

Blacksmithing Works

Introduction

Blacksmithing activities at the Tell Mozan site are currently considered relatively challenging due to the lack of electricity at the site.

This circumstance necessitates the assistance of a mobile blacksmith who possesses an electric generator mounted on a vehicle, allowing mobility within the site.

From the outset, the objective was to rely on a blacksmith from Tell Mozan or nearby villages for two main reasons:

- Economic considerations: Hiring a blacksmith from Qamishli or Amuda to work at Tell Mozan would incur significantly higher costs, approximately four times the expense of hiring one from neighboring villages.
- Promoting the involvement of local suppliers: This approach aligns with the objectives of our project and is part of the “*Eco-archaeological Park*”, which aims to support local communities and encourage the active participation of local suppliers in carrying out on-site operations.

Accordingly, the only viable option was to engage the blacksmith residing in the village of Umm al-Rabi‘, located approximately one kilometer north of Tell Mozan.

The blacksmithing work at the site was limited to several specific tasks, including:

- Straightening the bent iron fence.
- Repairing the breaks in the temple panorama.
- Fixing the tannur (oven) cover in the palace area.
- Repairing doors in excavation zones.
- Repairing the palace panorama.

- Installing the mesh on the iron frames of the drainage system in Iwan C5.
- Fixing the sheets (tutiya) on walls D1-1 and E1, and the screw on the Abi dome.
- Repairing the old protective barbed wire and replacing the deteriorated sections with new material.

The following sections provide a detailed description of each task.

Iron Fence

The iron fence is one of the key elements that enhance the aesthetic appeal of the site, in addition to its primary function of protecting it. The fence serves a dual purpose: it safeguards the excavations and prevents visitors from accessing fragile areas, while also reducing the risk of visitors falling into deep excavations, which could result in injuries.

Moreover, it helps maintain the designated visitor pathways and regulates movement throughout the site.

At the site, most sections of the iron fence were bent (Fig. 1), some were broken (Fig. 2), and other parts were entirely missing (Fig. 3). The objectives of the repair process were to:

- Straighten the bent sections.
- Repair the broken parts.
- Replace the missing elements.

It should be noted that completely replacing the fence would be a very costly undertaking; therefore, this task has been deferred to future years. The mission may later decide to renew the fence entirely or replace only the missing sections, particularly in the areas between the excavations above the palace and the palace.

The work on site continued for two days. On the first day, the iron fence was repaired by welding the broken sections (Fig. 4) and adding new rods to replace the missing parts in the temple area (Fig. 5). The blacksmith attempted to unscrew the bolts to reassemble the sections; however, the bolts were corroded and could not be removed.

Some parts had to be cut (Fig. 6) and rewelded (Fig. 7), and other parts straightened (Fig. 8) in both the temple and palace areas.

Repair of the Panorama in the Temple Area

The panorama in the temple area functions as a concise guide, providing visitors with information about the archaeological discoveries in the temple area. It contains sheets with brief yet comprehensive descriptions of the area.

The temple panorama had a break in its right corner (Fig. 9), which made opening the cover difficult. Additionally, several minor cracks were observed on the cover. The blacksmith welded the broken corner (Fig. 10) and the minor cracks (Fig. 11).

It is important to note that any repair work may affect other parts of the panorama. So, it will be necessary to repaint the entire panorama following the welding operations to ensure that its appearance and functionality are preserved (Fig. 12).

Repair of the Tannur Cover

It was observed that two rings of the tannur cover were broken (Fig. 13), which hindered the proper closing of the cover and caused it to become dislodged from the surrounding tannur frame. Therefore, the damaged rings were replaced with new ones and welded in place (Fig. 14).

Repair of the Doors

It was observed that one of the doors had become embedded in the ground due to accumulated debris over the past years, preventing it from opening properly and obstructing visitor movement. Two options were considered: excavating to enable proper door operation or slightly raising it above the ground. The latter option was chosen to avoid any excavation at the site at this stage, even if minor. The blacksmith raised the door and rewelded it in place (Fig. 15).

Repair of the Palace Panorama

A previous defect was identified, where the cover of the palace panorama did not open in a manner that allowed it to rest flat on its base.

This hindered visitors' ability to simultaneously read the content of the panorama and view the palace (Fig. 16).

To address this issue, the iron rod that was preventing the cover from lying flat was cut (Fig. 17), allowing the cover to achieve the desired flat position (Fig. 18).

At the same site, the break in the metal canopy covering the palace panorama was also repaired (Fig. 19).

Installation of the Mesh on the Iron Frames of the Drainage System in Iwan C5

It was observed that the mesh covering the iron frames installed over the drainage system in Iwan C5 was missing (Fig. 20), which led to the accumulation of debris within the drainage pits due to the absence of the protective mesh. Consequently, a new mesh was installed on the two frames and secured in place, restoring it to its original condition prior to wear and loss (Fig. 21).

Fixing the sheets (tutiya) on walls D1-1 and E1, and the screw on the Abi dome.

It was observed that the sheets (tutiya) on the protective systems above Wall D1-1 were not properly secured, or the bolts may have been removed from their positions. This situation exposed the sheets to potential displacement due to strong winds, which could result in their falling or in the dislodgment of the cement blocks placed above them for stabilization. Such occurrences could threaten visitor safety or, at a minimum, leave the wall exposed without protection against weather conditions.

The tutiya was firmly secured using bolts to prevent any potential fall (Fig. 22). Additionally, the tutiya above Wall E1 was installed and secured (Fig. 23), and one of the missing bolts on the Abi dome was

reinstalled, as its absence could have caused water leakage into the dome (Fig. 24).

Repair of the protective barbed wire

The primary function of the protective barbed wire is to support the iron fence, thereby protecting the excavations and maintaining the visitor pathways. It was observed that some sections of the protective barbed wire installed on the iron fence were deteriorated or not properly secured to the rods (Fig. 25), and other sections were missing in different areas.

To restore protective efficiency, on the second day of work, the intact sections of the wire were reinstalled, and new pieces were added in areas containing deteriorated or missing sections (Fig. 26).

Abi Panel

When opened, the Abi panel cover tilted excessively backward, rendering it unstable and inconvenient for display (Fig. 27). To address this, screws were installed at the bottom of the cover to serve as a support (Fig. 28), ensuring that the cover opens evenly and remains stable during use (Fig. 29).

Figures



Figure 1: Image showing bent rods



Figure 2: Image showing broken rods



Figure 3: Image showing missing rods



Figure 4: Image showing welding of the rods



Figure 5: Image showing the addition of new rods



Figure 6: Image showing cutting of parts of the rods



Figure 7: Image showing welding of the rods



Figure 8: Image showing the straightening of bent rods



Figure 9: Image showing the broken corner of the panorama



Figure 10: Image showing welding of the panorama corner



Figure 11: Image showing welding of minor cracks in the temple panorama



Figure 12: Image showing the panorama after welding



Figure 13: Image showing the broken rings of the tannur cover



Figure 14: Image showing the tannur cover after repair



Figure 15: Image showing the door during the raising process



Figure 16: Image showing the cover not resting flat on its base



Figure 17: Image showing the cutting of the iron rod that prevented the cover from lying flat



Figure 18: Image showing the panorama cover after adjustment, lying flat on its base



Figure 19: Image showing the repair of the broken canopy above the palace panorama



Figure 20: Image showing the missing mesh on the drainage frames in Iwan C5



Figure 21: Image showing the installation of the new mesh on the drainage frames



Figure 22: Image showing the securing of the tutiya sheets on Wall D1-I



Figure 23: Image showing the securing of the tutiya sheets on Wall E1



Figure 24: Image showing the re-installation of a missing bolt on the Abi dome



Figure 25: Image showing damaged protective barbed wire



Figure 26: Image showing the reinstalling of the new protective barbed wire



Figure 27: Image showing the Abi panel cover tilting backward



Figure 28: Image showing the installation of screws at the bottom of the Abi panel cover



Figure 29: Image showing the Abi panel after the installation of the support screw for stability