**Evaluación 3 – Proceso: Armado de un Auto Volkswagen**

This project speaks about the assembly process of a Volkswagen car. This process is formed by six micro processes.

* The first process is Presses:

Most of the vehicle is made by suppliers. The manufacturer takes charge doing principally the auto-body and engine, everything begins in the workshop of press. The steel is placed in a few rollers that make cross the steel and the press cuts pieces in the required measure. With the process of printing is molded the steel. Finished of stamping all the pieces, and the first quality control, it passes to the following process.

* The second process is Body Shop:

It is the part in which the different parts of the body are assembled

There are two workshops dedicated to this function. First, body elements without movable parts (doors, trunk ...) are assembled, and in the second, doors and hoods are assembled. This work is characterized by its high percentage of automation.

At the end of the assembly process of the chassis, the car passes a quality control to verify that everything is in place before moving on to painting.

* The third process is Painting

The body painting process is divided in two parts.

In the first, the body is protected from corrosion and external agents, also facilitates adhesion of the paint. At this stage, sealing compounds and protective wax are applied

Then, the body is washed under high pressure, plus various chemical treatments are applied to avoid imperfections. The body is submerged to a voltage to create a paint layer that protects the body from corrosion. After, the body is dried in an oven, and before painting, the body is cleaned using rollers feathers.

At painting stage, first, the inner parts are painted, and then the outer parts. Then a lacquer coating and catalyst are applied. Immediately, the body is introduced into a drying oven.

At the end, the whole body is polished to remove defects.

* The fourth process is Motors:

The motor assembly is an essential part of a car. We want to make clear that before placing the motor, the car already has an exhaust system, transmission, a steering column, shafts, a rear axle, etc. It is planned this way in order to save time and labor.

* The fifth process is Assembly:

When we get to the assemblage area, the first thing we have to do is to get the doors removed. We do this for two reasons: to avoid them being bothering when we place the seats, dashboards, and some accessories. During this process, the seat belts, the airbags, the roof, the sun visors, the glasses, and some blocks that make it work are assembled. This is made by operators and robots. Then, we assemble the outer parts such as radiators, lights, doors, etc.

* The sixth process is Final review:

In cars is carried out a test to verify that everything is in order in the factory. The employees verify that noises or faults there are no in the operation. in case of faults are repaired.

In the second phase. The car is subjected to a rain test to see if it is filtered water. After that the car made a test of maximum performance of engine, brakes, damping in a close circuit.

* Conclusion:

We manufacture a car that offers comfort and technology capable of competing with any other car in the market.