Shaft Assemblies

Polychem Systems’ unique, non-metallic headshaft assembly consists of Cast Nylon-6 wall-mounted stub shaft spindles and biaxially-wrapped fiberglass, telescopic tube sections that are locked in place with non-metallic collars and interlock keys. This lightweight, water-lubricated assembly requires no cranes for installation and is virtually maintenance-free, eliminating the need for heavy, corrosion-prone steel shafts and bearings.

Clarifier Flights

Polychem Systems’ fiberglass clarifier flights and attachments are engineered for the performance requirements of each application:

- **Ultra Flight** with Standard Attachment
- **Box Flight** with Ultra Attachment

“C-Channel”, the industry standard, is designed with continuous fiberglass filament and mat running the full length of the flight. “Ultra Flight”, “Box Flight”, and “Ultra Attachment” provide superior strength characteristics for wider tank or extreme sludge loading applications.

Non-Metallic Chain & Flight Sludge Collectors

Non-Metallic Chain & Flight Sludge Collectors
With over 12 thousand systems and 7 million feet of collector chain in operation, Polychem Systems has become the industry standard for performance and reliability and the company that design engineers the world over turn to for their chain & flight sludge collector systems.

Operating in clarifiers over 300 feet long (90 metres) and 33 feet (10 metres) wide, as well as in heavy-duty stacked clarifiers, Polychem Systems has proven for over 25 years that we can handle the most severe sludge loading situations.

The only non-metallic clarifier components with a proven track record in 300’ systems.

**Scavenger Ditch**

Stub Shafts
- Easily-installed idler stub shaft assembly made of Cast Nylon-6 with self-lubricated bearing.

**Headshaft Assembly**

Stub Shafts
- Biaxially-wrapped fiberglass, non-metallic, telescoping headshaft assembly.

NCS-720-5 Chain
- 6" pitch, non-metallic chain.
- No special tools required for assembly.

Flights
- Fiberglass flight and non-metallic chain attachment link, Cast Nylon-6 wear shoes and wall brackets with fiberglass return rail, and low-friction, non-metallic, self-lubricating wear strip.

**Return Rail Assembly**

Shear Pin Sprocket Assembly
- Non-metallic drive sprocket with stainless steel hub for NH-78 drive chain.
- Jaw clutch assemblies for dual output drives.

**Jaw Clutch Drive Sprocket Assembly**

Sprockets
- NH-78 driven sprocket and NCS-720-5 headshaft sprocket, with chain-saver rims.

**Jaw Clutch Drive Sprocket Assembly**

Return Rail Assembly
- Cast Nylon-6 wall brackets, fiberglass rail, and self-lubricating wearstrip, provide low friction guide for flights.