

## GTEK Hydrocyclone



### ● Description

Hydrocyclone is a continuous device that utilizes centrifugal force to accelerate the settling rate of particles. When feed slurry enters the hydrocyclone tangentially under pressure, as result of the high centrifugal forces, particles coarser than the “cut point” size migrate into a primary vortex adjacent to the wall and move forward to discharge with a small volume of water via the spigot. Particles finer than the “cut point” size migrate into a secondary upward-moving vortex, along the axis of the hydrocyclone and discharge with the majority of the water via vortex finder.

### ● Application

Hydrocyclone is one of the most important devices in the minerals industry, it is widely used in the mineral industry processing as a classifier, which has proved extremely efficient at fine separation size. Hydrocyclone is widely used in closed circuit grinding operations but it also has many other applications, such as desliming, degritting, and thickening.

### ● Features & Benefits

1. Compact and simple structure
2. No moving parts
3. Low investment and running cost
4. Easy to install and simple to operate
5. High efficiency

### ● Technical Specification

| Model | Interior Dia (mm) | Cone Angle (°) | Overall Pipe Dia (mm) | Feeding Size (mm) | Feeding Pressure (Mpa) | Processing Capacity (m <sup>3</sup> /hr) | Range (um) | Dimensions (LxWxH)(mm) |     |      |
|-------|-------------------|----------------|-----------------------|-------------------|------------------------|--|------------|------------------------|-----|------|
| FX660 | 660               | 20             | 180-240               | 16                | 0.03-0.2               | 250-350                                  | 74-220     | 1250                   | 890 | 2650 |
| FX500 | 500               | 20             | 130-200               | 10                | 0.03-0.3               | 140-220                                  | 74-200     | 850                    | 790 | 2050 |
|       |                   | 15             |                       |                   |                        |  | 74-150     | 850                    | 790 | 2380 |
| FX350 | 350               | 20             | 80-120                | 6                 | 0.04-0.3               | 60-100                                   | 50-150     | 775                    | 605 | 1765 |
|       |                   | 15             |                       |                   |                        |  | 50-120     | 775                    | 605 | 2115 |
| FX300 | 300               | 20             | 65-115                | 5                 | 0.04-0.3               | 45-85                                    | 50-150     | 665                    | 585 | 1310 |
|       |                   | 15             |                       |                   |                        |  | 40-100     | 665                    | 585 | 1505 |
| FX250 | 250               | 20             | 60-100                | 3                 | 0.06-0.35              | 40-60                                    | 40-100     | 540                    | 480 | 1180 |
|       |                   | 15             |                       |                   |                        |  | 40-100     | 540                    | 480 | 1220 |
|       |                   | 10             |                       |                   |                        |  | 30-100     | 540                    | 480 | 1380 |
| FX200 | 200               | 20             | 40-65                 | 2                 | 0.06-0.35              | 25-40                                    | 40-100     | 435                    | 360 | 1050 |
|       |                   | 15             |                       |                   |                        |  | 30-100     | 435                    | 360 | 1115 |
|       |                   | 10             |                       |                   |                        |  | 30-100     | 435                    | 360 | 1205 |
| FX150 | 150               | 20             | 30-45                 | 1.5               | 0.06-0.35              | 11-20                                    | 30-74      | 280                    | 295 | 690  |
|       |                   | 15             |                       |                   |                        |  | 30-74      | 280                    | 295 | 900  |
|       |                   | 8              |                       |                   |                        |  | 30-74      | 280                    | 295 | 1270 |
| FX125 | 125               | 17             | 25-40                 | 1                 | 0.06-0.35              | 8-15                                     | 20-100     | 210                    | 185 | 620  |
|       |                   | 8              |                       |                   |                        |  | 20-74      | 250                    | 240 | 985  |
| FX100 | 100               | 20             | 20-40                 | 1                 | 0.06-0.35              | 5-12                                     | 20-100     | 260                    | 210 | 525  |
|       |                   | 15             |                       |                   |                        |  | 20-100     | 268                    | 215 | 720  |
|       |                   | 8              |                       |                   |                        |  | 20-100     | 268                    | 215 | 1000 |
| FX75  | 75                | 15             | 15-22                 | 0.6               | 0.1-0.4                | 2-5                                      | 20-74      | 240                    | 230 | 465  |
|       |                   | 6              |                       |                   |                        |  | 5-40       | 240                    | 230 | 800  |
| FX50  | 50                | 15             | 11-16                 | 0.3               | 0.1-0.4                | 1-2                                      | 10-74      | 160                    | 155 | 350  |
|       |                   | 6              |                       |                   |                        |  | 5-30       | 160                    | 155 | 590  |