



# MODEL 24A T/S SPECIFICATION

## 1.0 General Specifications

There will be furnished one (1) only Grind Hog™ Model 24A T/S Comminutor as manufactured by G.E.T. Industries, Inc. Rotation shall be in a clockwise direction

## 1.1 Design Criteria

The comminutor shall be designed to handle the flows indicated below, within the head loss noted.

- a) hydraulic capacity 10 MGD (37,800m<sup>3</sup>/day)
- b) satisfactory operation shall occur under conditions of zero flow
- c) head loss at peak flow shall not exceed 20 inches (508 mm)
- d) design shall be such that the flow enters the size reduction and screening device horizontally and exits vertically downward to facilitate the flushing of solids

## 1.2 Cover Plate

Shall be:

- a) of heavy-duty construction and of high quality cast iron
- b) fitted with 4 position lock down arrangement, and 2 alignment holes for repositioning following service
- c) located on, and positioned by wall mounted supports allowing for ease of removal for inspection and maintenance.

## 1.3 Rotating Drum Screen

- a) heavy-duty Cast Ductile Iron ASTM 536, grade 60-45-18

## 1.4 Cutting Elements

- a) replaceable shear bars constructed of high-quality A2 tool-steel shall be attached to the rotating drum. Each shear bar shall be machined from solid bar stock, surface ground to establish exact tolerances
- b) stationary cutting bar, shall be of high-quality 01 tool steel hardened to a minimum of 56 Rockwell C, and shall be reversible, allowing for four (4) sets of cutting edges prior to sharpening or replacement
- c) all submerged fasteners shall be of stainless steel

## 1.5 Motor

TEFC 3 Hp. Motor suited to outdoor weatherproof service (IP55) on \_\_\_\_\_ volt, \_\_\_\_\_ phase, \_\_\_\_\_ cycle service. Close-coupled

## 1.6 Drive Arrangement

- a) the motor shall be close-coupled to a speed reducer drive, a heavy duty planetary gear of the totally enclosed non-vented type suitable for total submergence during emergencies

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**G.E.T. INDUSTRIES INC.**

Toll Free: 877-213-7418 Email: [get@grindhog.com](mailto:get@grindhog.com) Web: [www.grindhog.com](http://www.grindhog.com)

## SPECIFICATION cont'd...

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- b) double seals on the output shaft shall ensure flood-proof operation through a reduction ratio of 59:1
- c) the cycloidal reducer shall be capable of withstanding shock loads to 500% of its mechanical rating of 11.1 Hp. and be warranted for two (2) years
- d) the drive shall have a minimum full load efficiency of 90% and be pre-lubricated with grease, requiring routine maintenance every 500 to 1,000 hours

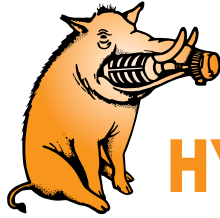
### 1.7 "Toilet Seat" Channel Mounting System

Shall consist of a box style structure fabricated of 304 Stainless Steel dimensioned to suit the existing channel and supported from above for ease of installation

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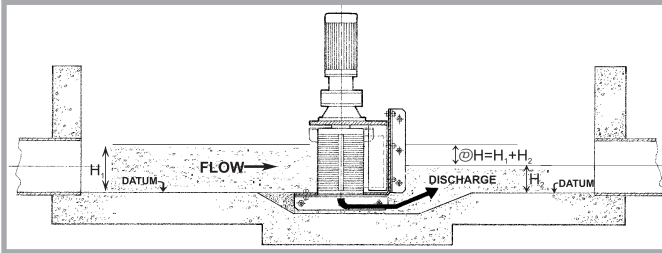
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# Grind Hog™

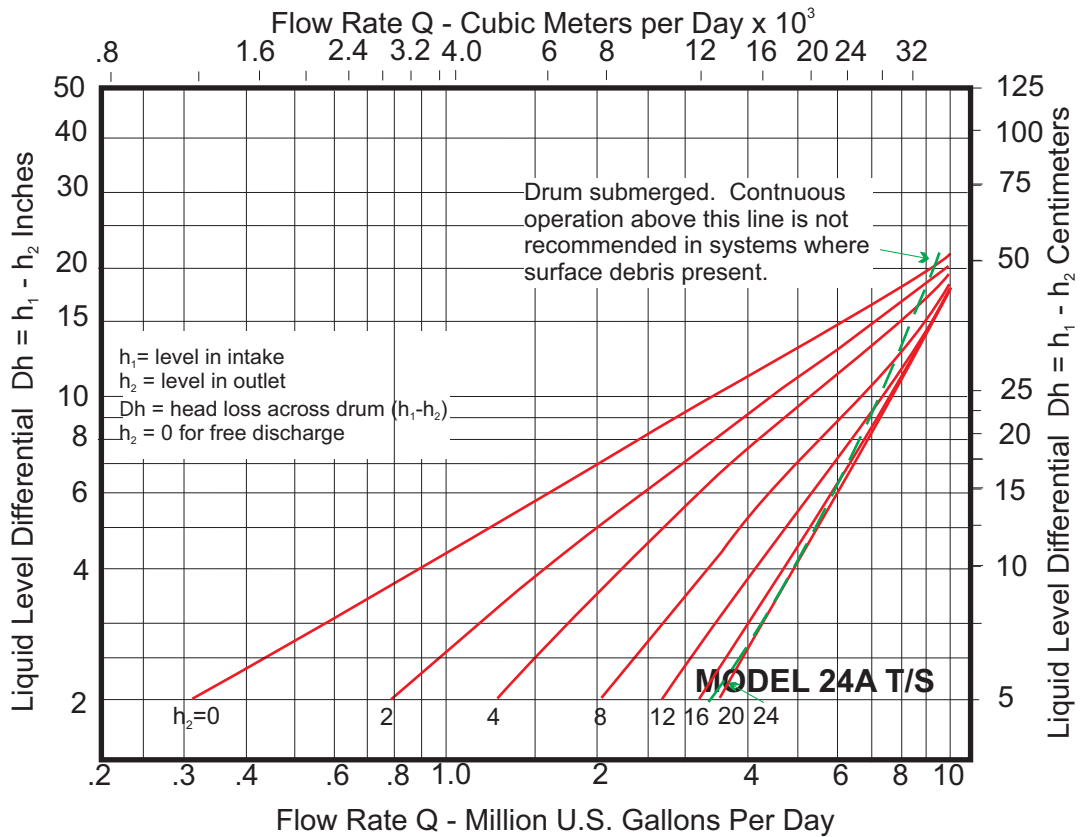
## HYDRAULIC DATA SHEET IN-CHANNEL MODEL 24A T/S



### GENERAL DATA

<b>Capacity</b>	0-10 MGD (US)	0-37800 m <sup>3</sup> /day
<b>Drum Diam.</b>	22.5 in	57.2 cm
<b>Inlet Area</b>	526 in <sup>2</sup>	3393 cm <sup>2</sup>
<b>Outlet Area</b>	324 in <sup>2</sup>	2090 cm <sup>2</sup>
<b>Slot Width</b>	0.470 in	12 mm

### HYDRAULIC PERFORMANCE CURVE



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# IN-CHANNEL MODEL 24A T/S cont'd...

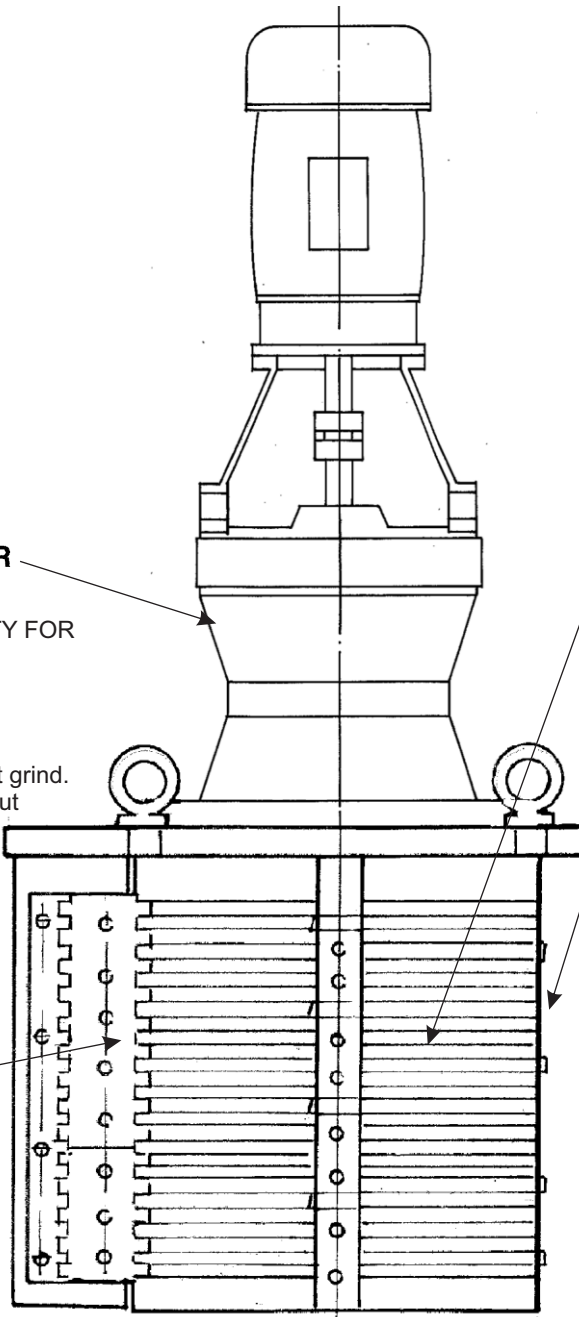
## DESIGN FEATURES

### **SUMITOMO SM-CYCLO SPEED REDUCER 6000 SERIES**

- HIGHEST OVERLOAD CAPACITY FOR FREQUENT STOP-START AND SEVERE REVERSING
  - SMOOTH, SILENT OPERATION
  - EXCEPTIONAL LIFE
- Torque transmitting parts roll, don't grind.  
There is no sliding friction, so output torque/input horsepower efficiency approaches 95%

### **STATIONARY CUTTING BAR**

- REVERSE-SPARE STANDARD EQUIPMENT
- A2 HIGH QUALITY TOOL STEEL
- HIGH RESISTANCE TO WEAR



### **CAST DUCTILE IRON SEWAGE SCREEN**

- LONG LIFE UNDER ABRASIVE CONDITIONS

### **ROTATING SHEAR BAR ASSEMBLY**

- MACHINED FROM SOLID BARSTOCK
- PRECISE TOLERANCES MAINTAINED

### **SUBMERGED FASTENERS OF STAINLESS STEEL**

### **HEAVY DUTY CAST IRON CONSTRUCTION**

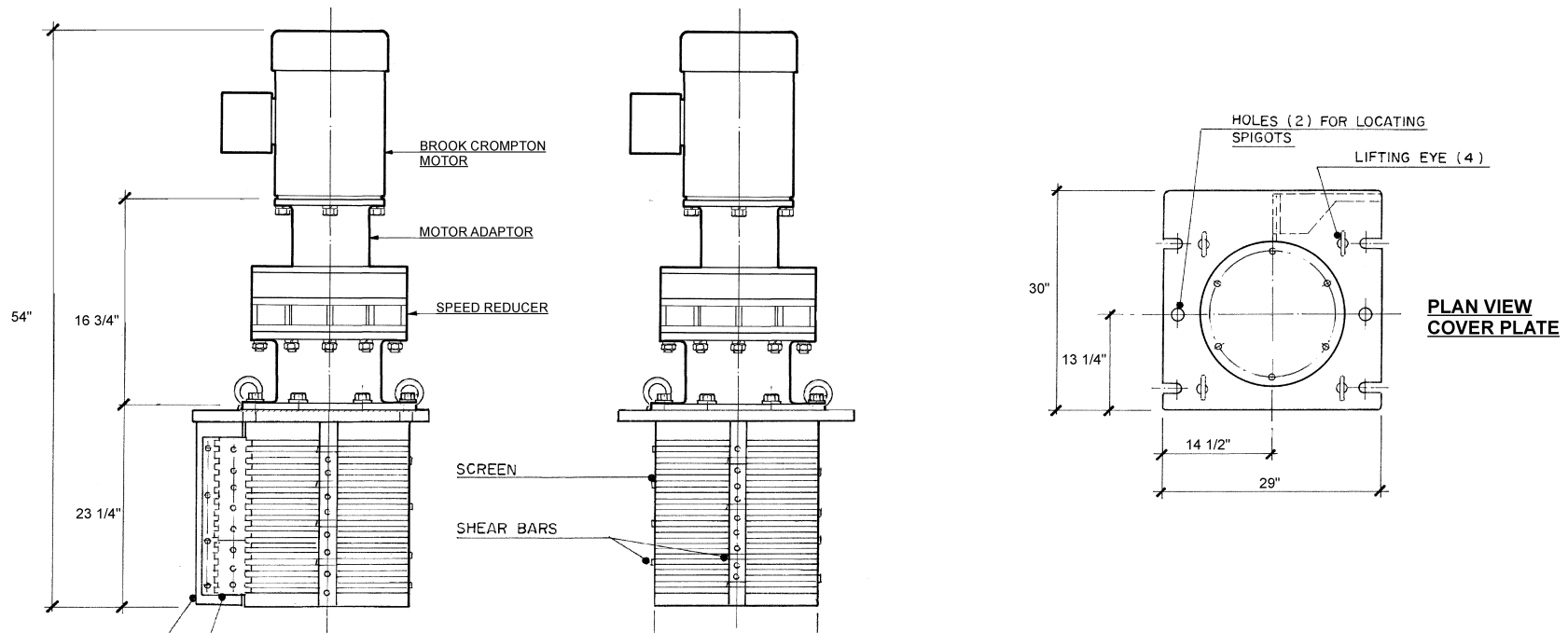


**Grind Hog™**

# MECHANICAL DETAIL

## MODEL 24A T/S

SERIAL No. \_\_\_\_\_



### MATERIALS OF CONSTRUCTION & GENERAL ENGINEERING DATA

<b>HOUSING:</b>	GREY IRON	<b>CAPACITY:</b>	10 MGD (US)/37800 m <sup>3</sup> /day	<b>INLET AREA:</b>	526 sq in 3393 cm sq
<b>DRUM (SCREEN):</b>	DUCTILE IRON (ASTM 536 GRADE 60-45-18)	<b>DRUM SPEED:</b>	30 RPM	<b>OUTLET AREA:</b>	324 sq in 2090 cm sq
<b>SHEAR BARS:</b>	AISI-A2 HIGH ALLOY TOOL STEEL	<b>ROTATION:</b>	CLOCKWISE	<b>DRUM DIAMETER:</b>	22.5 in 572 cm
<b>CUTTING BARS:</b>	AISI-01 TOOL STEEL REVERSIBLE	<b>SLOT WIDTH:</b>	0.470 in / 12 mm	<b>WEIGHT:</b>	lb kg
<b>HARDWARE &amp; FASTENERS:</b>	304 STAINLESS STEEL	<b>NO. OF SLOTS:</b>	76		
<b>MOTOR MANUFACTURER:</b>	Brook-Crompton	<b>POWER:</b>	____ / ____ / ____	<b>RPM:</b>	1750
<b>STYLE:</b>	TEFC (IP55)	<b>HP:</b>	3	<b>KW:</b>	2.24
		<b>FRAME:</b>	182TC	<b>FLANGE:</b>	'C'
				<b>RATIO:</b>	59:1
				<b>RATING:</b>	11.1 HP
				<b>SM-CYCLO REDUCER MODEL:</b>	V6170

REVISIONS	BY	DATE	APP.
<b>G.E.T. INDUSTRIES INC.</b>			
(877) 213-7418			
www.grindhog.com			
TOLERANCES			SCALE
L			NTS
DECIMAL			DRAWN BY
FRACTIONAL			APPROVED BY
ANGULAR			WDM
DATE	PROJECT NO.	DRAWING NO.	REV.
Nov. 2009		6 0280	



**Grind Hog**

# HORIZONTAL FLOW

RETROFIT ALTERNATIVE

## “TOILET SEAT BOX STYLE” DROP IN REPLACEMENT

PROJECT: \_\_\_\_\_

ANTICIPATED PEAK FLOW: \_\_\_\_\_

EXISTING CHANNEL:

Width (w): \_\_\_\_\_

Depth (d): \_\_\_\_\_

Underdrain Clearance (c): \_\_\_\_\_

MOTOR REQUIREMENTS:

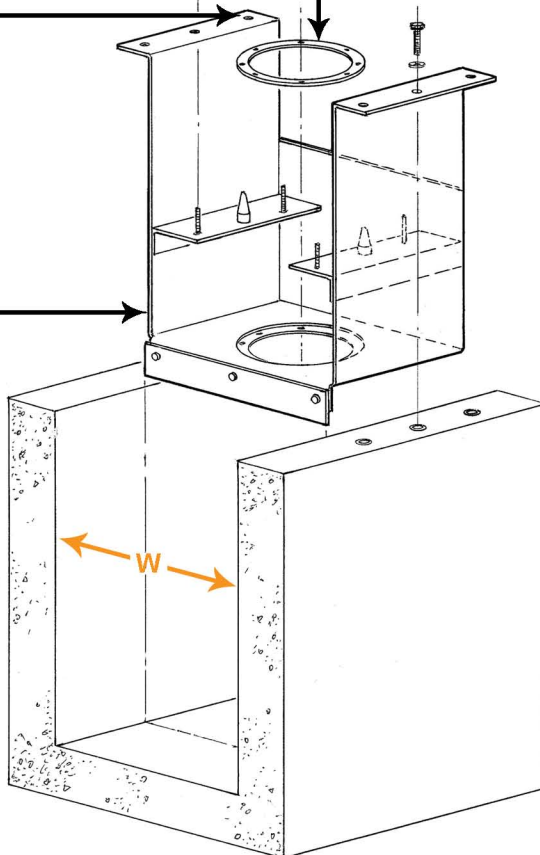
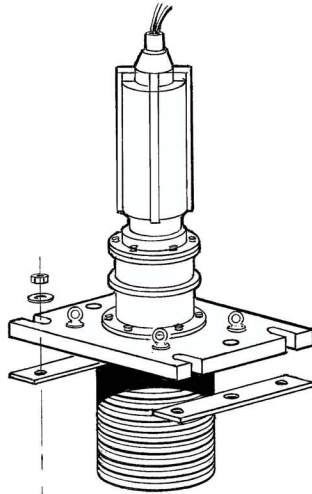
Power: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Enclosure: \_\_\_\_\_

Replaceable wear ring for extended life

Supported from above on the channel walls, eliminating the requirement for any submerged anchorage

Fabricated from 304 Stainless Steel to suit existing channel dimensions



## REPLACING

Barminutor

Infilco Degremont

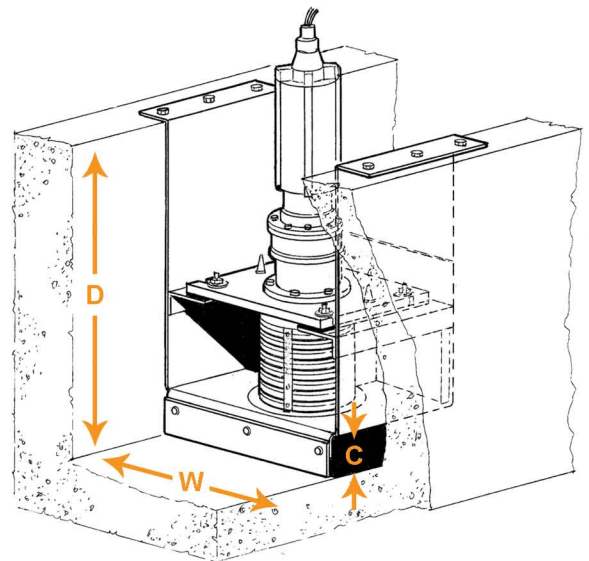
Clow Aer-O-Flo

Muffin Monster

Franklin Miller-Diminutor

Worthington

.....Among others



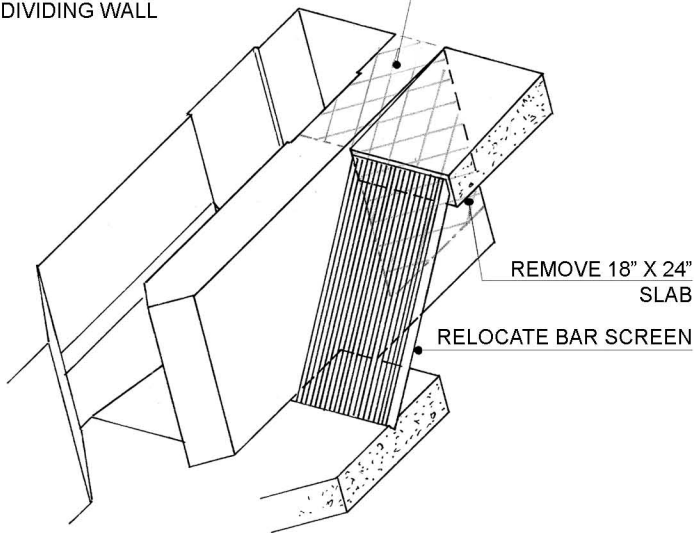
# HORIZONTAL FLOW



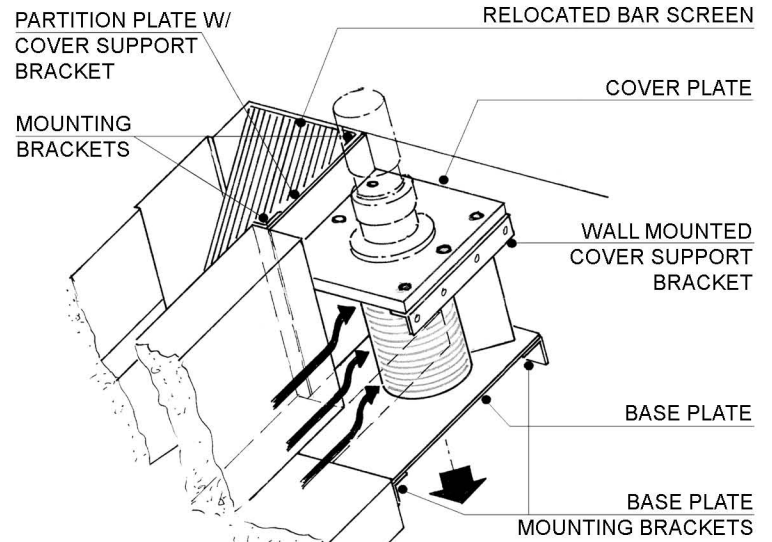
Customized to suit each application

## ORIGINAL CHANNEL

REMOVE 24" SECTION OF DIVIDING WALL



## PROPOSED CHANGES



Original  
Worthington 15-5



Custom Fabricated  
Basin



16 ASX T/S



Custom Fabricated Basin  
& 16ASX T/S  
Ready for Shipment

G.E.T. INDUSTRIES INC.

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