



MUDWIZARD®

PRODUCT

CATALOGUE

*WATER TREATMENT
SYSTEM*

MUDWIZARD.COM

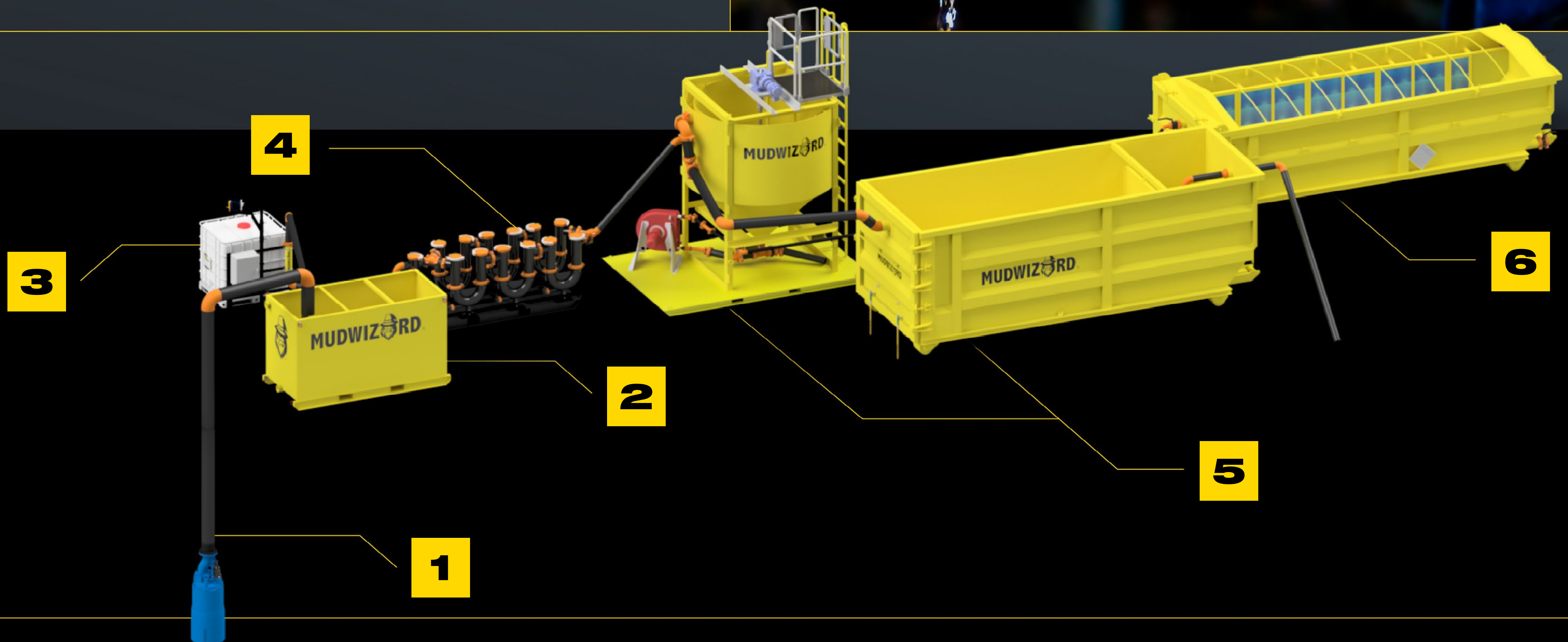


PRODUCT CATALOGUE

STEPS IN THE SLUDGE TREATMENT PROCESS

THIS DOCUMENT IS A REFERENCE GUIDE DESIGNED TO FACILITATE THE DISCUSSION, EVALUATION AND SELECTION OF THE MOST APPROPRIATE WATER TREATMENT CONFIGURATIONS FOR YOUR SPECIFIC REQUIREMENTS. IT INCLUDES THE STANDARD EQUIPMENT FEATURED IN THE MUDWIZARD PRODUCT LINE, ALONG WITH THEIR SPECIFICATIONS.

THE TREATMENT PROCESS CONSISTS OF SEVERAL SEQUENTIAL STAGES, TYPICALLY INTEGRATED INTO A STANDARD CONFIGURATION. HOWEVER, CERTAIN STAGES MAY NOT ALWAYS BE REQUIRED. WE RECOMMEND CONSULTING A MUDWIZARD PRODUCT SPECIALIST, WHO CAN ASSIST YOU IN EVALUATING YOUR OPERATIONAL REQUIREMENTS AND SELECTING THE MOST EFFECTIVE TREATMENT SOLUTION.

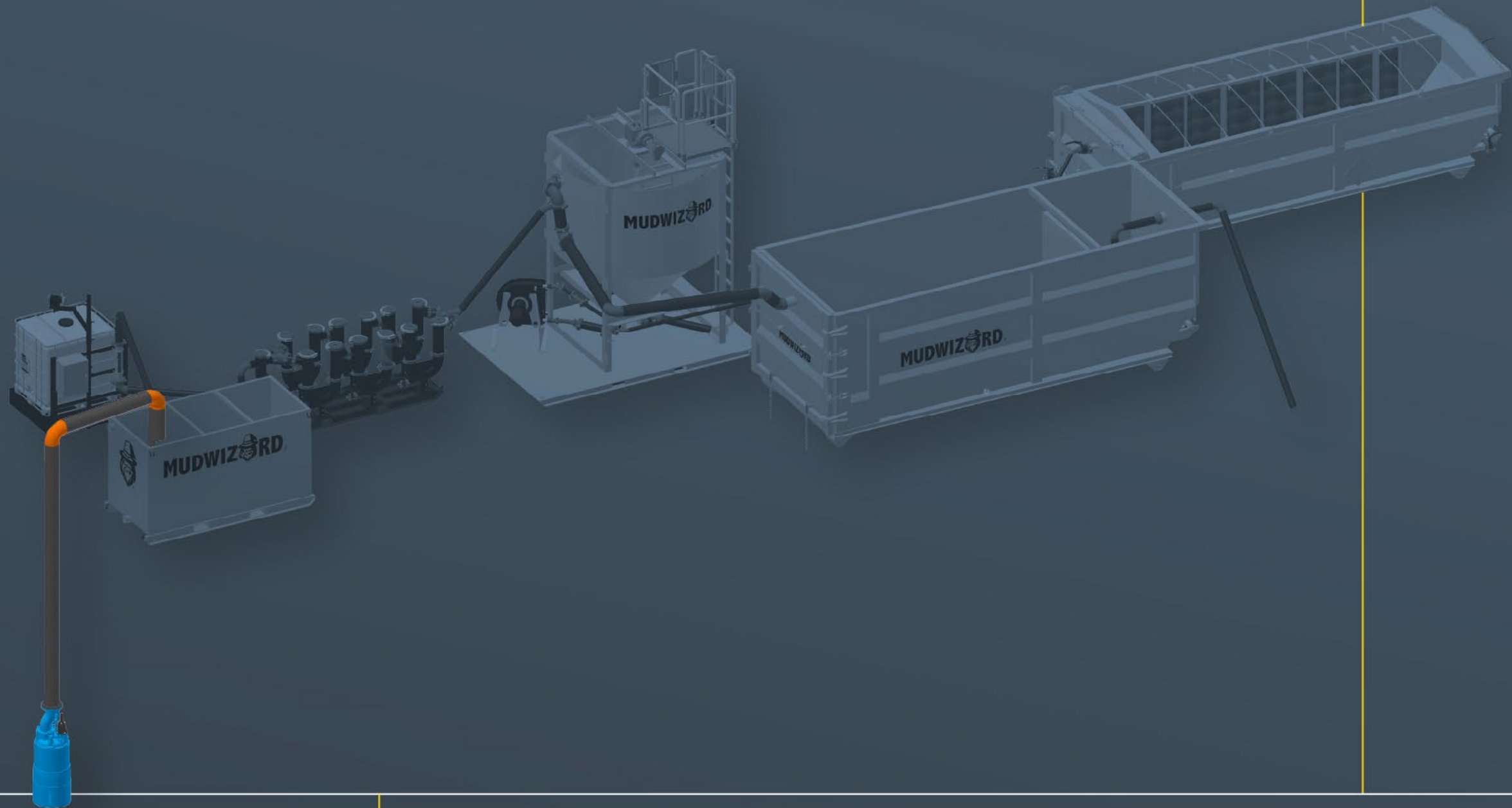




PUMPING AND MUD COLLECTION

COLLECTION OF WASTEWATER SLUDGE GENERATED BY OPERATIONS AND TRANSFER TO A SETTLING BASIN, CONDITIONING TANK OR DIRECTLY TO A MUDWIZARD WATER TREATMENT SYSTEM.

MUDWIZARD OFFERS A RANGE OF PRODUCTS AND SPECIALIZED EXPERTISE IN SELECTING SLUDGE COLLECTION AND TRANSFER PUMPS TAILORED TO THE SPECIFIC NEEDS OF EACH OPERATION.



TSURUMI - LB SERIES

Pumps designed for slurry, mud and sand pumping with hard iron adjustable wear parts and bottom side discharge. Their low tip speed contributes to extended service life. A cooling jacket surrounding the motor allows the pump to remain cool even under low-flow conditions.



TSURUMI - GPN SERIES

Pumps designed for slurry, mud and sand pumping with hard iron adjustable wear parts and bottom side discharge. Their low tip speed contributes to extended service life. A cooling jacket surrounding the motor allows the pump to remain cool even under low-flow conditions.



TSURUMI - KRS SERIES

The cast iron construction of this series extends pump life by preventing premature wear and failures caused by abrasive materials commonly found in mining, aggregate, and construction applications. Available in various discharge sizes and horsepower, these pumps are designed to withstand the most demanding operating conditions.



TSURUMI - KTZ SERIES

Designed to withstand the most demanding conditions, including the abrasive waters of construction, aggregate, and mining dewatering. Each pump model can switch from high head to high volume performance by simply changing the impeller and wear plate, increasing versatility.

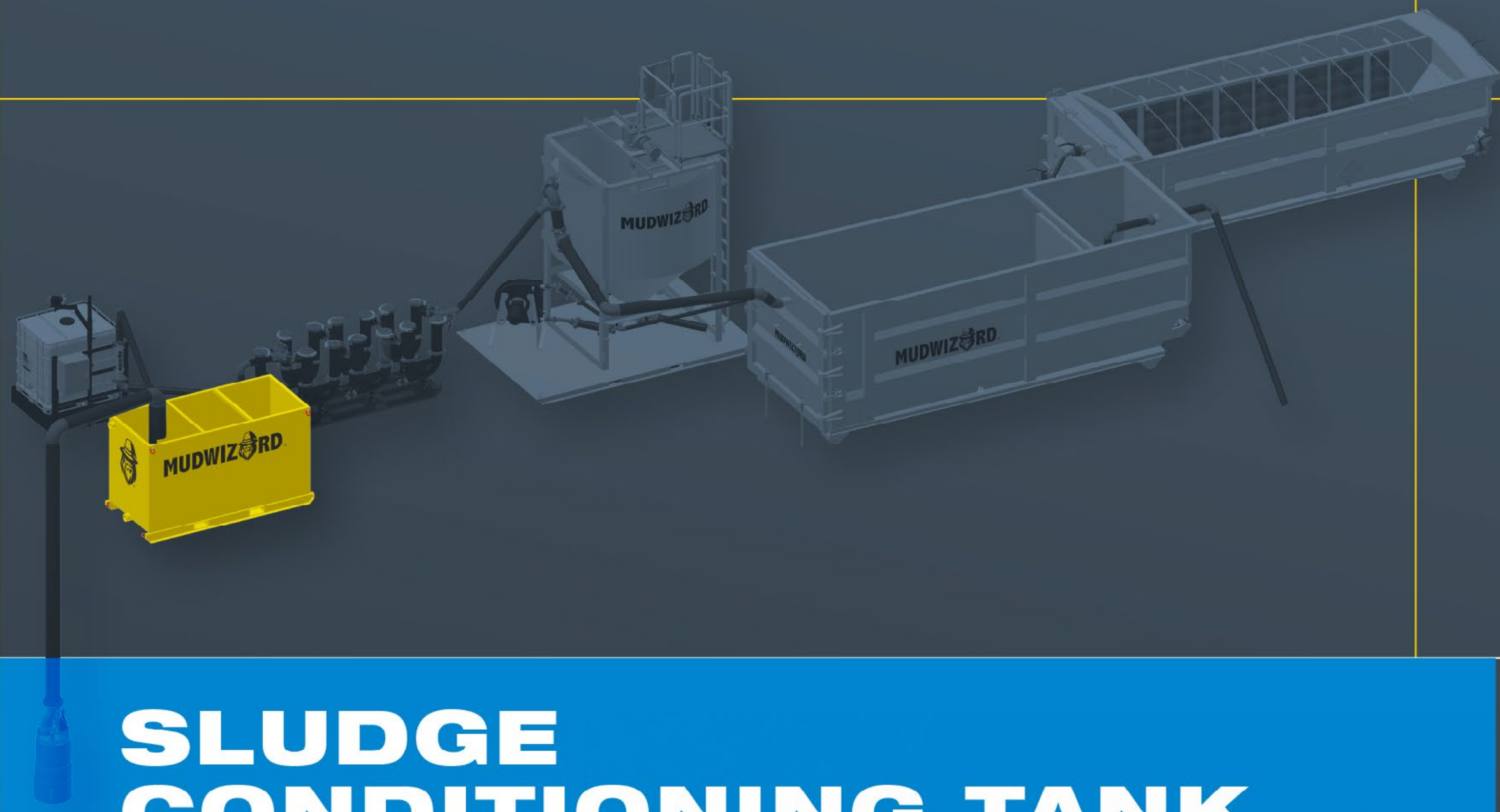


DRAFLOW PRODUCTS

Dragflow submersible pumps with an agitator for abrasive mixtures are industry leaders because of their unrivalled strength. Their quality makes them indispensable in the dredging field, but also in the industrial sector, mining and for custom projects. They are available in electric and hydraulic models in small, medium, and large sizes.



SLUDGE CONDITIONING AND AGITATION TANK



SLUDGE IS PREPARED THROUGH CONTROLLED AGITATION, WHICH HOLDS PARTICLES IN SUSPENSION TO STABILIZE THE SLUDGE FOR TREATMENT. THIS SYSTEM CONFIGURATION ALLOWS FOR SEQUENTIAL PROCESSING WHEN THERE IS NOT ENOUGH FLOW FOR CONTINUOUS PROCESSING.

SLUDGE CONDITIONING TANK

DESCRIPTION

Sludge conditioning tanks designed to keep particles in suspension and ensure optimal treatment performance. Their size and volume can be fully customized. These tanks are ideal for operations experiencing significant flow variations, such as sequential treatment processes. They are mobile and can be installed either upstream or downstream of the treatment system. A series of tanks can be used to manage larger water volumes and provide longer settling times, thereby optimizing the final treatment results. The addition of two underflow/overflow baffles further enhances the settling process.



SPECIFICATIONS

MUDWIZARD CONDITIONING CONTAINER

DIMENSIONS
279 CM X 124 CM X 155 CM
(110" X 49" X 61")

WEIGHT
771 KG (1,700 LBS)

VOLUME
4,15 M³ (1,096 GAL)

INPUTS AND OUTPUTS
(4") VICTAULIC

ENTRIES
FOR FORKS AND LIFTING RINGS

OPTIONS

- CUSTOM DIMENSIONS ACCORDING TO SPECIFICATIONS
- CAMLOCK INPUTS AND OUTPUTS
- 2 UNDERFLOW/OVERFLOW BAFFLES
- FLOW METER WITH TOTALIZER
- TURBIDIMETER

TECHNOAGITATOR PUMP

DESCRIPTION

Robust, submersible and easy to operate, this agitator is an ideal solution for mixing water in basins where sediment beds accumulate. The positioning of the three nozzles creates a highly effective vortex action in sumps and tanks while providing excellent abrasion resistance.



SPECIFICATIONS

RAYON
10-METRE RADIUS =
89% DENSITY

20HP

575 V

3 PHASES

50-FOOT ELECTRICAL CABLE

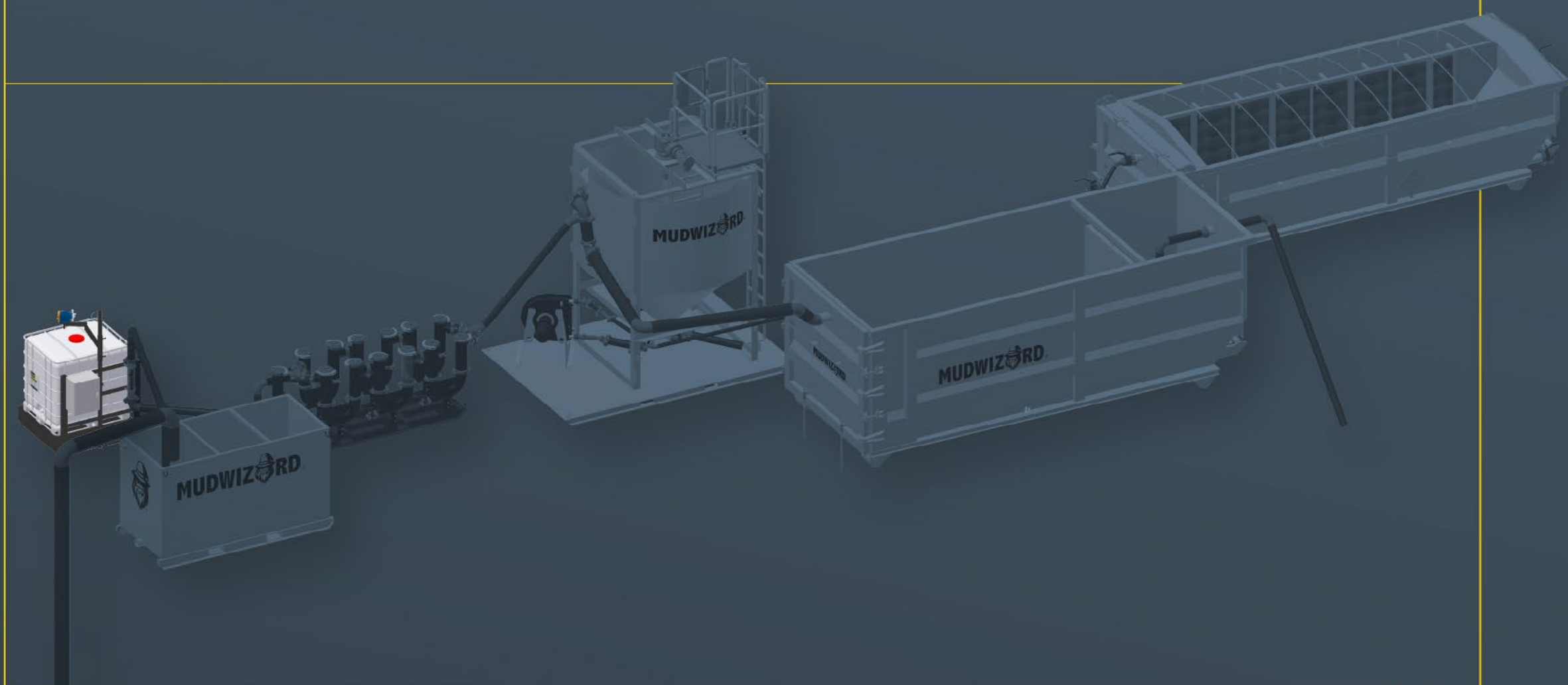
OPTIONS

- MULTI-OUTLET DUCTS CAN BE ADDED TO DIRECT A JET TO A SPECIFIC PLACE OR TO INCREASE THE AGITATION RADIUS.



LIQUID INJECTION

BY DOSING PUMP AND PH CONTROL



INJECTION OF A LIQUID SOLUTION DESIGNED TO MEET SPECIFIC TREATMENT REQUIREMENTS. THIS STAGE PROVIDES PH CONTROL TO ACHIEVE ACCEPTABLE DISCHARGE LIMITS WHILE IMPROVING FLOCCULATION PERFORMANCE THROUGH COAGULANT INJECTION FOR SUPERIOR SEPARATION RESULTS.

LIQUID DOSING UNIT

DESCRIPTION

A liquid dosing system equipped with a robust, variable-flow metering pump and instrumentation. This unit is used to perform coagulation and pH control in compliance with applicable discharge regulations. The injection of a coagulant, selected based on laboratory analyses, accelerates the separation and settling of suspended solids. The unit's containment base provides spill protection by retaining liquid in the event of an accidental leak.



SPECIFICATIONS

DIMENSIONS
121 CM X 160 CM X 223 CM
(48" X 63" X 88")

WEIGHT
508 KG (1,121 LB)

DOSING PUMP
64 L/H

TRANSPORT PLATFORM
ADAPTED FOR 1,000 L HEAD TANK
AND A 113 L DRUM.

AIRTIGHT BASE IN CASE OF ACCIDENTAL
SPILL

INLINE STATIC MIXER

FLOW SWITCH

CONTROL PANEL

120 V POWER SOURCE

OPTIONS

- DOSING PUMP 17 L/H
- AUTOMATIC PH CONTROL SYSTEM

MUDWIZARD LIQUID COAGULANT COA/PH-

DESCRIPTION

Used to accelerate solid separation and settling during treatment while also improving hydrocarbon settling. It enhances the effectiveness of Mudwizard flocculant tablets and supports pH control in accordance with applicable discharge regulations.



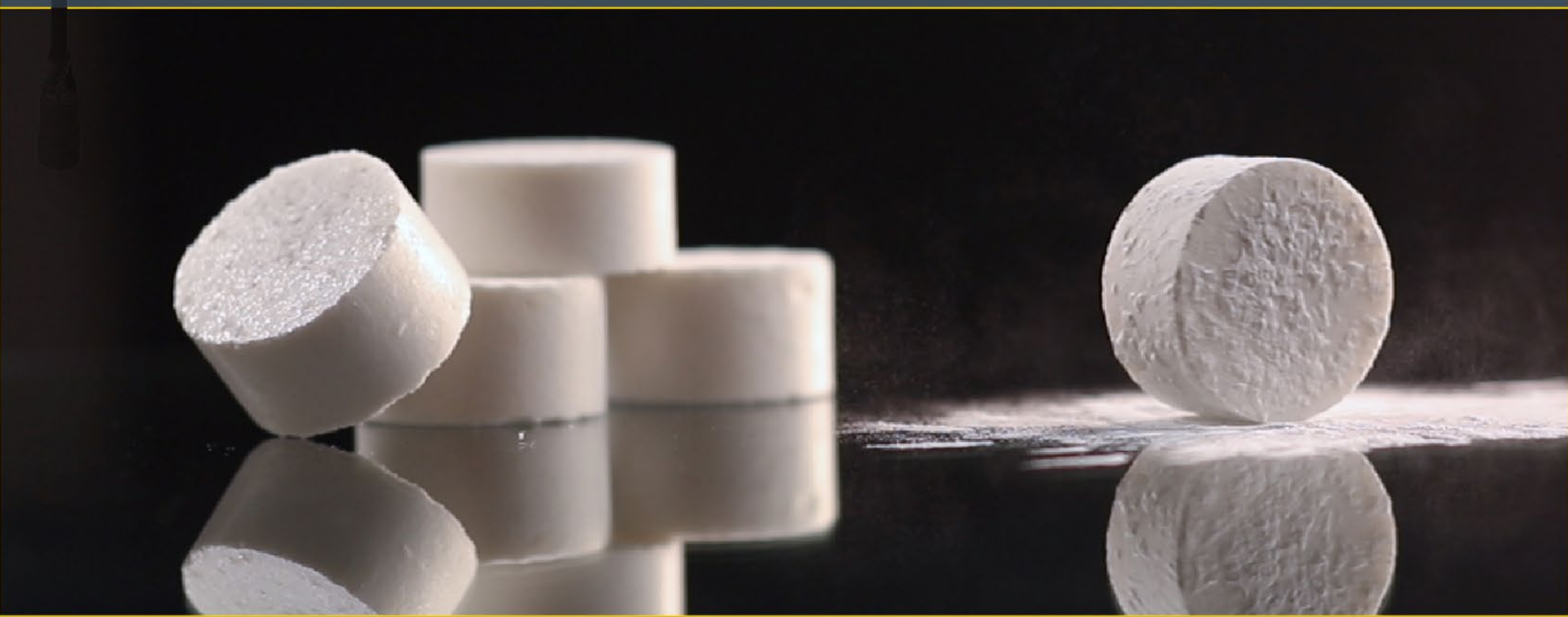
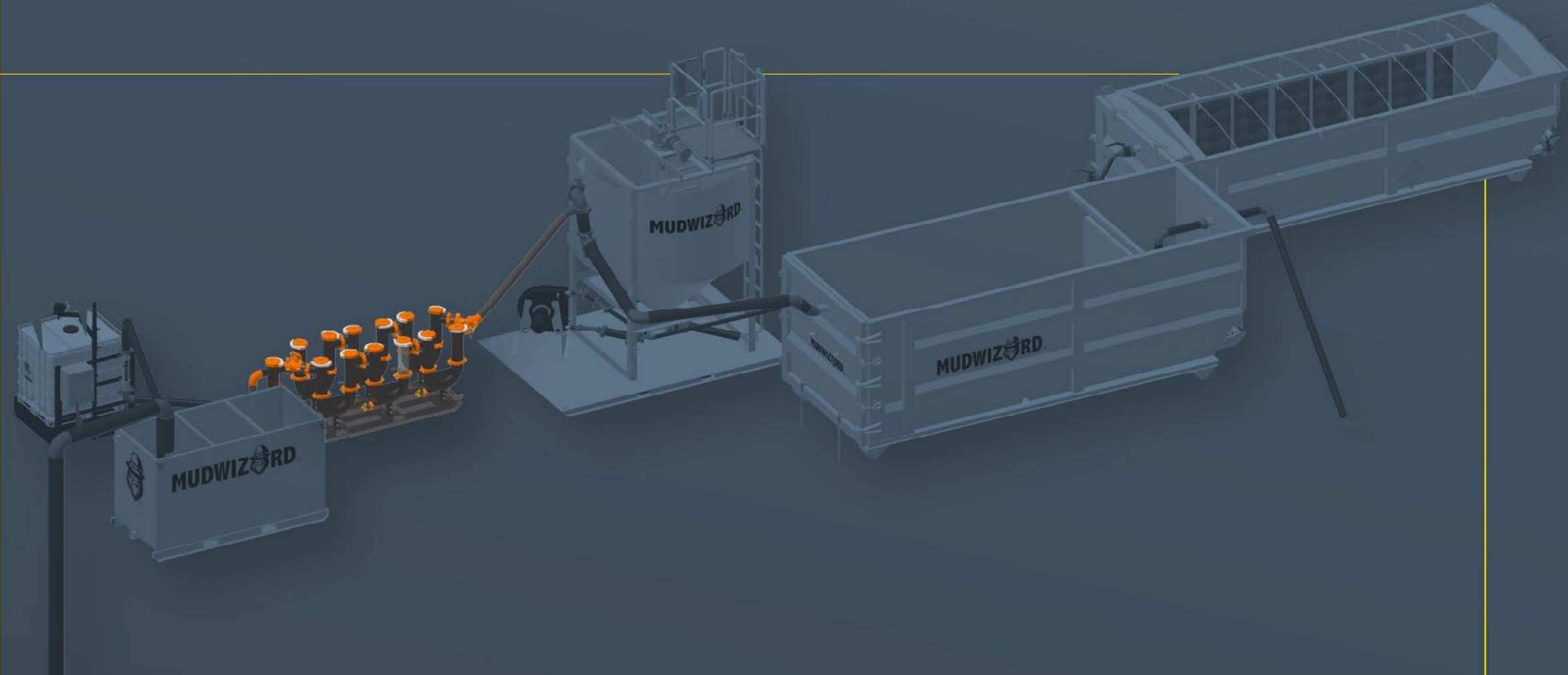
SPECIFICATIONS

1,000 L HEAD TANK OR 113 L DRUM
SAFETY DATA SHEET ON REQUEST



4

TABLET
DOSING UNIT



- TABLET ADAPTED TO YOUR MUD TYPE
- BIO-BASED, NON-TOXIC AND SAFE FOR THE ENVIRONMENT
- EASY TO USE

FLOCCULANT TABLETS ARE USED TO DECANT SLUDGE PARTICLES IN THE WATER, EFFECTIVELY SEPARATING SOLIDS FROM LIQUIDS.

INNOVATIVE DOSING SYSTEM UTILIZING MUDWIZARD'S PATENTED TABLET TECHNOLOGY, SPECIFICALLY DEVELOPED FOR MINERAL SLUDGE APPLICATIONS. UNIQUE ON THE MARKET, IT OFFERS NUMEROUS ADVANTAGES, INCLUDING EASE OF USE BY FIELD PERSONNEL WITHOUT SPECIALIZED TRAINING AND A REDUCED FOOTPRINT.

THESE DOSING UNITS ARE ASSEMBLED ON PLATFORMS FOR EASY HANDLING AND TRANSPORTATION BETWEEN JOB SITES. THIS FEATURE ALLOWS CUSTOMIZED CONFIGURATIONS TO MEET SPECIFIC OPERATIONAL REQUIREMENTS. THEIR MODULARITY ALSO ENABLES OPERATION IN CONFINED SPACES AND MANAGEMENT OF REQUIRED FLOW RATES THROUGH MULTIPLE UNITS OPERATING IN PARALLEL.

ACCURATE DOSING IS ACHIEVED THROUGH LABORATORY ANALYSES, PRODUCT ENGINEERING AND SYSTEM CONFIGURATION.

MUDWIZARD
FLOCCULANTS

DESCRIPTION

For more than ten years, Mudwizard has developed a range of polymers specifically designed for mineral sludge treatment. The patented Mudwizard dosing platforms work with tablets for easy handling and transport. The tablets are manufactured in our production plant, allowing us to control product quality. In addition, our laboratories can develop formulas that are tailored to the needs of our customers.

SPECIFICATIONS

- SPECIFICALLY FOR MINERAL SLUDGE
- BIO-BASED, NON-TOXIC AND SAFE FOR THE ENVIRONMENT
- AUTONOMOUS DOSAGE
- EASY TO HANDLE AND CARRY
- NEUTRAL PH, SAFE FOR WORKERS
- 1 TABLET CAN TREAT UP TO 75,000 LITRES WITH A DOSE OF 1 PPM

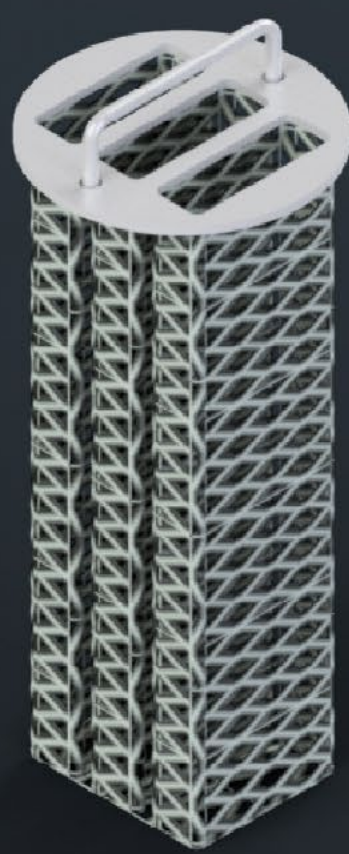


FORMAT
15 KG

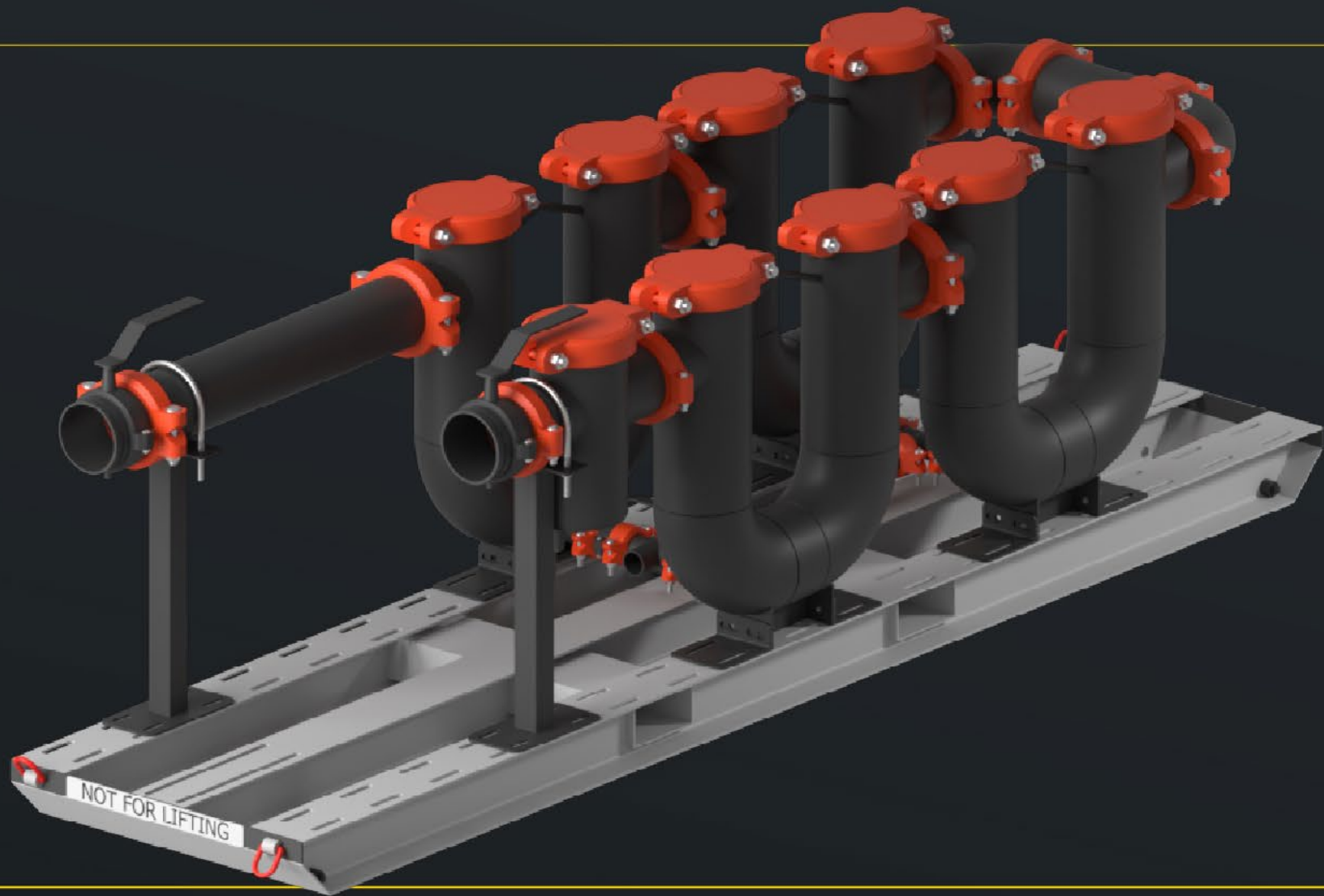


TABLET
DOSAGE UNIT

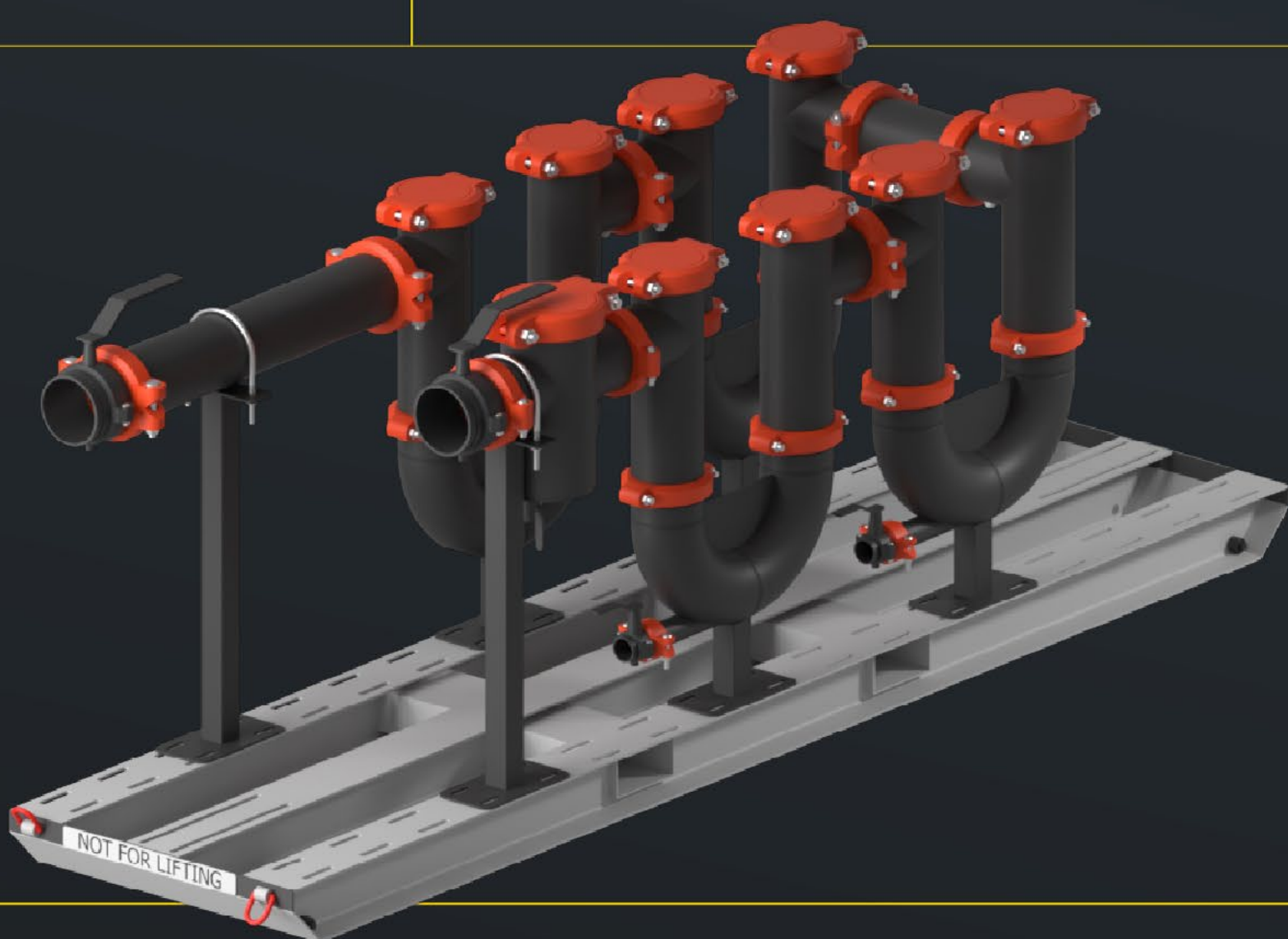
THE RANGE OF DOSING UNITS IS MADE OF SCHEDULE 40 STEEL PIPE, THE BASKETS ARE MADE OF 304 GRADE STAINLESS STEEL AND VICTAULIC® SNAP-JOINT COUPLINGS.



DISSOLVER BASKET
(6 & 8 INCHES)



100-400 GPM



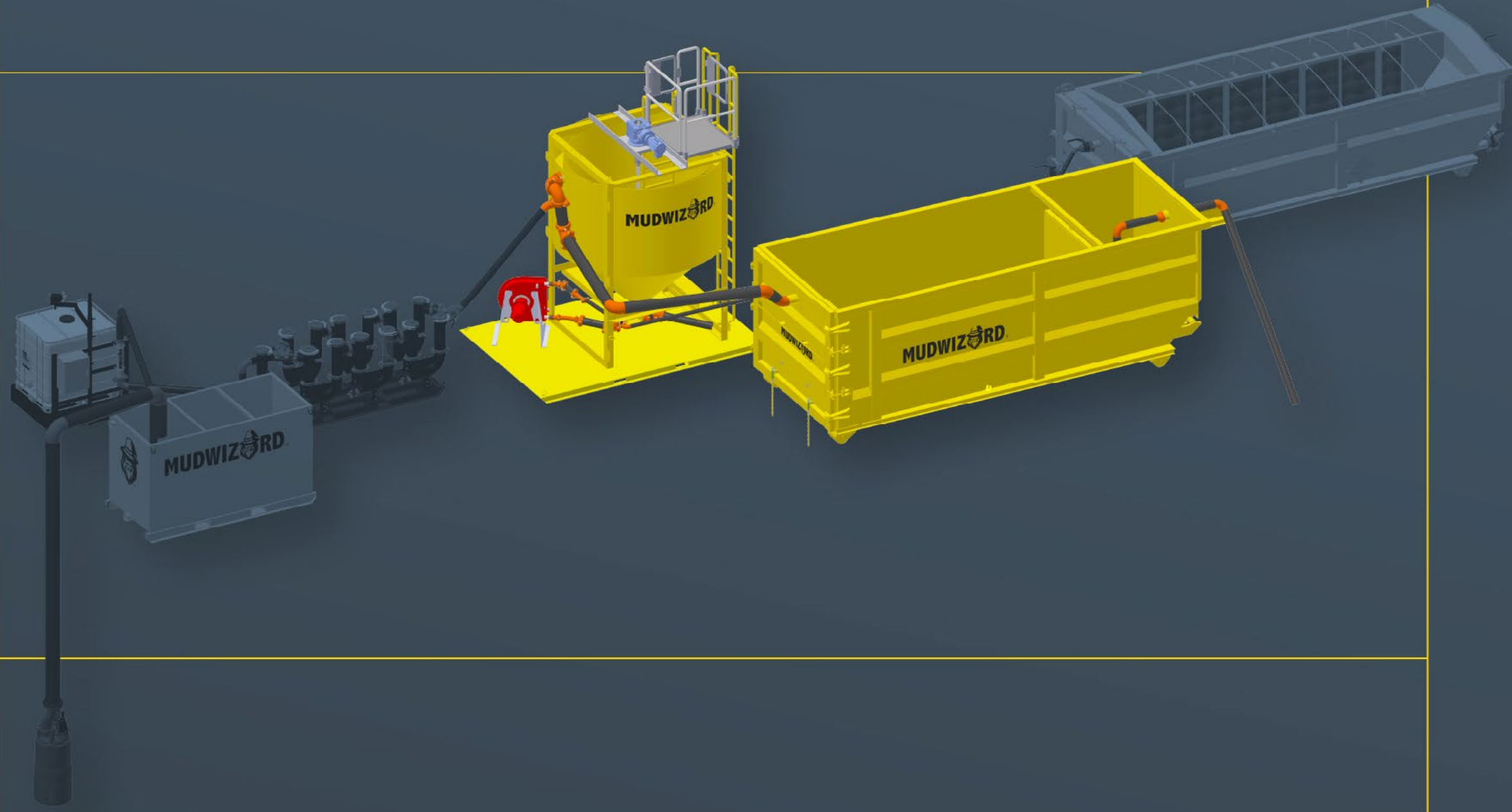
400-1200 GPM

SPECIFICATIONS

UNIT	DIMENSIONS	WEIGHT	FLOW RATE	NUMBER OF BASKETS	TABLET LOADING CAPACITY	MAXIMUM DOSING CAPACITY	INLET AND OUTLET	STRAINER OPTIONS	DRAINAGE LINES
100-400	131 x 31 x 50 in 333 x 79 x 127 cm	2300 lb 1043 kg	150-800 USGPM 34-182 CHM	8	256	4 PPM	4 in 10,16 cm	8 in 20,32 cm	2 in 5,08 cm
400-1200	158 x 33 x 42 in 401 x 84 x 107 cm	2388 lb 1083 kg	800-1600 USGPM 182 - 363 CHM	8	384	4 PPM	6 in 150,24 cm	10 in 25,4 cm	2 in 5,08 cm



SETTLING TANK AND ROLL-OFF BASINS



THIS STEP ALLOWS SLUDGE PARTICLES TO SETTLE AS QUICKLY AS POSSIBLE FOLLOWING COAGULATION AND/OR FLOCCULATION, IN COMPLIANCE WITH DISCHARGE STANDARDS. TANKS AND BASINS MUST BE DESIGNED TO PROMOTE OPTIMAL FLOW FOR SETTLING. THIS STAGE ALLOWS FOR SEVERAL POSSIBLE CONFIGURATIONS FOR THE SUBSEQUENT MANAGEMENT OF GENERATED SLUDGE.

MUDWIZARD OFFERS A SETTLING STATION SPECIFICALLY DESIGNED FOR OPTIMAL PERFORMANCE, ACHIEVING CLARIFICATION IN A TEN-MINUTE WINDOW. ADAPTABLE TO SPECIFIC REQUIREMENTS, IT IS EASY TO MAINTAIN AND CAPABLE OF TREATING HIGH FLOW RATES WITHIN A COMPACT FOOTPRINT. THE STATION IS EQUIPPED WITH RAKES FOR SLUDGE CONCENTRATION. PERISTALTIC PUMPS MANAGE AND TRANSFER SLUDGE TO THE SELECTED DESTINATION. MODULAR LADDERS, WALKWAYS AND GUARDRAILS PROVIDE SAFE ACCESS FOR OPERATIONAL ACTIVITIES. MUDWIZARD ALSO OFFERS A RANGE OF STANDARD ROLL-OFF BASINS DESIGNED TO MEET SPECIFIC OPERATIONAL REQUIREMENTS.

SETTLING TANK 0-45M³ 0-200 GPM

DESCRIPTION

This settling station combines engineering and chemical expertise to ensure optimal settling results. Clarified water produced during the process is managed through an overflow system for discharge or recirculation. The remaining sludge underflow is pumped from the tank. The modularity of these units makes it possible to process the required volumes with a high degree of flexibility.



SPECIFICATIONS

DIMENSIONS

254 CM X 254 CM X 335 CM (100" X 100" X 132")

WEIGHT

2,359 KG (5,200 LB)

MAXIMUM FLOW RATE

45 M³ /H (200 GPM)

VOLUME

8,8 M³ (2,325 GAL)

FABRICATION

MADE FROM SCHEDULE 40 STEEL PI

OVERFLOW

15,24 CM (6") VICTAULIC

UNDERFLOW

10,16 CM (4") VICTAULIC

POWER SOURCE

575 VOLTS

PERISTALTIC PUMP

AFX40

PLATFORM DIMENSIONS

244 CM X 366 CM (96" X 144")

CONTROL PANEL

RAKE

DOUBLE WALL

SAFETY LADDER

OPTIONS

- SAFETY PLATFORM
- OPTIONAL 240 V POWER SUPPLY
- PLASTIC CORROSION TANK

ROLL-OFF WATERTIGHT SETTLING BASIN

DESCRIPTION

Watertight basin equipped with separator wall to decant treated water. This roll-off style basin allows for several operations, such as transport and access, and facilitates sludge management. The unit is equipped with a tilting rear door.

SPECIFICATIONS

DIMENSIONS

645 CM X 256 CM X 216 CM (254" X 101" X 85")

WEIGHT

3,039 KG (6700 LB)

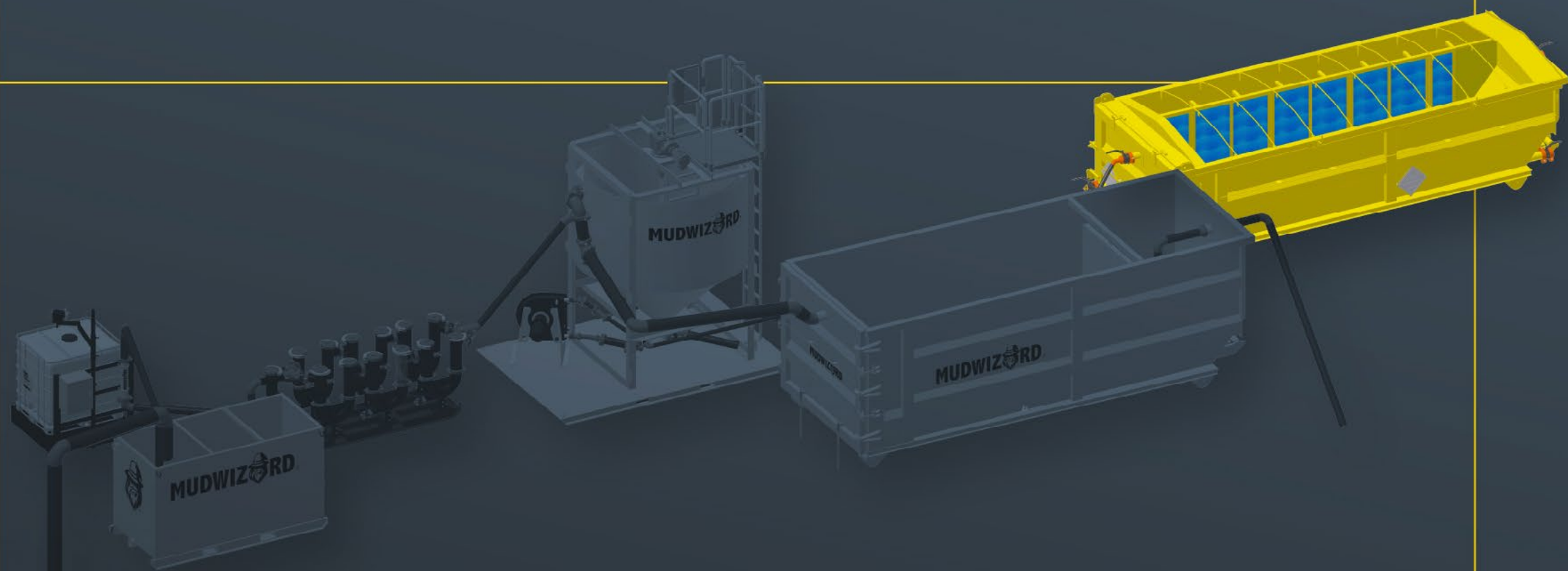
MAXIMUM VOLUME

24 M³ (6,340 GAL)





SECOND DEWATERING AND SLUDGE THICKENING UNIT



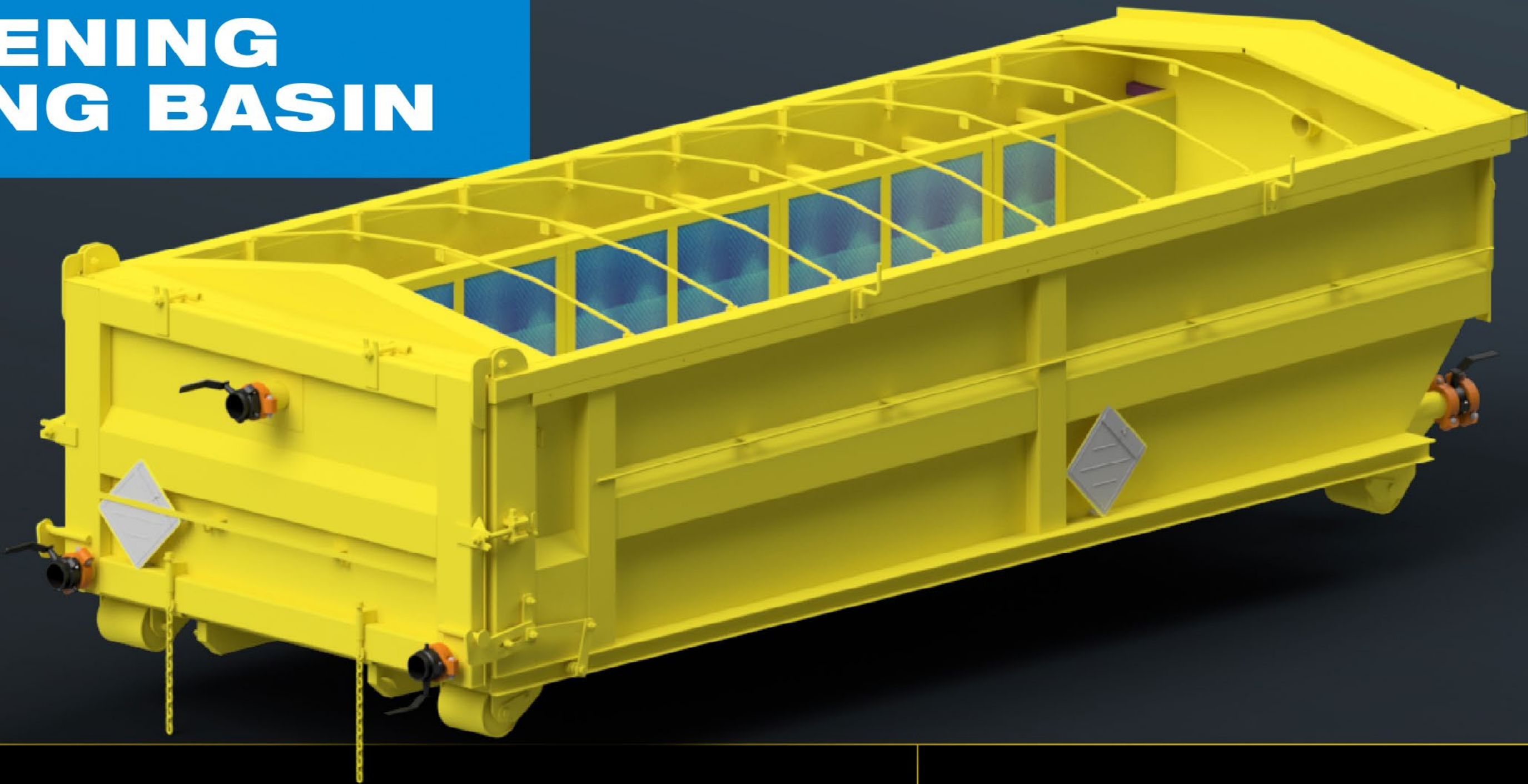
THIS STAGE CONSISTS OF SECOND DEWATERING SLUDGE COLLECTED DURING PREVIOUS STAGES TO OBTAIN A MORE CONSISTENT SLUDGE IN PERCENTAGE OF SOLIDS. THIS SIMPLIFIES HANDLING WHILE REDUCING TRANSPORTATION AND DISPOSAL COSTS.

SLUDGE-THICKENING AND DEWATERING BASIN

DESCRIPTION

This stage consists of second dewatering sludge collected during previous stages to obtain a more consistent sludge in percentage of solids. This simplifies handling while reducing transportation and disposal costs.

Sludge-thickening and dewatering basin equipped with membrane filter walls. The walls can accommodate any type of membrane filter. This roll-off style basin allows for several operations, such as transport and access and facilitates sludge management. The unit is equipped with a tilting rear door.



SPECIFICATIONS

DIMENSIONS
635 CM X 256 CM X 178 CM
(250" X 101" X 70")

WEIGHT
3,085 KG (6,800 LB)

MAXIMUM VOLUME
11 M³ (2,905 GAL)

FILTERING WALL
PERMEABILITY 340 CFM

OPTIONS

- TYPE OF FILTER MEMBRANE ACCORDING TO REQUIRED SPECIFICATIONS



INSTRUMENTATION

THE MUDWIZARD SOLUTION CAN INTEGRATE ANY INSTRUMENTATION REQUIRED TO MEET CLIENT-SPECIFIC NEEDS. THIS INTEGRATION IS CUSTOMIZED FOR EACH PROJECT.

1

FLOW METER
WITH TOTALIZER

2

TURBIDIMETER

3

PH PROBE

4

MUD-LEVEL
SENSOR

ON-SITE TECHNICAL SERVICES

OUR MUDWIZARD TEAM OFFERS START-UP SERVICES AND TECHNICAL SUPPORT FOR YOUR CONSTRUCTION OPERATIONS. FEE GRID ON REQUEST.



LABORATORY SERVICES

MUDWIZARD PROVIDES LABORATORY TESTING AND ANALYSIS SERVICES IN ROUYN-NORANDA TO EVALUATE YOUR SPECIFIC WATER TREATMENT REQUIREMENTS. OUR SPECIALISTS IDENTIFY THE OPTIMAL SYSTEM CONFIGURATION BASED ON THE CHARACTERISTICS OF YOUR SAMPLE, FREE OF CHARGE AND WITHOUT OBLIGATION.



TEST YOUR WATER WITHOUT ANY CHARGE

SEND US A SAMPLE OF YOUR WATER. OUR LABORATORY EXPERTS WILL TEST IT USING THE MUDWIZARD PRODUCT LINE AND PROVIDE YOU WITH A DETAILED REPORT CONTAINING OUR RECOMMENDATIONS.



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