



MODEL 16BS SPECIFICATION

1.0 General Specifications

There will be furnished one (1) only Grind Hog™ Model 16BS Comminutor as manufactured by G.E.T. Industries, Inc. Rotation shall be in a clockwise (standard) / counter-clockwise (optional) direction.

1.1 Design Criteria

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

- (a) hydraulic capacity 4.5 MGD (17,000m³/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 Casing and Curb Ring

Shall be:

- (a) of heavy-duty construction and of high quality cast iron
- (b) machined flat and complete with three (3) holes for anchor bolts
- (c) of the open type allowing free access for complete cutting bar and shear bar mechanism maintenance and inspection without dismantling the unit

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 bars (3), shall be of high-quality O1 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 3 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
- b) double seals on the output shaft shall ensure flood-proof operation through a reduction ratio of 59:1

G.E.T. INDUSTRIES INC.

Toll Free: 877-213-7418 Email: get@grindhog.com Web: www.grindhog.com

SPECIFICATION cont'd...



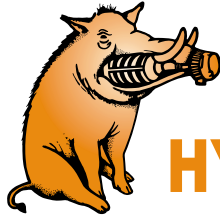
- c) the cycloidal reducer shall be capable of withstanding shock loads to 500% of its mechanical rating of 7.72 Hp. and be warranted for two (2) years
- d) the drive shall have a minimum full load efficiency of 90% and be pre-lubricated with grease, requiring routing maintenance every 500 to 1,000 hours

A) 'KWIK-LIFT' WET WELL REMOVAL SYSTEM

The Comminutor shall be equipped with a slide rail system which will allow the Grind Hog™ to be removed without entering the wet well. The guide rails shall be 304 schedule 40 stainless steel pipe, 1.5 inches in diameter, and shall be of adequate length as shown on the drawings. Guide rail support shall be 304 stainless steel and shall be mounted to the wet well wall. All attaching hardware shall be of stainless steel and shall be supplied by the contractor.

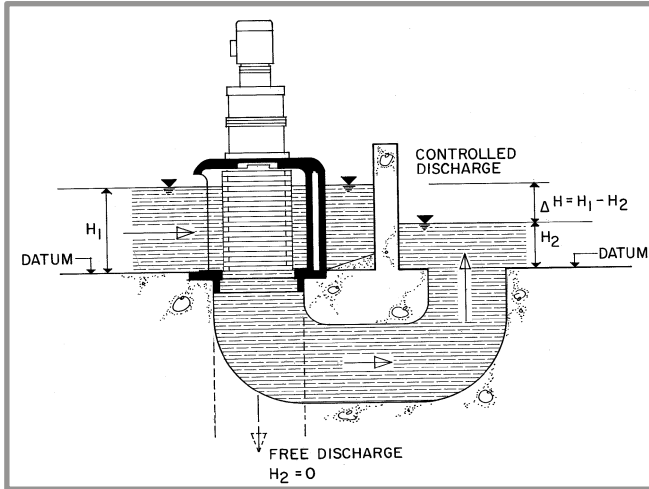
G.E.T. INDUSTRIES INC.

Toll Free: 877-213-7418 Email: get@grindhog.com Web: www.grindhog.com



Grind Hog™

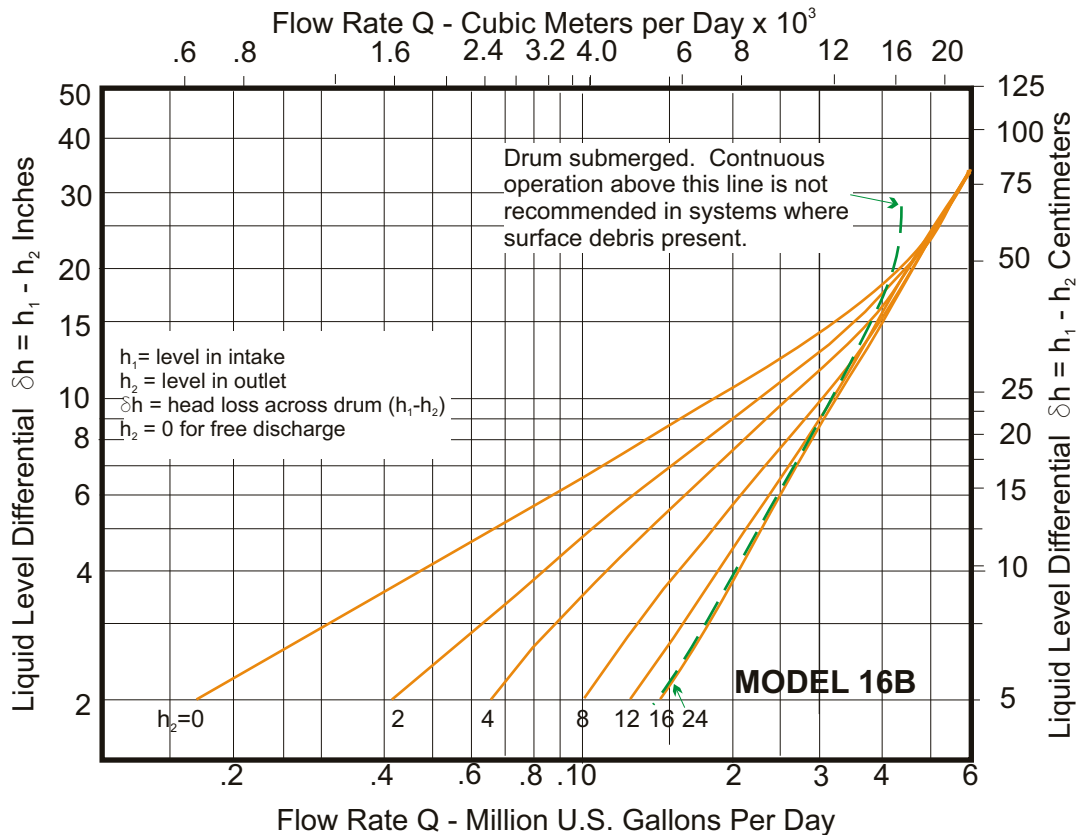
HYDRAULIC DATA SHEET IN-CHANNEL MODEL 16B



GENERAL DATA

Capacity	0-4.5 MGD (US)	0-17000 m ³ /day
Drum Diam.	14.5 in	36.8 cm
Inlet Area	274 in ²	1767 cm ²
Outlet Area	121 in ²	780.6 cm ²
Slot Width	0.470 in	12 mm

HYDRAULIC PERFORMANCE CURVE



G.E.T. Industries Inc.

Toll Free: (877) 213-7418

E-mail: get@grindhog.com ♦ Web: www.grindhog.com



IN-CHANNEL MODEL 16B cont'd...

DESIGN FEATURES

SM-CYCLO® SPEED REDUCERS

- 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

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

CAST DUCTILE IRON SEWAGE SCREEN

- LONG LIFE UNDER ABRASIVE CONDITIONS

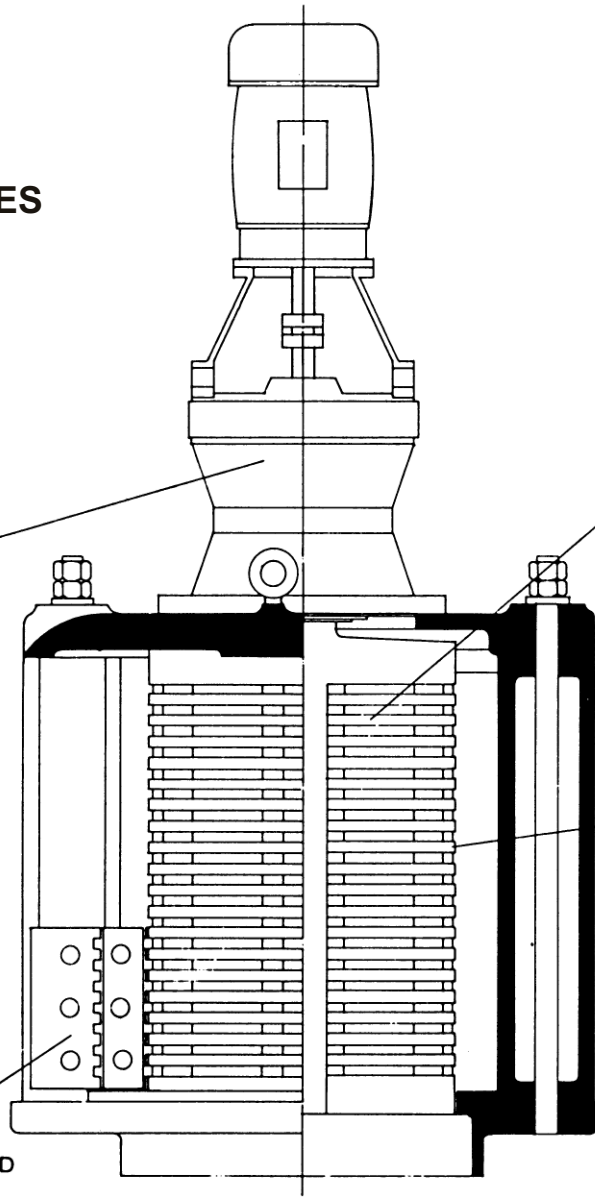
ROTATING SHEAR BAR ASSEMBLY

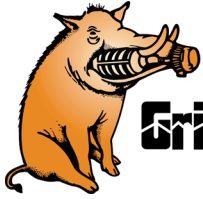
- MACHINED FROM SOLID BARSTOCK
- PRECISE TOLERANCES MAINTAINED.

SUBMERGED FASTENERS OF STAINLESS STEEL

HEAVY DUTY CAST IRON CONSTRUCTION

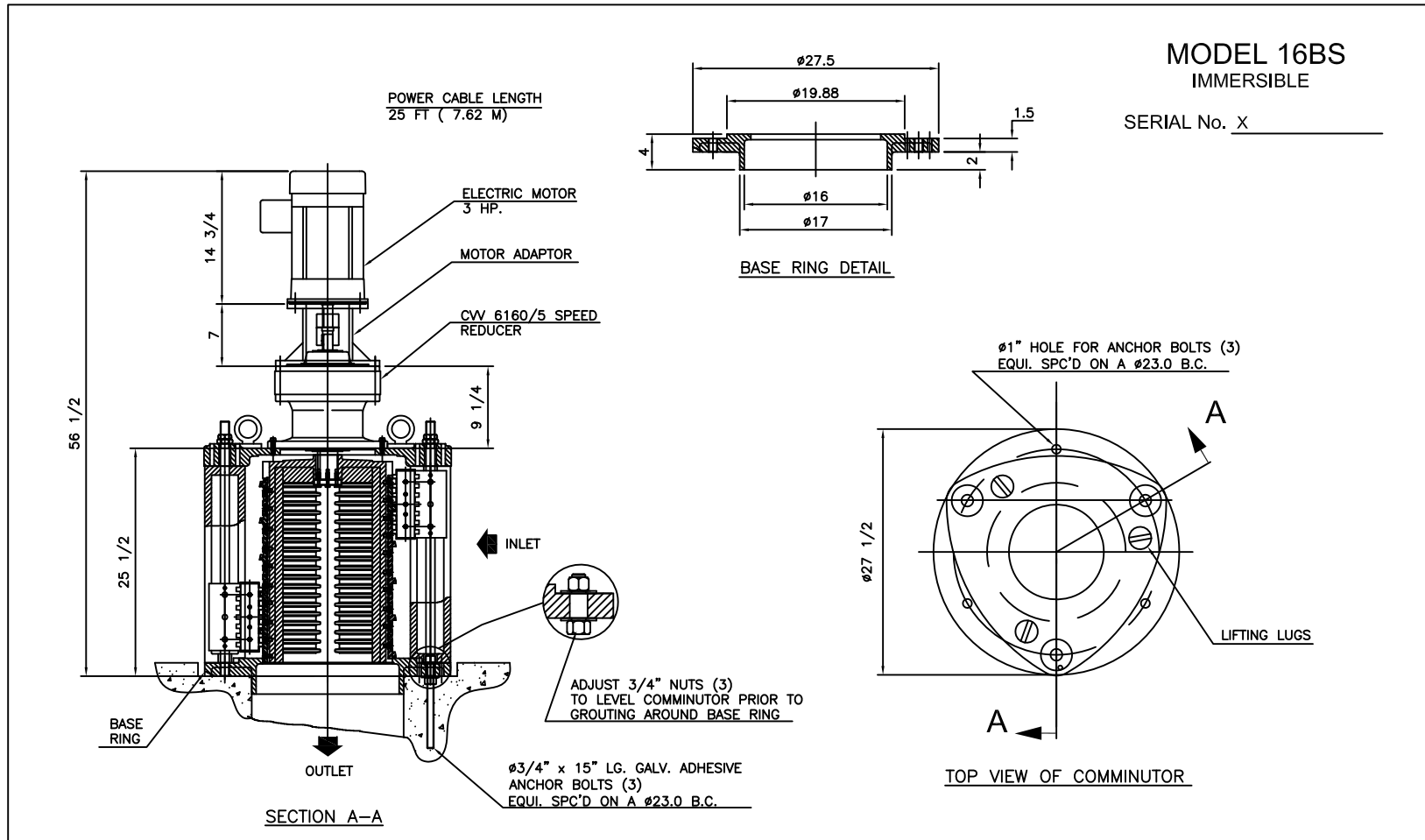
VERTICAL "FREE"
OR
"CONTROLLED"
DISCHARGE





Grind Hog

MECHANICAL DETAIL



MATERIALS OF CONSTRUCTION & GENERAL ENGINEERING DATA							
HOUSING:	GREY IRON	CAPACITY	4.5 MGD (US) / 17000 m3/day	INLET AREA	274 SQ IN	1767 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-H1 TOOL STEEL REVERSIBLE	SLOT WIDTH	.470 IN / 12 mm	WEIGHT	850 LB	385 kg	
HARDWARE & FASTENERS:	304 STAINLESS STEEL	No. OF SLOTS	76				
MOTOR MANUFACTURER:		POWER:	X	RPM:	1750	REDUCER:	SM - CYCLO
MODEL:	V6160						
STYLE:	IMMERSIBLE	HP:	3.0	KW:	2.23	FRAME:	182TC
		FLANGE:	'C'	RATIO:	59:1	RATING:	7.72 HP

G.E.T. INDUSTRIES INC.
get@grindhog.com
www.grindhog.com
1 (877) 213-7418

TOLEANCES	INFO.	SCALE
DECIMAL	INFO.	NTS
FRACTIONAL	INFO.	DRAWN BY
ANGULAR	INFO.	G.P.
		APPROVED BY
		W.D.M.
DATE	FILE NO.	QWG. No.
MAY, 2012		6 0240