

STUDYING AND ANALYSING THE PROCESS OF MANUFACTURING AUTOMOBILE FUEL BAKES

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ANNOTATION. This work examines the production process of a car fuel tank and analyzes each of its stages. Fuel tanks are an important component in the automotive industry, and their quality and reliability directly affect the management and production of vehicles. The work examines additional materials, technology, design features, and quality control processes in the production of fuel tanks. , problems that may arise in the production process and methods for their elimination are analyzed. It is possible to establish the production of experienced machine guides.

Keyword Fuel tank production, Welding, Fuel tank performance, Technological processes,

The automobile fuel tank is manufactured at the "UzSeaMyung CO" JSC enterprise, and the production process is considered a complex process. The production process is mainly carried out in two stages;

1. Stamping process;
2. Welding assembly process;

The quality condition of the steel sheets received at the enterprise warehouse is checked, they are cut to the required sizes and thicknesses, in the pressing workshops, the upper and lower parts of the Cobalt car tank are prepared by giving the required shape and drilling the necessary holes in several stages on stamping machines for steel sheets with sizes of 1025*685*1 mm and 1055*700*1 mm', and at the inspection site, the finished parts are placed in special molds, and its standard sizes of GAP and FLUSH 'sizes 'sizes'are measured. Three to five parts from each batch are checked. It'goes through measurement work well'and is transferred'to the assembly process'.

The stamping process is also carried out in two stages:

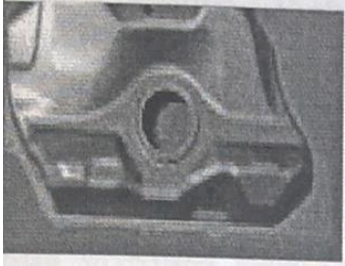
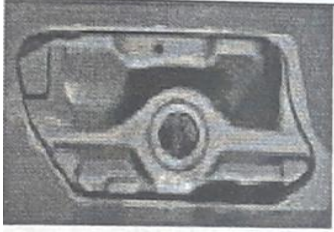
1. Stamping the upper part of the tank (Table 1);
2. Stamping the lower part of the tank (Table 2);

The stages of stamping the upper and lower parts of the car fuel tank'are listed below;

Table 1

No	Detail	Stamping equipment	Surgical site	Purpose of the operation
1.		1200 tons	In the pressing shop	Steel sheet molding



2.		600 tons	In the pressing shop	Forming and drilling holes in steel sheet 1) $0.36.7 + 0.25$; 2) $020 + 0.25$; 3) $3 - 5 + 0.15$; 4) $3.07.7 + 0.2$.
3.		300 tons	In the pressing shop	Forming and straightening steel sheet
4.		300 tons	In the pressing shop	Shaping, straightening, and bending a steel sheet. 1) $0130.4 + 0.5$; 2) $040.4 + 0.5$;

As mentioned above, parts that have passed the measurement well are transferred to the assembly process. The assembly process is carried out in the enterprise's welding shops. Each welding post in the welding workshops of the joint venture "UzSeaMyung CO" JSC is independently equipped with the necessary equipment. The assembly of fuel tanks is carried out based on the technological process management plan. The management plan is developed by the engineers with a clear understanding of each operation. The assembly process for the Matiz fuel tank consists of the following stages:

1. Auxiliary operations;
2. Assembly process;

Auxiliary operations'Before the assembly process, the condition, quality, and serviceability of all parts are checked. This process consists of 27 stages', 8 of which are inspected after stamping work in the enterprise's pressing shop', and 19 are inspected and sent by supplier enterprises'.

1) the upper part of the tank is inspected, and 3 batches from the batch are checked visually in the pressing shops for wear of the anti-corrosion layer and absence of cracks.

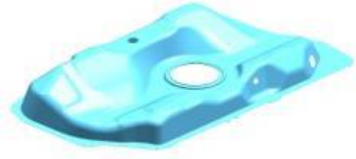
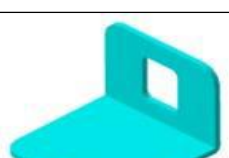
2) the lower part of the tank is inspected, and 3 batches of the batch are checked visually in the pressing shops for wear of the anti-corrosion layer and absence of cracks.

3) inspect the protective protector attached to the bottom of the bucket, and inspect 3 batches of the batch in the pressing shops for wear of the anti-corrosion layer and the absence of cracks.

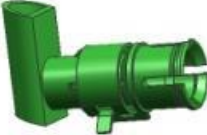
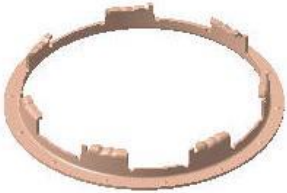
4) a settling tank is inspected to prevent fuel'swaying inside the tank, and 3 batches are checked in the pressing workshops for wear and tear of the anti-corrosion layer'without cracks.'

No	Detail	Review duration	Checkpoint	Purpose of the investigation
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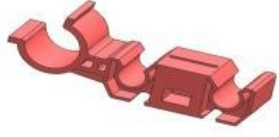


1.		3 pieces from the batch	In the pressing shop	the anti-corrosion layer is not worn out, there are no cracks
2.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
3.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
4.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
5.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
6.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
7.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
8.		3 pieces from the batch	In the pressing shop	no wear of the anti-corrosion layer, no cracks
9.		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks



10		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks
11.		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks
12		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks
13		3 pieces from the batch	Supplier	No damage, no cracks
14		3 pieces from the batch	Supplier	No damage, no cracks
15		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks
16		3 pieces from the batch	Supplier	no wear of the anti-corrosion layer, no cracks
17		3 pieces from the batch	Supplier	No damage, no cracks



18		3 pieces from the batch	Supplier	No damage, no cracks
19		3 pieces from the batch	Supplier	No damage, no cracks
20		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks
21		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks
22		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks
23		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks
24		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks
25		3 pieces from the batch	Supplier	Absence of friction, wear, or cracks



26		3 pieces from the batch	Supplier	Absence of friction, wear, and cracks
27		3 pieces from the batch	Supplier	Absence of friction, wear, and cracks

The "Uz-SaeMyung.Co" joint venture primarily produces fuel tanks and body panels for vehicles such as DAMAS, NEXIA R3, GENTRA, COBALT, SPARK, Onix, and Tracker.

In the process of manufacturing the aforementioned products, the sheets are first shaped in the pressing shop and their quality is verified. The next stage is carried out in this welding shop. In this workshop, the pressed sheets are welded together. The quality of the welded parts is checked by the inspection. During the inspection, poorly welded parts are found to be defective and are re-examined. Then, the welded fuel tanks in good condition are sent to the painting section, where they undergo painting. After passing through each section the quality of the work performed is checked and tested. The finished products are packaged and sent to enterprises.

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