# **Schools for Knowledge Economy Project (SKEP)**

# Phase III- Package 1 & Package 2

# **Medanat and Contractor Site Staff Training**

Location: Online Meeting Time: 10:00 a.m. to 11:00 a.m. Date: Monday, July 04, 2022

## **Training Director:**

## **Home Office Support:**

1. Suhair Amarin- Project Director/Head of Design Department

#### **SKEP III Staff:**

1. Natheer Amarin- Project Manager

#### **Site Engineers**

## **Medanat Staff:**

- 2. Alaa Eleimat
- 3. Yousef Omar
- 4. Qais Lataifeh
- 5. Sadam Al-Bqaeen
- 6. Taher Al Ribie
- 7. Ammar Gharaibeh

#### **Contractor Staff:**

- 1. Amer Abdulghani/ PM
- 2. Khalid Bazian/PM
- 3. Tharwa Malkawi
- 4. Abdulmalek
- 5. Rami Al-Haj
- 6. Sahar Sulaiman
- 7. Anas Shdefat
- 8. Abdullah Al Husban
- 9. Walaa Khreisat
- 10. Omar Hammori

#### **Fresh Graduates Engineers:**

- 1. Ghaith Otoum
- 2. Wesam Ankir
- 3. Maram Abu Awad
- 4. Areen Khreisat
- 5. Khalid Al-Jahaleen
- 6. Sarah Al Ali
- 7. Aya Al Abed.
- 8. Dema Dababseh.
- 9. Abdullah Al Dabbas
- 10. Ghassan Ajjori
- 11. Ayman Ayasrah
- 12. Ahmad Al-Madhoun

## **Purpose of Site Staff Training**

## Training programs focusing on one or more of the following topics:

- 1. Health, Safety and Environment.
- 2. Production of visual documentation through videos and photography.
- 3. Advanced Materials for Construction and Repair of Concrete.
- 4. Construction Quality on Site.
- 5. Construction Supervision Skills.
- 6. Electrical Works.
- 7. Mechanical Works.
- 8. Issues Related to Work Shop Drawings, As Built Drawings, Approvals and Similar.
- 9. Utilities and Infrastructure.
- 10. Municipalities Regulations.
- 11. Construction Ethics.

## July 04, 2022 Training Material

## Why and When Construction Equipment Should Be Upgraded:

No Construction work can be done efficiently and on high standards without the existence of good equipment, add to this that they add to the labors' productivity and ensure the project's smooth delivery.

And here is why construction equipment should be Updated every while and then:

## 1. Increasing Labor's Safety:

Despite decreasing Labor's injuries, construction companies must remain vigilant about Labors safety as a site contains many hazards. Therefore, anything a company can do to improve labors' safety is a must-do and upgrading equipment will assist in this.

It's tempting to buy older equipment to save on expenses. However, this could end up driving up the cost more as the equipment is more likely to malfunction, causing numerous unplanned for expenses. If someone gets injured, it could lead to an expensive lawsuit.

#### 2. Increasing Project Capacity:

Swapping aging equipment for newer models means your construction equipment will be able to handle bigger jobs. As a result, the project could finish ahead of schedule. Or rather, it may finish on time whereas the old equipment could cause a missed deadline. Newer equipment will be more durable, more efficient, and simpler to operate.

#### 3. Increasing Profits:

Rather than looking at upgrading equipment as an expenditure, view it as an investment that will pay off in the long run. Newer equipment will be easier and cheaper to maintain. As previously stated, upgraded construction equipment will be able to achieve more in less time. Every hour shaved is money saved.

Outdated construction equipment is less efficient in using fuel, which increases your costs. It's slower and requires more upkeep. The older it is, the more care it will need. It could reach the point that maintenance will not suffice and it needs to undergo repairs.

Newer equipment improves the quality of work. It's more likely to execute the tasks exactly as expected. Older equipment that fails will cause delays. Delays often involve penalties.

#### 4. Increasing Uptime:

While upgrading to new equipment involves a large initial investment, it will yield a faster return on investment. Not only does the new equipment increase the chances of getting the work done correctly, but also, it's more likely to last for the duration of the project. Newer equipment allows you to scale and keep up with demand.

Outdated and old construction equipment can break down multiple times on a project. You may not be able to get a licensed technician to come to the jobsite quickly enough. Besides, it may not be possible to repair it on the jobsite or it may not be repairable at all. In either case, it will require renting a replacement. Between the price of repairs and renting a backup, the costs add up.

## 5. Increasing Employee Morale:

Employees that are challenged and get the opportunity to work with new equipment are happier employees. They're more likely to work harder and more efficiently. You take away the burden of dealing with outdated construction equipment. They're not constantly having to fiddle with it, maintain it, fix it, and whatever else ails the equipment.

The best equipment doesn't work alone. It needs people to operate it. The most skilled construction workers will want to work with current equipment and technologies. Thus, having updated equipment can help you land the best talent.

## The Right Time to Upgrade the Construction Equipment:

Asset management software will help identify construction equipment that needs to be upgraded.

### 1. The equipment can't handle its tasks;

If the equipment doesn't have the capability to perform its tasks as required, then it's going to cause your profits to leak. Consider renting a new model to take it for a test run. See how it performs. Does it save time? Cut repair costs?

#### 2. Maintenance is Becoming a Regular Occurrence:

Equipment that regularly breaks down is going to eat up time and money. Consider how much it delays the project when it's broken. Lost workdays and missed deadlines can quickly grow expensive. Equipment that requires more maintenance can also be an increased safety risk.

#### 3. Can't Handle Big Jobs:

Older equipment tends to have a limit on how much it can handle. Newer equipment has the horsepower and strength to manage larger capacity tasks faster.

#### 4. It's getting harder to find replacement parts:

Construction equipment manufacturers can only have so much inventory available for older equipment. They want to stock up on parts for newer equipment. To make room for newer equipment replacement parts means sacrificing shelf space for older parts.

## 5. Fuel Costs are Higher than Necessary:

Homeowners replace the air conditioner filter a few times a year. The reason for this is that the dirtier the filter, the harder the air conditioning needs to work in putting out cold

air. The harder it works; the more energy it uses up. The more energy it uses, the higher the electric bill.