

QA 200 - Mobile Crushing & Screening

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ACADEMY**

Improving Processes. Instilling Expertise.

Mobile Plants

Presentation Overview

This is a presentation on the functionality and role that mobile plants may play within the construction and mining industries.

Mobile Plants

Overview

How they're Classified – They are Easily Transportable and Very Mobile on Site

1. Generally can readily be moved from site to site on public highways.
2. Typically are fast set up units from start-up to production.
3. Generally have a capacity limited to around 350-600 tonnes/hr depending on use and application.
4. Can quickly fill into any production unit.

Mobile Plants

Different Types

- **Crawler Mounted Units**
 - Self-supporting
 - Easy to move in pit
 - Fast set up & close down
 - Compact

- **Wheel Mounted Units**
 - Onboard process alternatives
 - External electrical power
 - Moved much less frequently



Mobile Plants

Types of Transportation

Crusher with bogie



Crusher on low bed

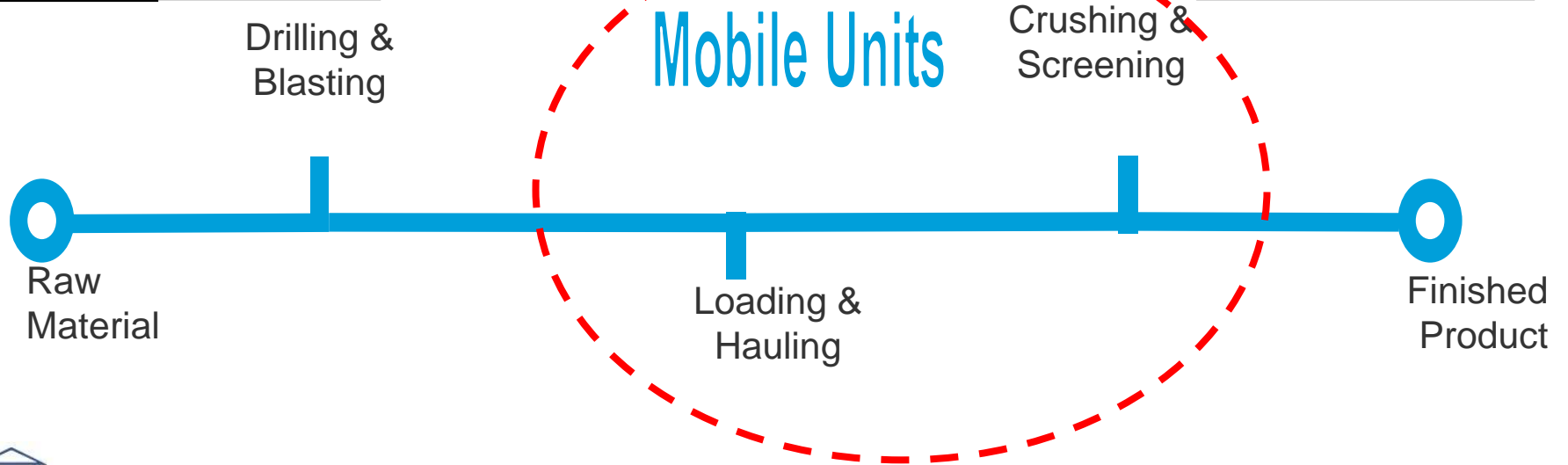


Rubber tire crushing & screening unit towed by fifth wheel



Mobile Plants

Where do they fit in the Quarrying Process?



Mobile vs Fixed Plants Comparison



Fixed Plant Operation

Typical Mobile Operation



Mobile Plants

Advantages

Because most ranges of mobile screens and crushers are designed to deal with virtually any quarry or recycling application, the units become very versatile.

- Construction Projects
- Quarry and Mining Projects
- Demolition and Recycling
- Waste processing/land fill
- Groundwork's and Excavation
- Size Reduction



Mobile Plants

Some Things to Consider

-About the Advantages

- **Lower capital cost** - No investment in heavy fixed structures. No concerns obtaining electrical supplies on proposed use sites.
- **Typically not subject to** - Planning restrictions or local taxes, as not considered a permanent structure.
- **Faster time** - From project approval to producing saleable materials.
- **Low Dollars** - They give a quicker return on investment.
- **Asset management** - They have good resale value. Leasable, so they can be considered off balance sheet—Can improve financial position.

Mobile Plants

Some Things to Consider

- About the Advantages

-**Multi-site capability** - Often used by stone producer to cover more than one mineral deposit. Especially useful when there is a need to maintain a market when an old existing plant requires replacement or rebuilding.

-**Easy to add/subtract** - They can be a production unit that can quickly change process and output to cover alterations in market demand.

- **Lowers operating costs** - Reduces hauling and people costs. Plants are often operated by just the two machine operators. The excavator driver that loads and operates primary crusher. And the loader driver that operates the loader that can feed the secondary plant, or can loads road trucks.

Mobile Plants

Some Other Considerations

Considerations

- Mobile plants allow you to take full advantage in the reduction of haulage trucks and loading cycles, as the primary crusher can be located closer to the shotpile
- They can easily mix and match into any type operation as a back up for a machine down or added production needs
- There are typically no ground checks or electric work to consider
- They are a good alternative to downed fixed units due to maintainence

Mobile Plants

Some Other Considerations

Considerations

- They're very portable and set up fast into any operation
- Permitting process is typically easier
- Mobile plants are easier to re-sell and they hold a reasonable resale value

Mobile Plants Typically Used

How do Mobile Plants Help ?

- They can be a **Short-term solutions provider**
- They can be **Temporary production booster**
- They can **Work fast in multiple locations**
- They can **Do whatever a fixed plant can do**

* **Note:** Related to shape and final product size, but not tonnage

Typical Mobile Plant Customer

Hamilton Aggregates, Clinton, AR



Mobile Plants

Hamilton Aggregates



Prepared Materials

Leads to low maintenance costs



Why Choose a Mobile Plant

In Hamilton Aggregates Case:

▪ Reasons they chose mobiles over stationary

1. Portability
2. Permitting
3. Ease of Maintenance
4. Multiple Uses
5. Better Resale Value
6. No Electric Issues
7. No Ground Checks Typically
8. Mix and Match into Existing Operations

Mobile Plants in Use

Hamilton Aggregates, Clinton, AR



Mobile Plants

Environmental Recycling Uses

- Reduce the number of land fill sites, sand & dump sites and also to extend their life.
- Recycling and reclaiming many types of material such as: asphalt, concrete, bricks, tiles and minerals.
- Saving resources by not having to use virgin material such as: sand & gravel, rock, & other minerals.



Mobile Plants

The Conclusion

What is the “New Normal”?



When Looking for profit?
Do we continue with the Status Quo? Or...



Mobile Plants

Or...Do we look at Change?



Mobile Plants

Can they be the “New Normal”?

**What I would like each of you
to do once you go home from
Quarry Academy is...**



Mobile Plants

Challenge Yourself to look for new innovative ways to make more profit?

Could a **Mobile Plant** be “**The New Normal**” way of earning more profit?



Mobile Plants

Tell me how you have made a change!

Please Email me @ stu.gamble@sandvik.com
and tell me what you have done to improve your
company's profits.

AND

Did a Mobile Plant have anything to do with it?

Thank You



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