



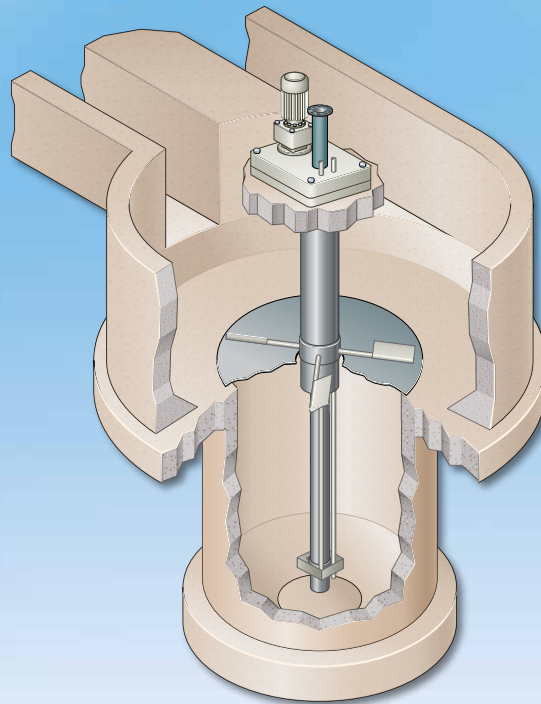
**E & I Corporation**  
Division of McNish Corporation

## “Swirl Grit” (Vortex Grit)

The function of the Swirl Grit, an E & I Corp staple since the early 1980's, is to remove Grit from the influent flow while keeping the organics in suspension. The adjustable axial propellers located in the grit chamber, attached to the main Torque Tube, create a corkscrew effect forcing the Grit to the chamber floor, moving the Grit along basin floor, and depositing it into the Grit storage hopper.

After sufficient Grit has been deposited into the Grit hopper, the Grit is pumped to a Classifier for dewatering. Pumping is accomplished by either an air lift or a self-priming pump which is mounted on the top portion of the unit adjacent to the primary drive gear head. As an option, the self-priming grit pump can be located in a remote location.

After the Classifier has washed and dewatered the collected Grit, the classifier deposits the Grit into a refuse container located under the head end of the Screw Classifier.



### Standard Features

#### Drive Head

- Fabricated steel housing, Powder coated
- Precision gear, grease lubricated
- Helical primary gear
- TEFC motor

#### Air bell, 10 inch diameter

#### Axial Flow Propeller

#### Mixer

#### Main Drive Tube

#### Grit Hopper Floor Plate

#### Grit Pump

- Self-priming Grit Pump
- Hi-Hard Internal Wetted Parts
- V-Belt Drive
- TEFC Motor

#### Flush Lines

#### Materials

- Carbon Steel, Epoxy painted

### Optional Features

#### Materials

- 304 or 316 stainless steel

#### Controls-Available in all NEMA standards

#### Variable speed drive

#### Air Lift

#### Cyclone

#### Dewater Screws

**E & I Corporation**  
Division of McNish Corporation

214 Hoff Road  
Suite M  
Westerville, Ohio 43082  
614.899.2282 PH  
614.899.0304 FAX



E & I Corporation

## SCREENS

### Catenary Bar Screen

Features-Catenary principle "No under-water bearings or sprockets," heavy duty, jam free, high capacity, multiple rakes

Models

- CBS-SM (shaft mount drive)
- CBS-CD (chain drive)
- CBS-CD-AE (auto entry)

### Catenary Trash Rakes

Features- Catenary principle "No under-water bearings or sprockets", extra heavy duty, super capacity, jam free, multiple rakes

Models

- CTR-CD

### Catenary "Compact II"

Features- Catenary principle "No under-water bearings or sprockets", compact version of the heavy duty CBS, complete with stainless steel and non-metallic components, low maintenance

Models

- CCBS II-CD

### ARC

Features- single shaft, unitized construction, curved bar rack standard, low cost screen ideal for low flow applications

Models

- ARC-SM (shaft mount drive)

### ARM (ascending rake mechanism)

Features-high capacity single arm design, easily maintained, adjustable speed for high volume conditions, maintained from operation floor

Models

- ARM
- ARM-VS (variable speed)
- ARM-CE (curved entry bar rack)

### EIMT (front cleaned screen)

Features-state of the art front cleaned multi-rake screen, high volume capture, low head loss, stainless steel construction

Models

- EIMT

## TRAVELING WATER SCREEN

Features- flow thru design, continuous baskets, heavy duty roller type main chain, drop in construction, balanced drive system

Models

- TWS

## GRIT

### Catenary Grit Collector

### Heavy Media Collector

Features- Catenary principle "No under-water bearings or sprockets", heavy duty, high capacity, jam free, low maintenance

Models

- CGC
- CGC-A (aerated)
- CGC-AVC (aerated with velocity controlled baffle)

### V-Bucket Grit Collector

Features-standard and high capacity buckets, optional stainless steel and fiberglass reinforced plastic construction,

Models

- VBG
- VBG-A (aerated)

### Screw and Bucket Elevator

Features- standard capacity, steel and fiberglass reinforced plastic construction, ideal for low to moderate flows

Models

- SBE
- SBE-A (aerated)

### Swirl Grit (Vortex Grit)

Features-high rate of grit removal, no bearings, sprockets or chain to wear, efficient low cost of grit removal, accessories include: air lifts, pumps, dewatering screw conveyors

Models

- SG-A (air lift)
- SG-P (pump)

## Flocculators

### Vertical and Horizontal

Features-computer designed for efficient mixing, carbon or stainless steel for shafting or structural members, nonmetallic bearing liners, treated bearing shafts, fiberglass reinforced plastic arms and baffles, chain or direct drive, "NSF-61 CERTIFIED" COATINGS

Models

- VF
- VF-VS (variable speed)
- VF-DD (direct drive)
- VF-CD (chain Drive)
- HF
- HF-VS (variable speed)
- HF-DD (direct drive)
- HF-CD (chain Drive)

## COLLECTORS

### Three and Four Shaft Rectangular

Features- "NSF-61 CERTIFIED" systems Complete line of metallic and non-metallic chain, sprockets, bearings, stub shafts, shafting, wear shoes and strips, return rails, corrosion free materials (UHMW-PE, Nylon, Polyurethane, and Polyethylene). All materials selected for long life and low maintenance

Models

- RC-3S "NSF-61"
- RC-4S "NSF-61"
- RC-3S
- RC-4S

## SKIMMERS

### Pipe

Features-Metallic and non-metallic wetted components, Teflon pipe/end plate super seals

Models

- PS-L (lever operated)
- PS-G (gear operated)
- PS-GL (gear less operated)

### Helical

Features-Metallic or total fiberglass reinforced plastic, reels, beach plate and discharge trough, plastic drive components

Models

- HS-CS (carbon steel)
- HS-SS (stainless steel)
- HS-FRP (fiberglass reinforced plastic)

## Division of McNish Corporation

2355 Hoff Road • Suite M • Westerville, OH 43082

PH 614-899-2282 • FAX 614-899-0304

WWW.EANDICORP.COM