



Services

Pre-delivery inspection – a one-stop solution

By Christian Höhne, Technical Director, Formel D

Formel D uses structured concepts for pre-delivery inspections to support manufacturers with their upstream fleet management. At specially equipped sites, the service provider processes vehicles for internal delivery. This ensures that they are in perfect technical and optical condition at all times while taking the manufacturer's guidelines into account.

The increasingly wide range of modification and individualization options is constantly raising the demands made on production and manufacture. As a result, pre-delivery inspection (PDI) is consistently becoming more and more important, making more capacities necessary. This is often a great challenge for manufacturers, for besides premises fitted with the necessary equipment, the basic requirements for sound pre-delivery inspection include specially trained professionals.

The quality assurance measure follows specifications drafted by the manufacturer and implemented for each individual passenger automobile by the inspectors. The scope of the guidelines includes a check of the interior of the vehicle, the appraisal of the exterior and the inspection of the engine in the passive and active state. While the experts carefully document any errors, they can usually remedy slight deviations directly on site. When individual components have to be reworked several times,

process optimization is necessary on the part of the suppliers involved. This is why the service provider works hand in hand with numerous suppliers in order to implement and realize quality standards valid across all of their sites.

Comprehensive support

Within the Aftersales product division, Formel D develops individual solutions as part of vehicle management and implements

them, partly in the form of PDI concepts. As a competent partner with long years of experience, Formel D is also responsible for tasks such as the processing of new vehicles for internal delivery with precisely scheduled deadlines. Besides the passenger automobiles leased by employees, this also includes the fleet vehicles and the transporting of them to their destination as part of vehicle logistics.

Implementation of the PDI concept

To be able to provide the customers with the capacities they need directly on site, Formel D reacts quickly, for example providing project-specific teams made up of highly qualified personnel and also supplying the necessary areas if required. In this way, the service provider routinely implements international quality standards as part of PDI. The concept includes numerous spaces in which Formel D carries out the pre-delivery inspection of the vehicles according to a standardized and well-structured procedure. In addition, PDI areas possess complex equipment that includes tailor-made systems enabling the quality inspectors to carry out detailed pre-delivery inspection. Also, in coordination with the customer, expanded scopes of work such as the installation of accessories are carried out as part of sophisticated individualization measures.

Transparent documentation

Formel D uses the kanban method from the field of inventory management to control the processes. This makes it possible to adapt the procedures used in vehicle inspection to meet the specifications of the manufacturer. One of the fundamental elements of kanban is flexible warehousing with free spaces alongside production to actively prevent bottlenecks. "These alternative areas for a large number of vehicles correspond with a lead time of over half a week" is how Stefan Herrmann, project employee at Formel D, describes the peculiarities of the method. In contrast to the procedure followed by centrally controlled systems, the experts do not define the inventory beforehand here, instead realizing the project through flexible handling that meets the demand on the basis of sound process structures.

At the same time, the system enables large volumes to be realized while complying with consistently high quality standards. On arrival, the vehicles are given an order card enabling the online-based system to register the status at each station, update data records automatically every 30 seconds and constantly reflect the progress of the work. By means of the user-friendly interface, authorized persons such as vehicle fleet managers on the customer side as well as the Formel D employees involved in the

project access the network to gain information on the current state of processing of the vehicle in question.

"The customer is able to follow the progress of our work at all times. All those involved therefore have the same level of knowledge, allowing more transparency and improving communication," says Heiko Amma, Project Manager at Formel D, explaining the added value for the customer that results from the kanban method. The high safety standards of the software reliably safeguard the sensitive data involved.

Intelligent synergies

Formel D contributes a wide range of know-how from different product segments to this project. In addition to their expertise in technical documentation, vehicle technology and logistics, the experts make use of their experience in the fields of training and quality assurance. The dense network of Formel D sites leads to synergy effects allowing a flexible exchange of competence and material. "It is important for us to only work with qualified expert personnel such as mechanics, car body builders and automotive body painters," Stefan Hermann explains. "This tried-and-tested procedure maintains our high quality standard throughout all processes and responsibilities." The experts accompany all work steps, receiving the vehicles, carrying out a detailed electrical and mechanical check and mounting attachments and accessories. After the technical pre-delivery inspection and prior to final acceptance, one last external inspection takes place in which the paint is expertly reconditioned. After this, the experts hand over the vehicles according to the just-in-time method in order that lean processes can generate free capacities for the customers. ■



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