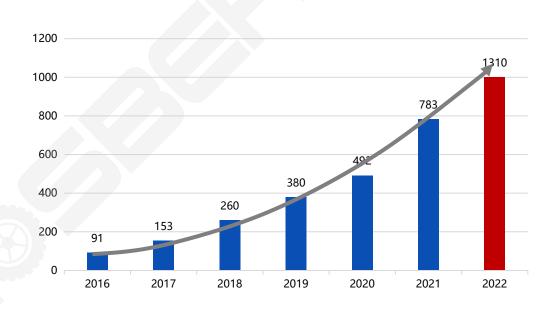


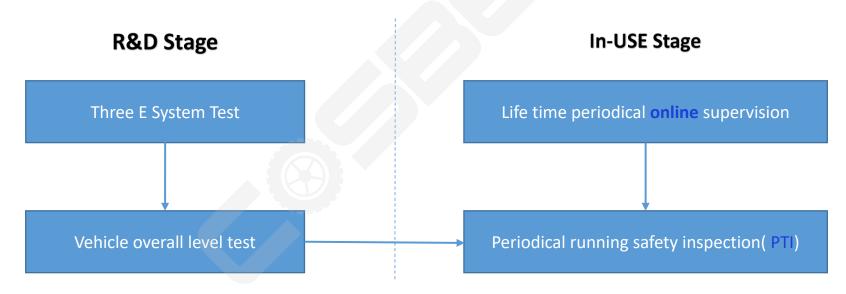


-By the end of 2022, China has 13.1 million new energy vehicles, of which 10.45 million pure (EV).





- -Perfect compulsory product certification type test (Type approval)
- -3-level Supervision system of "Manufacture-Local-State" reporting step by step
- -Whole life cycle Supervision-Regular safety inspection (Online Data & PTI)



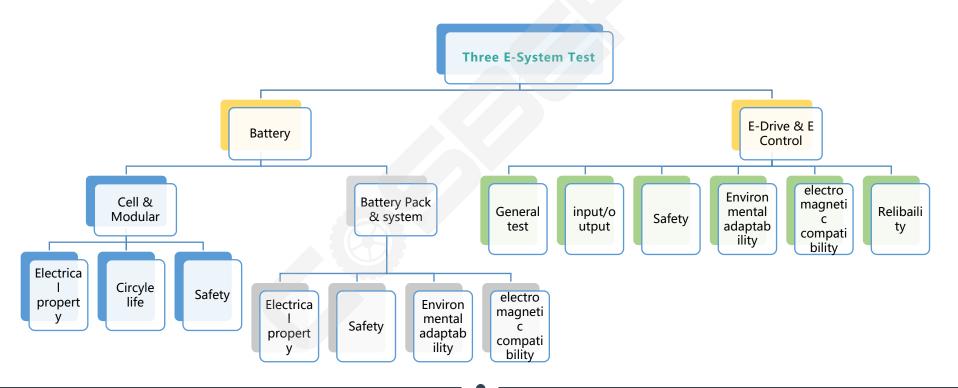
R&D Stage



Three-Electric system test:

Nearly 60 items, performance test, safety test and reliable durability test.

Electric drive and electronic control system are integrated together, the two test items are consistent.



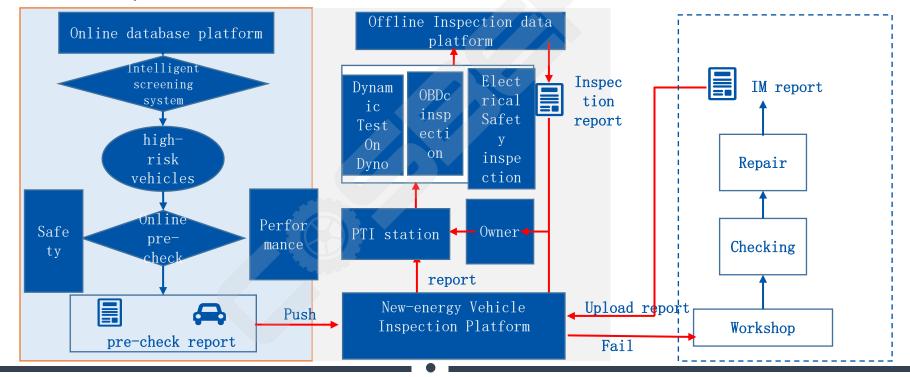
R&D Stage

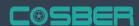


General Test	Input/output characteristic test	Safety test	Environmental adaptability test	Electromagnetic compatibility test	Reliability test
Visual Dimension	working voltage range Efficiency MAP	controller Protection function	Low temperature test High	Electromagnetic disturbance and immunity under load operation	402Hours Reliability test
Mass Weight	overspeed		temperature test		
Seal	Control Accuracy Response time	Safety grounding check	Damp-heat test	GB/T 36282- 2018	GB/T 29307
Stator cold state DC resistance	Controller current		Mechanical vibration		
Insulation resistance	Feed characteristic Temperature	Controller support capacitor	Waterproof and dustproof	Optional Items	Optional Items
Withstand voltage	rise Blocked rotation	discharge time	Smoke		



Relying on the three-level platform monitoring of big data for new energy vehicles, a safety inspection system is constructed by: Platform screening and Pre-inspection -I station Inspection -M station maintenance.





In order to strengthen the safety supervision of new energy vehicles, China began to implement the three-level monitoring system of national, local and Manufacture in 2016.

Platform

Protocol

Platform

Protocol

On-board data

Communication

protocol

National testing and management platform for new energy vehicles (National regulatory platform) National testing and management platform for new energy vehicles (Local supervision platform)

Leadership decision Emergency command Quality supervision

New energy vehicle

-- -- -- -- -- -- --

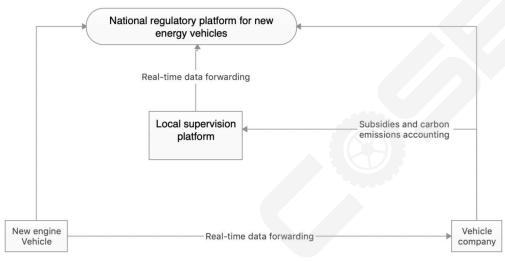
Vehicle terminal

New energy vehicle operation monitoring and management system Manufacture platform (Manufacture platform)

Safety warning telecommunication Intelligent transportation Other services



The system makes it clear that Manufactures are responsible for the safety of new energy vehicles first. Local platforms are positioned to do real-time data supervision of new energy vehicles in the public domain and urge production Manufactures to implement safety monitoring. In addition to the public domain, national platforms should also do all-round supervision of other fields.



GB/T 32960-2016 Technical specifications of remote service and management system for electric vehicles--Part 1General principle series standards 3

- -- Part I: General Provisions
- -- Part II: on-board terminal
- -- Part III: Communication protocol and data

format



Driving motor data (10 items)

- Number of driving motors
- 2. Drive motor assembly information list
- 3. Drive motor number
- 4. Driving motor condition
- 5. Drive motor controller temperature
- 6. Driving motor speed
- 7. Drive motor torque
- 8. Driving motor temperature
- 9. Motor controller input voltage
- 10. Motor controller DC bus current

Vehicle data (11 items)

- 1. Vehicle condition
- 2. Running state
- 3. Operating mode
- 4. Speed of vehicle
- 5. Accumulated mileage
- 6. Total voltage
- 7. Total current
- 8. SOC
- 9. DC-DC status
- 10. Gear position
- 11. Insulation resistance



Extreme value data (12 items)

- 1. Maximum voltage battery subsystem number
- 2. Number of the battery with the highest voltage
- 3. Maximum battery voltage
- 4. Minimum voltage battery subsystem number
- 5. Code of the lowest voltage battery
- 6. Minimum battery voltage
- 7. Maximum temperature subsystem number
- 8. Maximum temperature probe cell code
- 9. The maximum temperature
- 10. Minimum temperature subsystem number
- 11. Minimum temperature probe subsystem code
- 12. Minimum temperature value

Alarm data (10 items)

- Maximum alarm level
- 2. Universal alarm sign
- Total failures of the rechargeable energy storage device N1
- List of fault codes for rechargeable energy storage devices
- 2. Total number of driving motor failures N2
- 3. Drive motor fault code list
- 4. Total engine failure N3
- 5. Engine failure list
- 6. Total number of other failures N4
- 7. List of other fault codes