



PARTNERSHIPS IN PRACTICE

Exceptional  
efficiency for  
optimal wet  
classification  
performance



# Tega Hydrocyclones

## Features & Benefits

Tega hydrocyclones represents the next generation of hydrocyclones. Equipped with world-class technology and several innovative features, the new range of hydrocyclones offers significant product advantages in comparison to other hydrocyclones.



### Features

- Involute entry
- Modular design
- Different cone angles
- Light weight overflow pipe
- Simple fastening arrangements
- Radial /Manifold /Mushroom arrangement



### Benefits

- Less turbulence, higher efficiency  
less wear, finer cut point
- Easy maintenance, flexibility
- Wide range of cut points
- Less Installation & maintenance time
- High range of abrasion resistance,  
longer life, wide application area
- Compact & efficient cluster design



### Tega Services

TEGA INDUSTRIES LIMITED provides the best pre and after sales services possible, through own Engineering personnel, independent consultants and technical product and application specialists within the group. Emphasis is laid on finding cost effective solutions to technical problems, adopting a professional approach for each application.

#### Pre Sales Services

- Thorough study of the application for a detailed operation conditions.
- Evaluation through high end advanced simulation software for selection and design of Hydrocyclone.
- Trouble shooting: Defining areas where improvement of cost effectiveness is possible, outlining the technical solution together with economical evaluation.

#### After Sales Services

- Supervision of installation and commissioning of TEGA products, supervised by experienced TEGA engineering personnel.
- Trouble-shooting and revision of design.
- Monitoring the performance and wear rate of individual sections.



# Tega Hydrocyclones

## Product Range

With over 22 years of practical experience in manufacturing and supplying in mining & mineral processing equipments, Tega provides full technical & engineering support along with its wide range of cyclones.

Size Range	Material of Construction	Cut Size(mr)	Throughput (m3/hr)
2 inch to 36 inch	PU	5-150*	3-500*
	PU with Ceramic		
	Drop in type rubber liner		
	Cryston / Ceramic lined		



Drop in type rubber liner



Sintered Ceramic liner



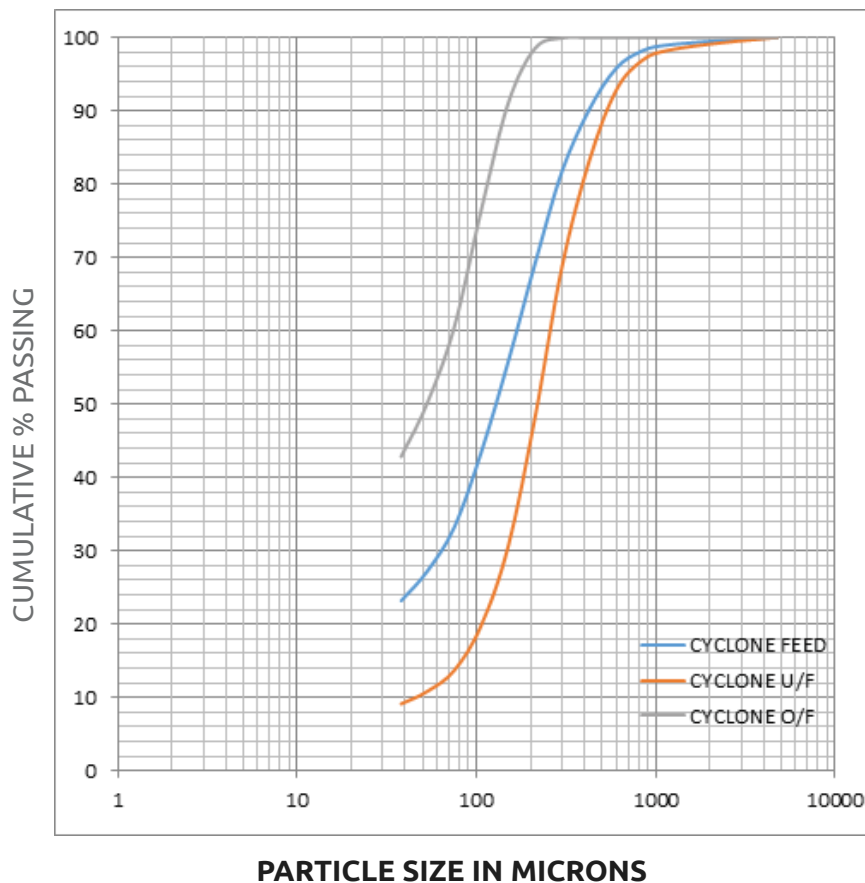
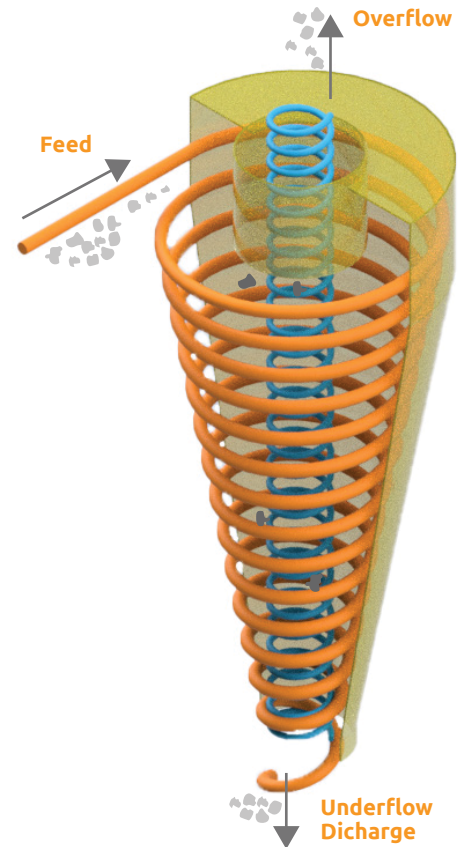
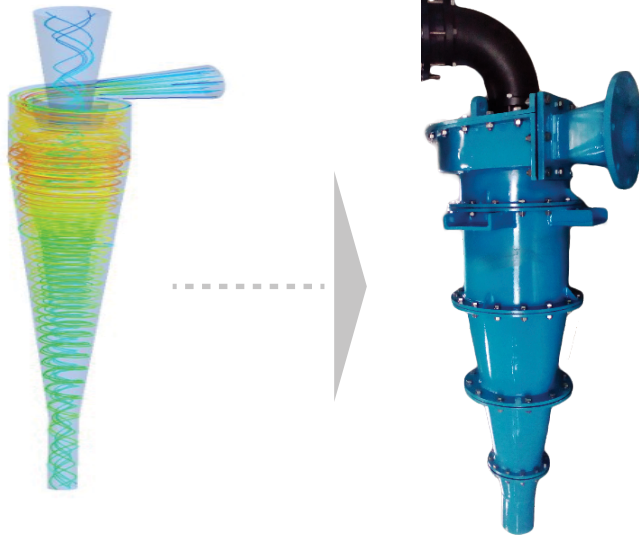
Molded Polyurethane

Application Area	
<b>Iron Ore Industry</b> <ul style="list-style-type: none"> <li>• Recovery from classifier slimes</li> <li>• Recovery from cyclone overflow (extreme slimes)</li> <li>• Beneficiation of feed to pellet plant</li> <li>• Pre-concentration of feed to magnetic separator</li> <li>• Recovery of iron from old tailings</li> </ul>	<b>Gold Ore Processing Plants</b> <ul style="list-style-type: none"> <li>• Classification in closed circuit grinding</li> <li>• Free gold recovery from primary cyclone underflow</li> <li>• Recovery of gold from plant tailing</li> <li>• Backfill sand preparation</li> <li>• Reduction of carbonaceous materials</li> </ul>
<b>Alumina Refinery</b> <ul style="list-style-type: none"> <li>• Hydrate classification</li> <li>• Spent liquor/Weak soda recovery</li> <li>• Sand separation</li> </ul>	<b>Chromite Ore Beneficiation Plants</b> <ul style="list-style-type: none"> <li>• Beneficiation of chromite ore</li> <li>• Dewatering/DE sliming</li> </ul>
<b>Coal Washery</b> <ul style="list-style-type: none"> <li>• Beneficiation of coal fines</li> <li>• Thickening of fine coal slurry</li> <li>• DE sliming/Classification</li> </ul>	<b>Beach Sand</b> <ul style="list-style-type: none"> <li>• DE sliming/Dewatering</li> </ul> <b>Clay Industry</b> <ul style="list-style-type: none"> <li>• DE gritting/Recovery of fine clay</li> </ul>

\*depends on the size of Cyclone

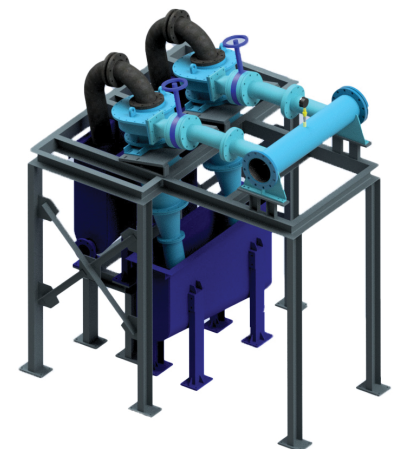
## Tega Hydrocyclone Performance

- Reduction in recirculation load to mill
- Deliver finer cut & sharper separation
- High-end design to improve life of cyclone parts
- Increased collection efficiency



### Application

- Beneficiation
- De sliming
- Dewatering
- De gritting
- Thickening



**2 WAY 15" HYDROCYCLONE MANIFOLD**





## Tega Hydrocyclones Case Study

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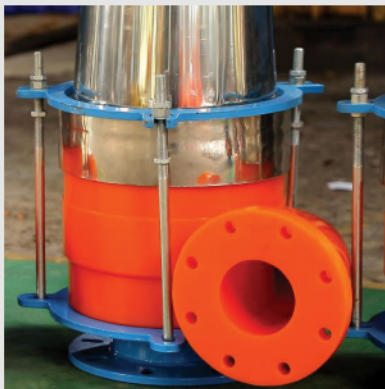
### Case Study 1

- One gold plant in Central Asia was struggling to get the desired separation quality of 80% passing 75 microns in the overflow in a SAG Ball Circuit.
- Tega was given a chance to provide the sought after solutions.
- Tega proposed 10 way Cyclone cluster with 8 Nos. Operating & 2 Nos. Standby Tega 10" Hydrocyclone.

**Outcome: 80% passing -75 micron particles are now reporting to the overflow.**

### Case Study 2

- The Canadian Gold producer replaced existing Primary & secondary Cyclones with Tega 26" and 10" Standard Cyclone in 2008 for their SAG-Ball Circuit and achieved desired separation of P80 75micron which was missing earlier.
- In 2017 Customer wanted to augment their capacity by 30%. But there was no extra space to house any separate cluster with different foot print, even roof height could not be increased. But capacity has to increase by 30% & overflow quality has to be maintained in the range of 77% to 80% passing 75micron.
- Tega provided customized solution, 10" hydrocyclone with Semi Stub cone with 1.9D Cylindrical body extension. To achieve desired separation with increased capacity.
- Capacity augmented from 145 tph to 195 tph. With content of 75micron in overflow being 78% to 80%.



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