 - Correlation and Validation of Models – Automotive engineers are becoming increasingly reliant on computer design, modeling and analysis tools. Physical testing is critical for developing and validating these models so that high-confidence decisions can be made.
 - Endurance and Key Life Testing – Customers expect vehicles to last more than 100,000 miles without any significant issues, so durability and endurance testing has become increasingly important. Testing a subsystem (such as a climate control system) with several components installed and functioning in their actual vehicle configuration provides a more accurate test environment, reveals issues that arise from interactions between components and is less expensive than running several separate component tests,
 - Testing Multiple Parts – Testing multiple parts simultaneously can save money and reveal issues related to variation in materials or processes.
 - Competitor Benchmarking – Testing a competitor's product can provide a wealth of information. Determining your product's superiority can also boost your competitive advantage.

▪ **Environmental Standards**

- Extreme environmental conditions such as heat, cold, dampness and wind, can have a dramatic impact on how automotive components function.
- Environmental testing can verify the fitness for use of any automotive components. Testing centers should be able to simulate a single condition, even multiple environmental conditions simultaneously. Climatic chambers may test wide fluctuations in temperature, altitude and humidity as well as examine the impact of blown sand, dust and salt spray.
- Other environments to consider include solar radiation, operating at angles, fungus, moist environments and Environmental stress screening can also expose products to stresses, such as thermal cycling and vibration to force latent defects. Lifecycle testing can assess the reliability of your vehicles and vehicle components, pinpointing weaknesses that may require redesign.

▪ **Dynamics Standards**

- Automotive components are subjected to vibration, shock stress and strain in vehicles operating on rough roads and from rotation of the engine and driveline. Products must be designed to withstand these forces and physical testing is essential in validating designs and verifying production processes. Fasteners can loosen, adhesives can fail, structural elements can fatigue and moving parts can wear as a result of these mechanical forces. When components fail it can result in costly warranty, or even product safety issues.
- Testing facilities provide dynamics testing and analysis services to assure that components will survive for the expected life of the vehicle, and perform as expected in collisions. Samples can be vibrated and subjected to mechanical shock that duplicate the actual levels in the vehicle, or exceed those levels to accelerate test programs to bring new products to market faster. Vibration analysis can evaluate designs to determine if a component is sensitive to a critical speed or vibration frequency (resonance) that could rapidly deteriorate its performance.
- Dynamic testing is often combined with environmental exposure to assure that the product will function as expected over the full range of conditions it will experience in its service life

▪ **Meeting Standards**

- Automobile manufacturers strive to meet government safety standards while offering cars that outperform competitor vehicles. Quality measurements help refine vehicles to reduce noise and vibration while increasing fuel efficiency, quality and overall value for the consumer. Automotive testing makes it possible to offer better performance, safety and comfort under the most extreme conditions

How Can AMIET REISEN Help With Your Automotive Testing Needs?

- For over 7 years, AMIET REISEN has offered a broad range of vehicle testing, service and supply solutions. We offer the expertise needed to test reliable, high performance vehicles that meet the most stringent safety standards. With the proven high capability of vehicle testing, we can meet your automotive testing needs, ensuring safety and reliability and offering improved longevity, durability and functionality.
- We take complete responsibility of Vehicle Durability Testing. Testing parameters, Route, Climatic conditions and Target get finalized, and we are open to work as per the conditions.
- Testing Staff includes Engineers, Diploma Supervisors and Drivers, their skill set is well defined and experienced also training activities are planned timely for knowledge improvement.
- Engineers will be working in shifts to mark and record the concerns, one supervisor will be working to control and navigate all the process Daily Position - diagnosis will be reported time to time
- The car will be starting and ending on the specified point by the company as per their testing norms the drivers will be having all the required documents and tools for the drive. 24 hrs assistance with skilled manpower back up.
- If required to achieve specific target within limited time then 3rd shift will also be implemented. Experienced Drivers and Engineers working with the same cars will also be assisting time to time, All the required information related to the car and its changes will be provided on time
- In case of brake down on road assistance will be given anywhere / everywhere in the testing to keep testing ongoing, also we instruct the supervisors accordingly to keep back up manpower with brake down car and to move further. We have towing facility with us to pick up any break down car from any where in and around the testing area. Cleanliness of the car will be done on time to time. Immediate replacement will be done in case of any driver discontinued / sickness / family problems or any emergency or the driver's personal issues.

▪ **COMPLETE VEHICLE TESTING:**



- Viraj

Station Manager
Lead Vehicle testing and Analysis

▪ **DURABILITY TESTING:**

- Purpose of testing and testing parameters are provided by clients, also in some cases it kept hidden due to confidentiality matters.
- The route will be provided/decided according to the testing requirements, City route, Ghat Section, Highways, Wet or Dry roads, Off road, Muddy routes, Extreme weather conditions etc. Testing targets will be provided by the clients and we do our best to achieve it.
- Training to the Engineers, Supervisors and Drivers provided timely, testing parameters monitoring communicated and then vehicles are allotted to the drivers as per their skill set. Daily check sheets, To Do lists, Responsibility sheets are followed thoroughly and are monitored by their respective supervisors. Drivers PPE monitored on daily basis and Skill Matrix maintained on monthly basis.
- Shift Start and End time record, Mileage Record and Concern tracking will be monitored closely by the engineers. Engineers, Supervisors and drivers do their best to monitor the testing parameters as per provided condition. Once concern detected the parameters (When, What, Where, Why and How it produced) will be recorded by the driver and then will be verified by the engineer.
- Once shift end, all the concerns while shift occurred will be shown to Station Leaders, details of the concern will be shared like, When, What, Where, Why and How it produced, the severity level will be decided and then due direction by the Station Leader, Preliminary Level analysis will be conducted on vehicles.
- End of the shift Daily Mileage, Concern tracking, Daily observation, To Do check list and Analysis reports will be arranged in 'Daily Report' and circulated to the Station Leaders and other team members via approved Mail ID. As like daily report, Monthly Report also will be generated by Test Engineer including Monthly Mileage, Vehicle Status, Concern Status and Chronic Concerns etc.

- As per the client request we run durability in different cities, we set the base in specific city and run the vehicle from the base. We have done testing in Mumbai city for about 1.5 years by making the station with equipped facilities of vehicle service and inspection. Correct data recording, Confidentiality of the vehicle and data security are the prime motive we keep while these types of tests.

▪ **COMPONENT OR SPECIFIC TESTS:**

- Due to the increasing competitive pressure in the global Automotive Industry, vehicle development schedules have decreased from 4-5 years a decade ago, to less than 2 years today. This has allowed manufacturers to react more judiciously to changing consumer demands, market conditions, and legislative requirements. The challenge for the vehicle development community is to meet these condensed timelines without negatively affecting quality and performance attributes such as warranty, fuel economy, crash worthiness, NVH (Noise, Vibration, and Harshness), and driver comfort. At the most fundamental core of any development program is vehicle and component durability testing.
- Our experience with automotive clients taken us to different types of testes, e.g.: **1) Wiper Test, 2) Tire Test, 3) Brake Pad test, 4) Oil Consumption test, 5) Fuel Consumption Test.** These special test carried out separately with special skill set technicians.
- When Special test are conducted it requires the specific data records with decided and controlled input conditions. These vehicles are run separately and special care, frequent data recording, continuous monitoring is necessary for these tests.
- While These Tests running, Start Time, Monitoring & Record time and Stop Time is fixed and it has to follow closely, else complete test can go in wrong direction.
- Special rig for Static wiper test, Special route and consistency for short term test like Fuel Consumption test and Oil Consumption test, Testing without failure of puncture and constant speed for tire wear test and Brake Pad test, these some are the special characteristic we maintained.

▪ **TEST DRIVES IN EXTREME WEATHER CONDITIONS:**

- The Vehicle response in extreme weather conditions is necessary factor for automobile manufacturers. Vehicle has to pass all the extreme weather condition tests for final GO!!.
- In extreme cold conditions, morning temp of engine, oil and other components are extremely low, its lower than atmospheric temp. Observations like Cold

Start, engine Oil freezing, other coolant Freezing, tire response, Air Conditioner response etc. Similarly in Hot region test observations Auto makers make their observations and do the necessary changes in the final product.

- We are well experienced in these types of Extreme Weather Tests. We have done many types of tests in Hot & Cold regions like, Kullu-Manali, Rohtang, Rajasthan, Jaipur, also the south india, Chennai, Bangluru, Kerla, Leh Laddakh, Kutch etc.

- **WEEKLY SERVICE AND AUDIT:**



- Naseeb Sheoran

**Test Engineer
Vehicle Audit**



- Sagar Jagtap

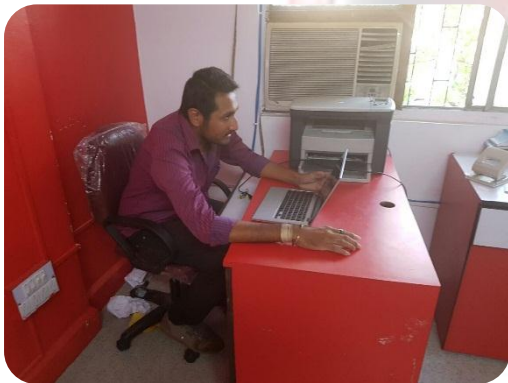
**Technician
Vehicle Service**

- After complete week testing vehicle need to undergone inspection, such as Engine oil, Wind shield water, Brake oil, Tire pressure, Brake pads, Battery Check and etc.
- Check list prepared by Station Leader and Engineer as per test parameters, chronic concerns kept under monitoring, Benchmarking concerns, by the check list technician inspect vehicles and prepares concern list.
- Besides Check list some vehicles need close/daily observation, activities like Tire wear monitoring, Brake pads monitoring, Wiper Tests etc. are conducted.
- End of the shift observations and concerns feedback will be given to the engineers and station leaders for inclusion in the daily report.
- At the time of Vehicle Brake down, On-Spot survey/Inspection will be conducted by technician for how failure occurred?, if vehicle possible to start it will be done else further inspection in detail in test center. After root cause analysis same day, Incident Report will be submitted by the technician which helps further analysis.
- Technician get trained periodically by the engineers and Station leaders, also special training programs for them.

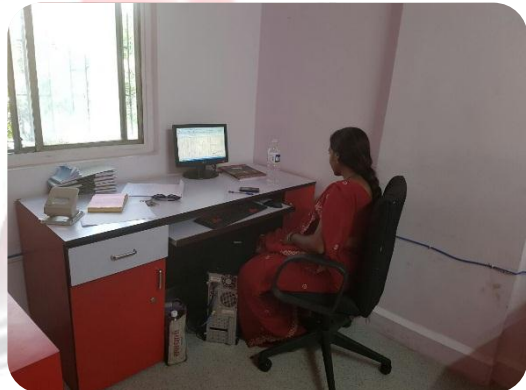
▪ **VEHICLE BRAKEDOWN SUPPORT AND BACK OFFICE:**

- Amiet Risen owns the record, 2007 to 2013 “**No Major Accidents and No Human Injury**”
- Once vehicle brake down or met with accident, **we safeguards the vehicle first by moving it to safe place**, as these are Prototypes and huge cost is involved to build it. Also if any damage to the car whole testing get stopped there and all investigation goes into thrash.
- We have brake down team which reaches to Brake down spot ASAP, and takes control of the situation. Also we have tie up with local Brake down support teams which helps us for instant response.
- Brake down Support team includes technician, and driver with other 3 support members which also manages the legal activities if happened any.
- Back office contains the staff of 14 members which handles Employee Relations, Salary and other Legal Activities.

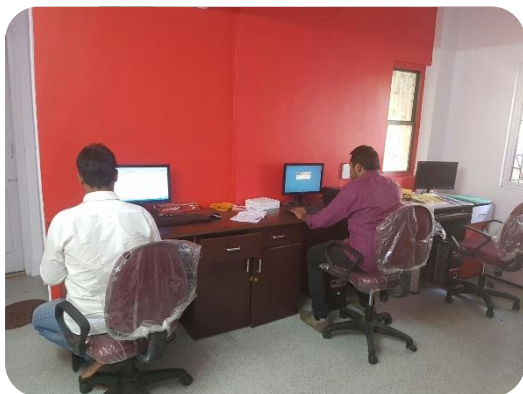
Our Back Office Support:



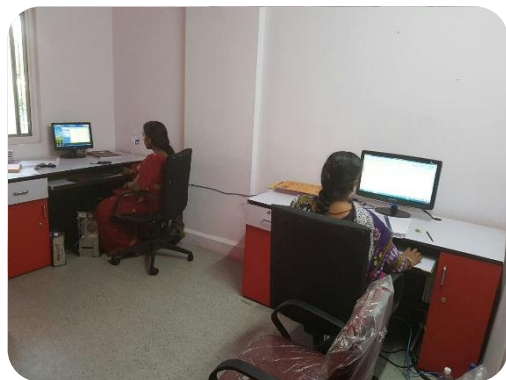
Manager



Recruitment & Employee Relations



Legal Affairs



Finance & Provident Funds

▪ **Driver Recruitment Process – We Hire Driver on the following basis –**

- Driver is the person who is going to feel the vehicle performance and report the concerns. So the technical knowledge and vehicle knowledge are two most important thing to be considered.
- The Recruitment Process for our company is a little tough for the drivers but it is for the betterment of the Future running - Age limit is max 40 years of age
- Technical background, knowledge of the vehicle, vehicle part names, Concern Identification and explanation are the prime things we consider before selecting a driver. Most of the testing drivers we select are ITI holders.
- Contact from some good reference / Cleanliness / Politeness – Over all behavior, Previous Jobs Reference / Physical fitness
- We also understand the need of the driver to do the Job Drivers with minimum 4 to 5 years' experience and a Transport License only is recruited after Conducting Proper driving Test.
- Driver Induction period is 5 working days. He is tested whether he is physically fit to drive the car on the highways – initial days they have to sit on co-driver seat to understand the routes Familiarization with rules and regulations, Safety while driving, road signs, and traffic rules are made understand better to the driver's before they drive on the road Measures to be taken to avoid accidents Action to be taken in case of accident break-downs Cleanliness, behavior towards the organization, superiors and employees and the car's Driver's verifications and records maintained with photos and fingerprints Evaluation of the Routes – before the drive on any route our supervisor's with the company official do the evaluation of the route to understand them better and the study the conditions of the road

▪ **Driver & Supervisor Performance improvement Plan**

- Awards to Driver's & Supervisor are for their Performance and hard work as they deserve 2) Giving more high level Technical assistance
- To run this Program we need the support of the Volkswagen Team by comparing and recommending the employees on their performances,
- Awards and certification for the best performing Employees
 - A) Clean Car Award
 - B) Safe Driving
 - C) Best Performance
 - D) Best Target Achievement
 - E) 100% Attendance

Company Holding the Following Licenses

“Before starting any New Field of work we obtain all the required and mandatory licenses by the Government”

- 1. Shop Act**
- 2. Pan No**
- 3. Duns Number**
- 4. Service Tax Number**
- 5. Labour Licence – for min employees (100) Labour Licence Number _____ (Labour Licence of 100 Employees – Can Be Extended to any number within a period of 2 days.**
- 6. Professional Tax Number –**
- 7. Employees State Insurance Corporation (ESIC) Certification -**
- 8. Provident Fund Account –**
- 9. TDS Number –**
- 10. MLWF (Maharashtra Labour Welfare Fund) Policy Number –**
- 11. POLICY SCHEDULED FOR EMPLOYEES COMPENSATION INSURANCE –**
- 12. PRIVATE LIMITED CERTIFICATION**
- 13. Banking Partners –**
- 14. Hongkong and Shanghai Banking Corporation (H S B C) Bund Garden Road Pune**
- 15. Maharashtra Bank – Vishrantwadi Branch Pune**
- 16. Slandered and Chartered Bank – Kalyani Nagar Pune**
- 17. HDFC Bank – Vishrantwadi Branch Pune**

Services Provided by AMIET REISEN –

- 1. Vehicle Testing**
- 2. Man Power Supply**
- 3. Vehicle Transportation**
- 4. High Class Car's on Rent**
- 5. Employee Transportation**
- 6. Car's on Long Lease**
- 7. Recruitments and Placements services**