



OVIVO® TRASH RAKE UPGRADES

ADD MORE VALUE TO YOUR CURRENT OVIVO® RAKE CLEANING OPERATION

Upgrades include:

A non-tipping gripper rake

HMI "Human Mechanical Interface"

Wireless "Hot Rail" system

All three items can be added to existing raking sites



NON-TIPPING RAKE

OVIVO offers a new Non-tipping rake to replace the existing rake designs. Since 2011, OVIVO has installed the non-tipping rake on all new installations with very good results with greater debris penetration and amount of debris removal from bar screens. The typical gripper "rake" tipping on the original design has greatly improved with this design and can be added to existing trolleys.

Added information:

- Non-tipping rakes are "taller" so dumpster and wall clearance is a factor.
- Non-tipping rakes are heavier than the standard rakes is a factor.

OVIVO HMI

OVIVO offers HMI screens added to your control panels. This HMI replaces existing control panel door indication pilot lights, with these pilot lights only offering very limited information and "0" added rake functions.

The OVIVO HMI's offer multi screens for equipment operations and information for examples:



- Main screen for normal operation and added rake functions.
- Time starts screen with six (6) plus different time starts that are programmable to the user's needs.
- Faults screen which shows all faults that could happen with the system.
- Slack rope screen which adds information to a pick position/s not seen below the water line.
- System Check screen which adds information to all system switches on the trolley.
- No more need to have a technician with a laptop and the program to trouble-shoot system, all done through the HMI screens.
- HMI information from HMIs can be sent to SCADA via CAD cable with data tags.

OVIVO can customize screens to better fit the customer's operational needs. OVIVO uses as standard the Red Lion or ABB HMIs.





OVIVO WIRELESS SYSTEM



OVIVO Brackett Bosker equipment has seen and found the need to improve the rake cleaning operation with use of festoons during high wind cleaning operations.

OVIVO Brackett Bosker wireless system uses a 3 phase hot rail installed inside or outside of the monorail with a 3 phase collector used with the hot rail to power the trolley independent of a festoon system.

Improvements:

- Wireless can be operated in much higher wind speeds.
- No need for festoons or festoon cable wagons.
- Smaller foot print with no need for longer festoon storage adding to the length on the monorail system.
- Tandem trolley can be operated from the same hot rail design.
- Newly installed wireless site in a straight and curve monorail design. SFWDM FAKA Union site (Florida) and City of Orange (California).
- Control panels are mounted to the end of the trolley frame. Two control panels mounted with hinges and release pins to swing control panels towards maintenance platforms for inspections.
- Hot rail system can be installed / fitted to existing OVIVO Brackett Bosker system trolleys.

SUCCESS STORIES

SFWMD FAKA UNION SITE, NEW INSTALL 2015:

Straight monorail system with Tandem rakes.

Upgrades:

- Tandem rake operations.
- Wireless Hot rail system no festoons or cable wagons, as seen in picture.
- Tandem ABB <u>HMI</u> • controls.
- Non-tipping rakes.
- Single trolley control ٠ panel mounted to the end of trolley as seen in picture.



CITY OF ORANGE CA. SITE, NEW **INSTALL 2016:**

Curve track monorail system with a single rake.

Upgrades:

- Wireless Hot rail system no festoons or cable wagons, as seen in picture.
- Red Lion HMI Control.
- Non-tipping rakes.
- A two control panel configurations mounted to the end of trolley as seen in picture. One panel 460 v and the other control panel / PLC.



Contact an Ovivo representative for an on-site equipment evaluation:

- Assess potential upgrades for equipment Assist with developing budgets for future plant repairs and upgrades
- Request spare parts lists and pricing
- Troubleshoot equipment

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