



The Arlat chain and flight sludge collector equipment is designed to be mounted into rectangular tanks and is suited for Primary and/or Secondary clarifiers as well as water plant settling tanks. The action of the flights is to scrape the sludge, which settles to the bottom, to one end where it is collected and transferred to the digesters. The returning flights travel along the surface of the tank skimming all the scum, which floats, into an Arlat scum trough or some other removal device.

The Arlat design utilizes non-metallic 720 series chain and sprockets to reduce weight and cost while providing a reliable and long lasting installation. The scraper flight material is FRP, fibreglass reinforced plastic, to reduce weight to make installation and maintenance easier. All flights are connected to the 720 series chain by means of the integrated connector plate, F26 or F28 depending on the flight size required.

The 720 drive sprockets are keyed to the head shaft which rotates in cast iron wall bearings fitted with UHMW inserts. UHMW is chosen for its long life, economical price and to remove the need for greasing bearings that can lead to grease and oils entering the water stream. The 720 idler sprockets are mounted to stationary shafts utilizing idler sleeves to reduce the chain drag and required drive torque.

The 78 series bull sprocket is keyed to the head shaft in order to properly transmit the drive torque to the collector system. The 78 series drive sprockets come in a variety of configurations; using shear pins with or without trip cams, jaw clutches can be used to allow a single drive to power two collector units while still offering the ability to segregate a single tank for maintenance or service.

















A variety of options are available to best fit your application:

- Stainless Steel chain is available for severe sludge blanket loading
- Scraper flights are available in a heavy duty profile
- Scraper flights are available in extruded Aluminum
- 2 or 3 shaft configurations are available for non-scum collecting systems or for DAF tanks
- Full PLC control panels are available that can offer;
 - Sprocket monitoring
 - Flight monitoring
 - Sludge blanket monitoring
 - Speed control for the C&F drive system
 - Torque monitoring

Technical Information:

- 720 series non-metallic Chain
 - o Chain material Glass Filled Nylon
 - o Pin material Acetal
 - o 6" Pitch
 - o 6000 lb Average Ultimate strength
 - o 1.4 lbs per foot
- 715 series SS chain (direct replacement for the 720 non-metallic chain)
 - o Chain material 403 Stainless Steel
 - o Pin material 403 Stainless Steel
 - o 6" Pitch
 - o 33,000 lb Average Ultimate strength
 - o 3.9 lbs per foot
- 78 series non-metallic Chain
 - Chain material Acetal
 - o Pin material 403 Stainless Steel
 - o 2.6" Pitch
 - o 5000 lb Average Ultimate strength
 - o 1.4 lbs per foot







