



MODEL 16AS T/S SPECIFICATION

1.0 General Specifications

There will be furnished one (1) only Grind Hog™ Model 16AS 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 3.5 MGD (13,200m³/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) the 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

Immersible 1.5 Hp. Motor, 1750 RPM, ____ volt, ____ phase, ____ cycle, suited to periodic submergence. Power cable length 25 ft. (7.6 m).

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

G.E.T. INDUSTRIES INC.

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SPECIFICATION cont'd...



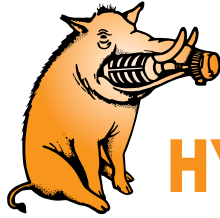
- b) double seals on the output shaft shall ensure flood-proof operation through a reduction ratio of 59:1
- c) the cycloidal reducer shall be capable of withstanding shock loads to 500% of its mechanical rating of 7.72 Hp. and be warranted for two (2) years
- d) the drive shall have a minimum full load 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 wall mounted brackets and fasteners, horizontal plate and skirt assembly, all of 304 stainless steel.

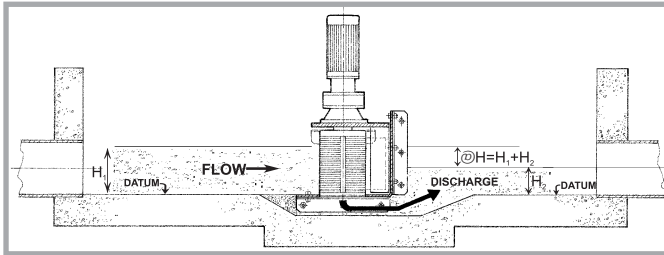
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Grind Hog™

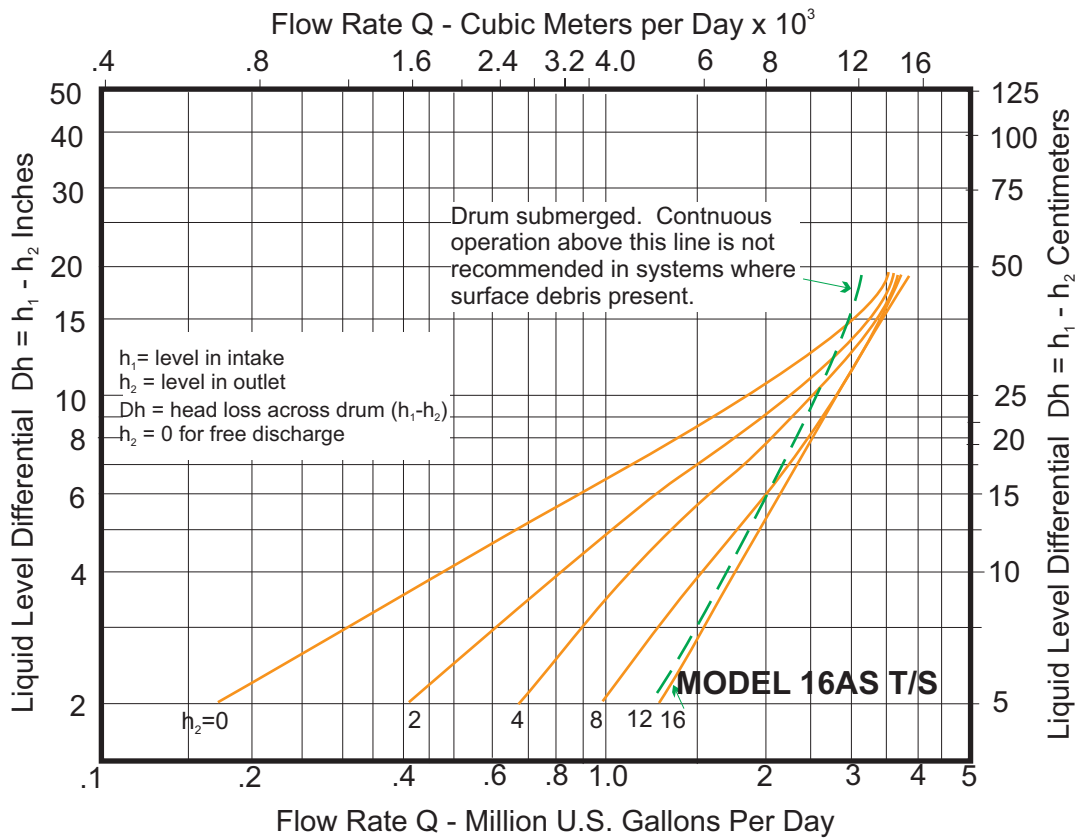
HYDRAULIC DATA SHEET IN-CHANNEL MODEL 16AS T/S



GENERAL DATA

Capacity	0-3.5 MGD (US)	0-13200 m ³ /day
Drum Diam.	14.5 in	36.8 cm
Inlet Area	202 in ²	1303 cm ²
Outlet Area	121 in ²	780.6 cm ²
Slot Width	0.470 in	12 mm

HYDRAULIC PERFORMANCE CURVE





IN-CHANNEL MODEL 16 AS 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

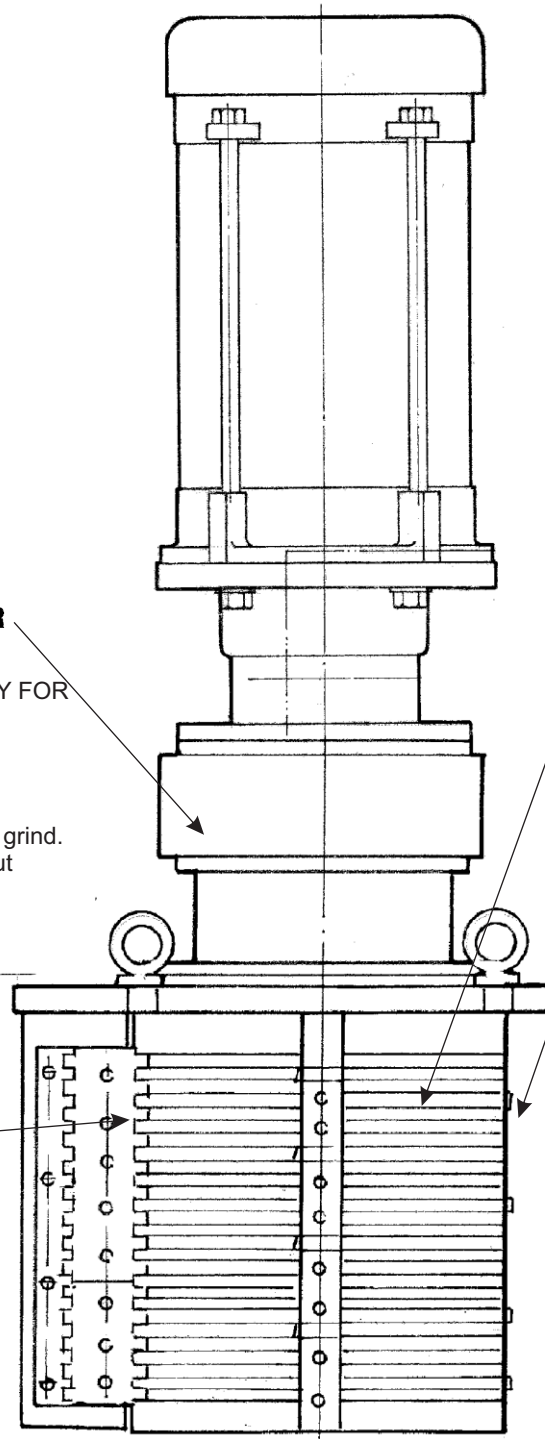
- LONG LIFE UNDER ABRASIVE CONDITIONS

ROTATING SHEAR BAR ASSEMBLY

- MACHINED FROM SOLID BARSTOCK
- PRECISE TOLERANCES MAINTAINED

SUBMERGED FASTENERS OF STAINLESS STEEL

HEAVY DUTY CAST IRON CONSTRUCTION



G.E.T. Industries Inc.

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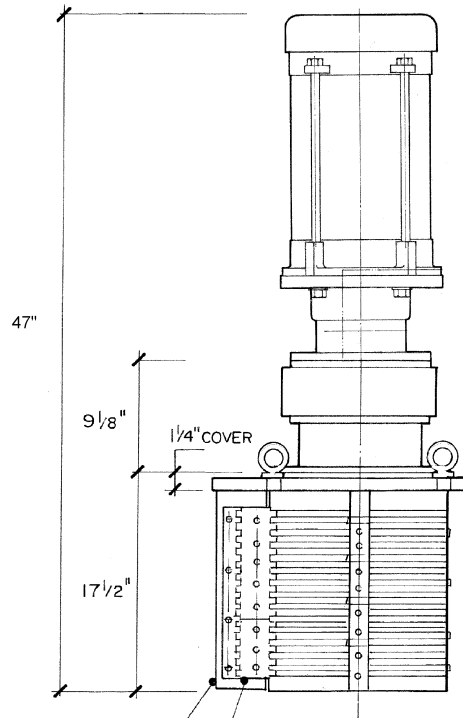
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Grind Hog™

MECHANICAL DETAIL

MODEL 16AS T/S
IMMERSIBLE
 SERIAL No. _____

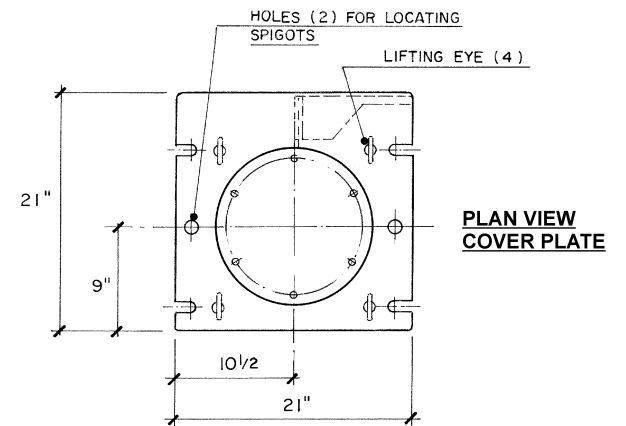
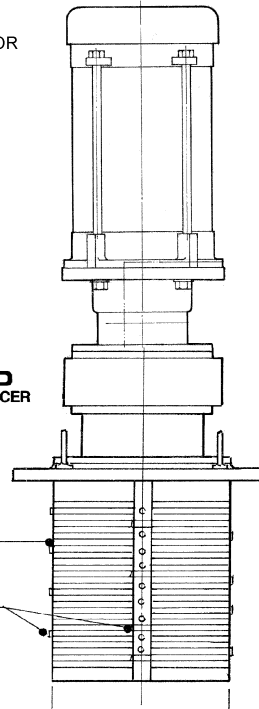


IMMERSIBLE MOTOR
 POWER CABLE
 LENGTH 25'

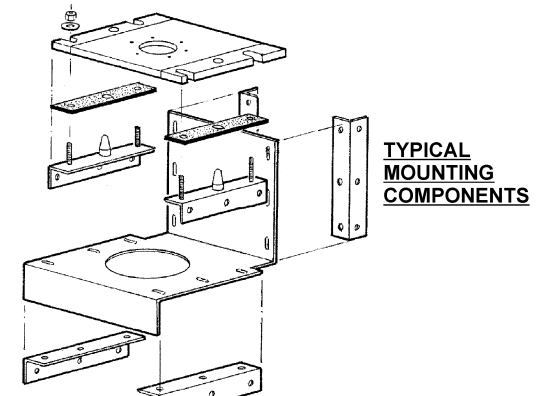
SUMITOMO
 SM-CYCLO SPEED REDUCER
 6000 SERIES

SCREEN

SHEAR BARS



PLAN VIEW
COVER PLATE



TYPICAL
MOUNTING
COMPONENTS

MATERIALS OF CONSTRUCTION & GENERAL ENGINEERING DATA

HOUSING:	GREY IRON	CAPACITY:	3.5 MGD (US)/13200 m ³ /day	INLET AREA:	202 sq in 1303 cm sq
DRUM (SCREEN):	DUCTILE IRON (ASTM 536 GRADE 60-45-18)	DRUM SPEED:	30 RPM	OUTLET AREA:	121 sq in 780.6 cm sq
SHEAR BARS:	AISI-A2 HIGH ALLOY TOOL STEEL	ROTATION:	CLOCKWISE	DRUM DIAMETER:	14.5 in 36.8 cm
CUTTING BARS:	AISI-01 TOOL STEEL REVERSIBLE	SLOT WIDTH:	0.470 in / 12 mm	WEIGHT:	lb kg
HARDWARE & FASTENERS:	304 STAINLESS STEEL	NO OF SLOTS:	56		
MOTOR MANUFACTURER:		POWER:	____ / ____ / ____	RPM:	1750
STYLE: IMMERSIBLE	HP: 1.5	KW: 1.12	FRAME: 182TC	FLANGE: 'C'	RATIO: 59:1
				SM-CYCLO REDUCER MODEL:	V6160
				RATING:	7.72 HP

REVISIONS	BY	DATE	APP.
G.E.T. INDUSTRIES INC.			
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www.grindhog.com			
TOLERANCES			SCALE
D. DECIMAL			NTS
F. FRACTIONAL			DRAWN BY
A. ANGULAR			APPROVED BY
DATE	PROJECT NO.	DRAWING NO.	REV.
May 2007		6 0227	



**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:

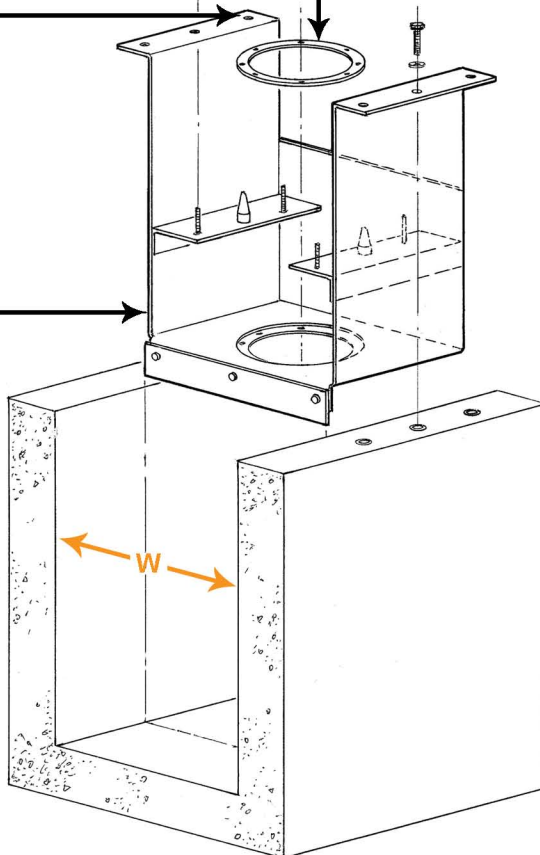
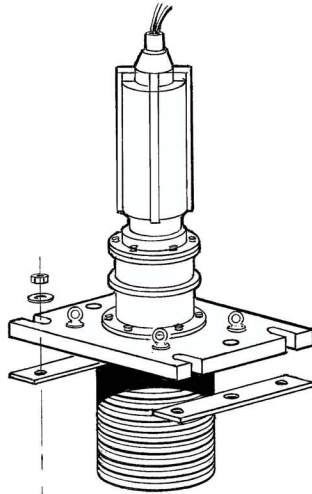
Power: _____ / _____ / _____

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

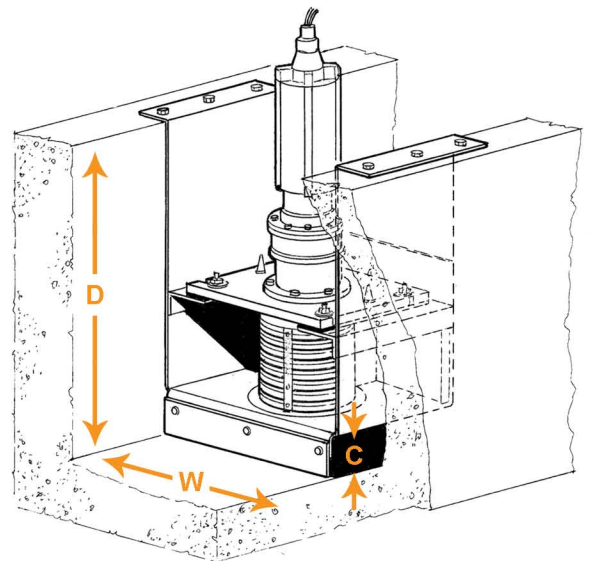
Clow Aer-O-Flo

Muffin Monster

Franklin Miller-Diminutor

Worthington

.....Among others



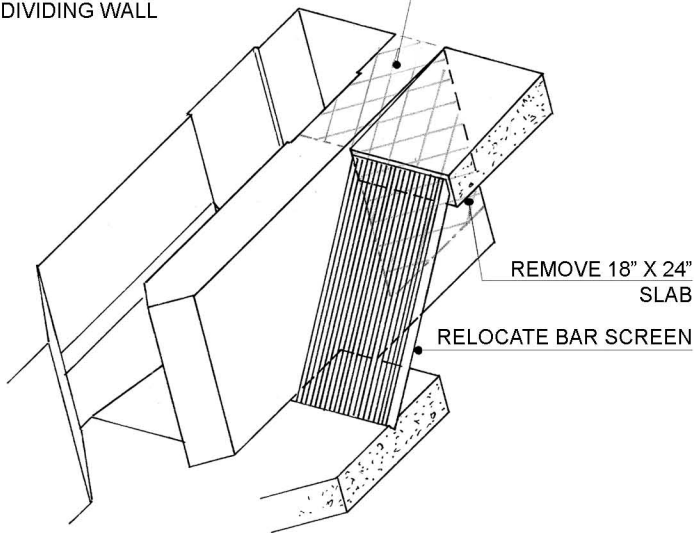
HORIZONTAL FLOW



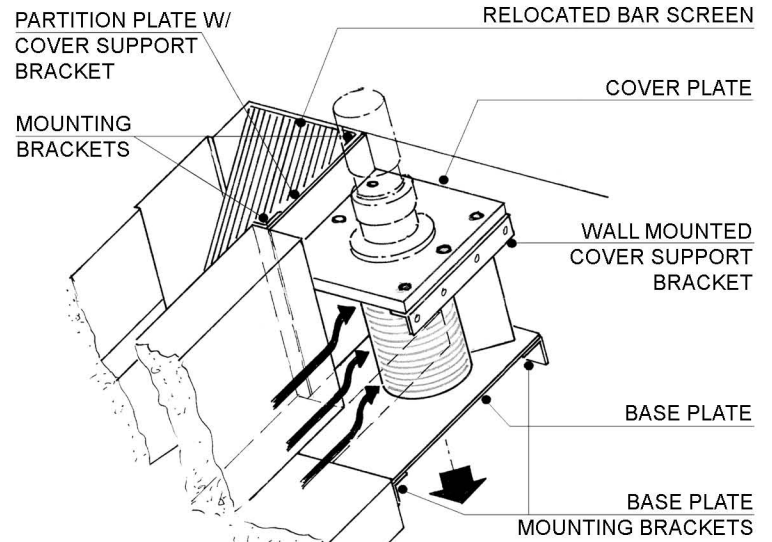
Customized to suit each application

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

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