

Sand-Manager® Classifying Tanks

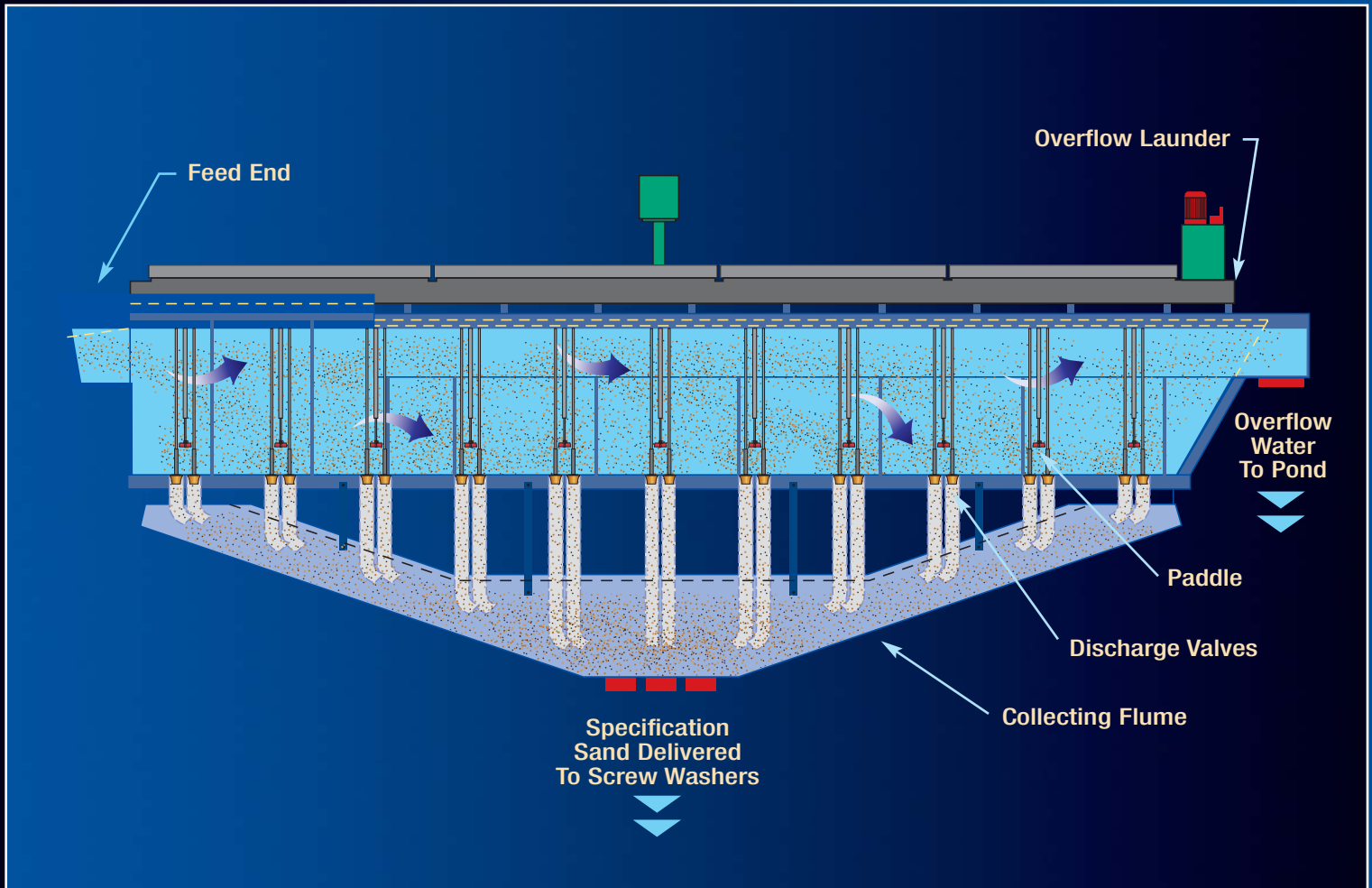


McLanahan
CORPORATION

LPT GROUP • HSS SAMPLING

EQUIPMENT, SYSTEMS & PROCESS INNOVATION – SINCE 1835

How They Work



SAND-MANAGER® CLASSIFYING TANKS ARE WIDELY USED IN SAND, GRAVEL AND CRUSHED STONE PLANTS AROUND THE WORLD.

The classifying method is based upon the principle that coarser sand settles near the feed end and finer sand is carried progressively further down the length of the tank. Valve stations located throughout the tank are equipped with hydraulically-operated valves and a torque motor-driven paddle shaft. As material accumulates at the base of the paddle, the motor stalls, signaling the appropriate product valve to open. As the correct percentage of material is allocated to its proper collecting flume, the sand is re-blended into specification products.

OPERATORS KNOW THEY CAN RELY ON McLANAHAN TO PROVIDE AN EFFICIENT, LOW MAINTENANCE WAY TO PRODUCE SINGLE OR MULTIPLE SPECIFICATION PRODUCTS FROM SLURRY OR DRY FEEDS.

Selection

USE THE CHARTS BELOW TO HELP GUIDE THE SELECTION OF YOUR McLANAHAN SAND-MANAGER® CLASSIFYING TANK.

For proper sand classification, we recommend 8 to 10 USGPM for every 1 TPH of sand feed. 100 USGPM is required to remove every 1 TPH of - 200 mesh material in the feed. Please consult the McLanahan Sales Department for technical support and selection guidance.

WATER CAPACITIES

10' WIDE UNIT			
Length	100 Mesh	150 Mesh	200 Mesh
24'	2,770	1,812	1,019
28'	3,458	2,262	1,272
32'	4,152	2,716	1,527
40'	5,001	3,272	1,839

For The Twin Classifying Tank, Water Capacity Is Doubled. Water Volumes Are Maximum Allowable (USGPM) When Maintaining A 1.03 Specific Gravity.

11' WIDE UNIT			
Length	100 Mesh	150 Mesh	200 Mesh
32'	4,657	3,047	1,712
40'	6,233	4,077	2,292

12' WIDE UNIT			
Length	100 Mesh	150 Mesh	200 Mesh
40'	7,044	4,608	2,590
48'	8,789	5,749	3,232

TWIN TANKS

FOR USE IN HIGH WATER-VOLUME APPLICATIONS SUCH AS DREDGING, THE PARALLEL TANKS DOUBLE WATER CAPACITY WHILE THE CROSS-COLLECTING FLUMES COMBINE MATERIAL TO SINGLE DISCHARGE POINT FOR FINAL DEWATERING OF EACH PRODUCT.



Twin 10' x 40' Sand Classifying Tank In Texas

THAT MAKES IT EASY FOR YOU TO OPERATE & CONTROL YOUR SAND PRODUCTION!



Melanahan Sand-Manager 7 / Pre-Plus II

File System Tools Views

% Undo Redo Zoom

Mainen Sand (STW 0.140)

Wet Dry

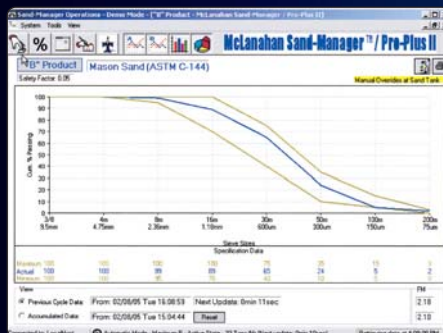
Relative Humidity (Percentage)

Wet Dry

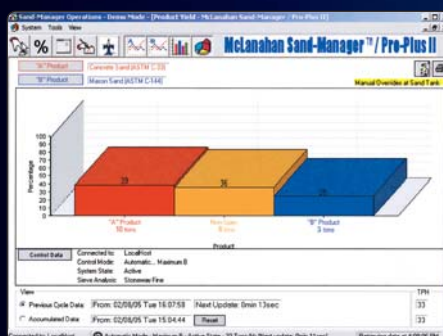
Wet	Dry
4	25
4	40
27	34
30	32
6	15
7	24
7	22
26	14

View: 1/1 1/1 1/1

The **Sand-Manager®** graphics software is available and enables you to monitor and/or adjust such features as product specifications, production levels, station gradations, valve activity, FM (fineness modulus), call up stored recipes and more... all from your office, home, or other remote location. You can access any or all features individually or simultaneously by opening multiple windows and arranging them to your preference. **You can now access what you want... when you want... where you want... how you want.**



For the ultimate control and unequalled efficiency, you can upgrade the standard graphics software package to incorporate our powerful **Pro-Plus II** engine, which provides a fully automated method to optimize sand production. You tell the computer what function is most important to you (i.e. minimize non-specification product, maximize a particular specification product, or produce a desired ratio of two specification products) and it performs the complex calculations necessary to achieve the desired results. By continually monitoring the tank's activity and automatically re-adjusting the station percentages accordingly, tight specification tolerances are maintained.



A unique leak-free method to join the valve seats, down-pipes and elbows – eliminating corroded hardware. Reduces downtime to minutes not hours.
(Patent Pending)

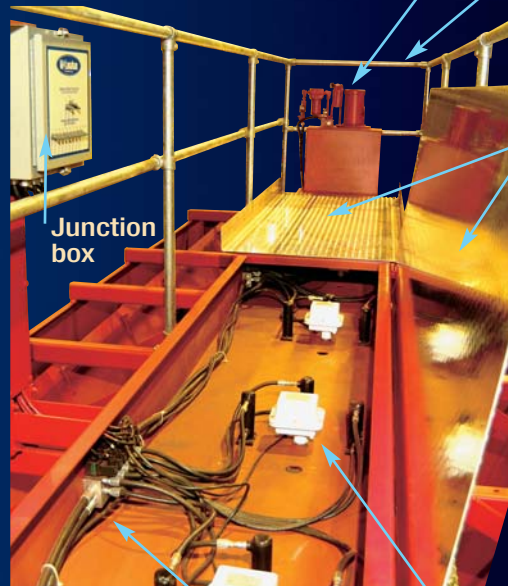
Standard Features

The **Sand-Manager®** Classifying Tank utilizes a percentage-based approach to control the classifying/re-blending process. As material accumulates at a given valve station, your designated percentage is discharged to each product. For example, at Station #1, you may require 80% of the material to discharge to the "A" product and 10% to the "B" product. You simply enter these percentage values into the controller to achieve the proper re-blending. (Note: In a 3-cell collecting flume tank, if the percentage allocated to the "A" and "B" products does not total 100%, the remaining material is discharged to the non-specification flume). Since each valve station operates independently, you can easily adjust the percentages to compensate for feed and/or specifications changes.

Solid, enclosed platform makes maintenance easy. No false bottom where your tools can drop through or excess water can enter!

Hydraulic power unit

Rust-free modular handrail

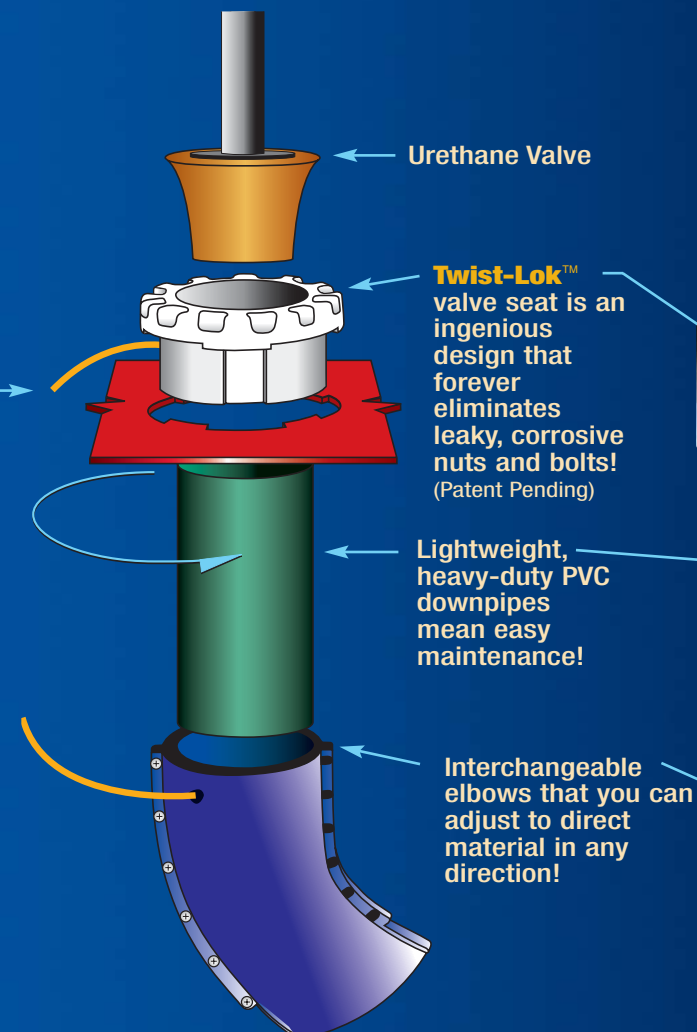


Rust-free aluminum lids allow simultaneous access to several stations for easy maintenance.

Junction box

One distribution block transfers hydraulic fluid between two valve stations – reducing the number of components.

Plug-in electrical connections reduce wiring time – making change-out easy.

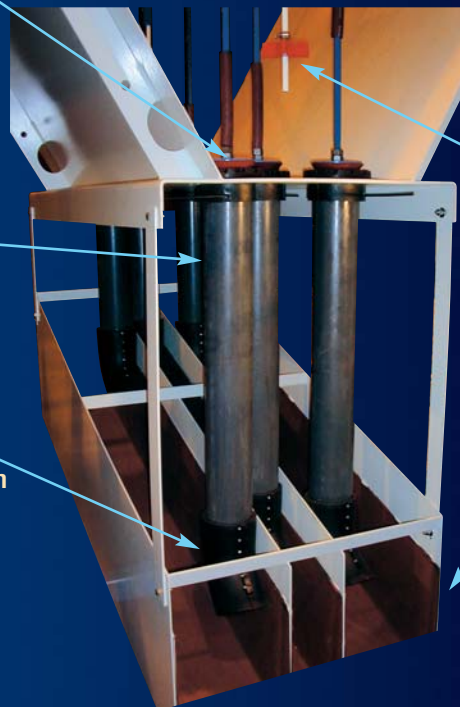


Urethane Valve

Twist-Lok™ valve seat is an ingenious design that forever eliminates leaky, corrosive nuts and bolts! (Patent Pending)

Lightweight, heavy-duty PVC downpipes mean easy maintenance!

Interchangeable elbows that you can adjust to direct material in any direction!



Infinitely adjustable paddles with a quick change-out design provide sensitive material feedback and reduce "blowing".

Extra wide and deep flume minimizes splashing and cross-contamination!

▲ **Valves, Valve Seats And Elbows Are Made From Long-Lasting Urethane**
Also Available In White Iron

Plus, The **Sand-Manager®** Features Three Sided Overflow Launder With Adjustable Weirs To Control Fines Retention.



**IT'S AMAZING
& ONLY FROM McLANAHAN!**

THE YIELD WIZARD™

**INCLUDED IN THE SAND-MANAGER®
SOFTWARE PACKAGE IS THE YIELD
WIZARD THAT DOES WHAT NO OTHER
SAND TANK SOFTWARE TOOL CAN DO.**

You simply tell The Yield Wizard what product you want and it tells you how to make it. What does this mean to you? *It means you may be able to make products or quantities you never thought possible.*

**IF IT SOUNDS SIMPLE,
THAT'S BECAUSE IT IS!**

The Yield Wizard guides you through a step-by-step process where you indicate what material gradation you have and what product(s) you want to make. The Yield Wizard then tells you if you can make a product (even if you do not have an operating Tank) and how much of it you can make. *But more importantly, it tells you exactly how to set up the Tank's controller to meet your specification.*

**SAY GOODBYE TO THE TIME
CONSUMING, WASTEFUL TRIAL
AND ERROR METHOD
OF "DIALING" IN A PRODUCT.**

The Yield Wizard is so user friendly that you can return to any window and make changes without running through the whole program again. *Plus, you can store your data and retrieve it anytime you want.*

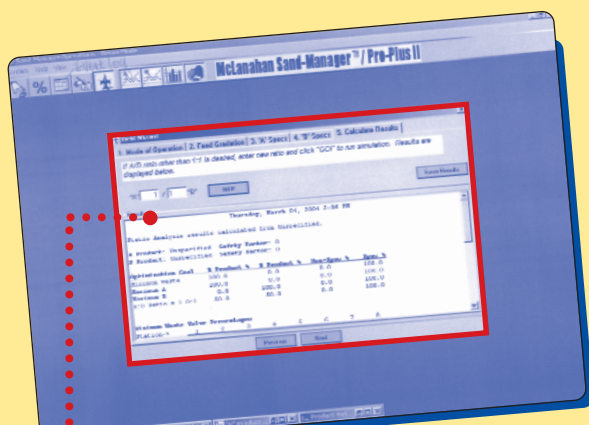
The Sand-Manager's® Yield Wizard™ can be run from multiple computers using Windows® 2000 Professional or XP Professional.

**ASK AROUND ABOUT OTHER
PROGRAMS... THEN CALL US.**

You'll discover how McLanahan saves you time and money by eliminating trial and error and maximizing your production.

**Available
For All
Sand Classifying
Tanks**

**Go Ahead,
Try A New Section Of The Pit
Or A New Spec For A Customer...
The Yield Wizard™
Makes You Money!**



McLanahan Sand-Manager®/Pro-Plus II

Semi-Portable & Portable Plants

Are Low Profile, Modular Units With A Sand-Manager® Classifying Tank & A Fine Material Double Screw Washer.

The collecting flume divides the Screw Washer, enabling the operator to produce either the same specification product from both screw shafts or two products, one from each screw shaft. The tank is nestled inside the Screw Washer to minimize the overall height.

The Semi-Portable Unit features structural steel legs for mounting on the foundation, while the Screw Washer rests directly on the foundation. Wiring is directed to a central control panel.

The Portable Unit is mounted on a trailer, which is fabricated with support structure, air brakes and fixtures required to meet I.C.C. regulations.



Portable Modular Sand Plant In Ontario, Canada



Model	Screw Washer Size (Diameter x Length)	Sand Tank Size (Width x Length)	Nominal Capacity TPH Concrete Sand	TRANSPORT DIMENSIONS			
				Overall Height	Overall Width (Screw w/Flares Removed)	Overall Length	Net Weight (Pounds)
2436	36" x 27'	10' x 24'	210	14'-2"	10'-3"	37'-8"	46,200
2836	36" x 27'	10' x 28'	210	14'-2"	10'-3"	39'-8"	49,300
2844*	44" x 33'	10' x 28'	350	13'-5"	10'-0"	45'-2"	68,600
3236	36" x 27'	10' x 32'	210	14'-2"	10'-3"	48'-0"	53,000
3244*	44" x 33'	10' x 32'	350	13'-5"	10'-0"	49'-8"	72,800
4044*	44" x 33'	11' x 40'	350	13'-5"	10'-0"	51'-1"	78,700

Please Refer To Page 3 For Water Capacities. Larger Semi-Portable Sizes Are Available On Request.

* These Portable Plants Are Designed To Allow The Sand Tank To Be Shipped Separately To Accommodate Highway Height Restrictions.

Optional Features

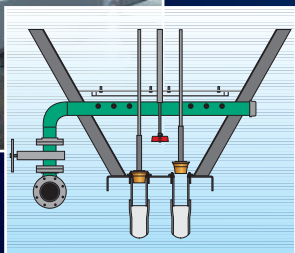


*End View Showing
Internal Section Of A
Rising Current System*

RIISING CURRENT FOR SHARPER SPLITS IN GRAIN SIZES

Tank performance is vastly improved by precisely controlling the settling process. Rising current is produced by metering fresh or re-circulated water through a manifold and pinch valve to the specific station. The upsurge current of water forces the smaller, lighter grains of sand into a longer period of suspension, which allows them to be carried further down the tank.

For recirculating water into the Rising Current manifold, an optional pump can be supplied. This Recirculating Pump comes complete with a motor, v-belt drive, drive guard and piping to return a portion of the Classifying Tank's water overflow to the rising current manifold. When considering this option, we will be happy to consult with you to determine whether this pump is applicable for your use.



COARSE AGGREGATE METERING BINS REMOVE PLUS 8 MESH FOR MORE EFFICIENT CLASSIFICATION

Coarse aggregate metering bins are designed to handle excess minus $\frac{3}{8}$ " x 8 mesh sand. Without having to deal with these coarse sizes, tanks can operate and classify more efficiently.

Metering Bins are monitored and controlled like the tank's valve stations to re-blend the sand into products as required. Bins are available in either single or two product designs, and can be equipped with a hydraulic or pneumatic clamshell gate.



McLanahan

CORPORATION

We Invite Your Inquiries.

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