## Metso MHC<sup>™</sup> Series Hydrocyclone



Next generation in hydrocyclone technology



# Exceptional efficiency for optimized performance

Metso's new MHC<sup>™</sup> Series delivers a high unit capacity and exceptional separation efficiency for a wide range of classification duties. The MHC Series' patent-pending design represents the next generation of hydrocyclones, focused on optimized process performance, superior wear component design, and improved ease of maintenance.

## New inlet head design for increased capacity

The internal geometry of the MHC Series has been developed in coordination with Metso's world-class simulation and modeling scientists. Through the use of advanced CFD and DEM tools, Metso developed a new inlet head design that delivers increased unit capacity while minimizing liner wear.

The MHC Series inlet head is designed to promote smooth flow of material into the hydrocyclone, while creating the absolute minimum possible turbulence. This design has been rigorously tested in the field and undergone Metso's stringent performance evaluation with successful results.



The MHC Series inlet head rapidly dissipates turbulence in the material flowing into the hydrocyclone.







## Single component conical section offers numerous benefits

One of the unique features of the MHC Series hydrocyclone design is the use of a single component conical section. Unlike standard hydrocyclones, the conical section is no longer constructed of multiple outer housing shells containing internal liners. Instead, the entire conical section is constructed into a single rigid component, eliminating the need for assembly of multiple housing and liner parts. The cone is constructed with rigid internal supports and is fabricated with a natural rubber wearresistant internal lining. This superior design offers several distinct advantages, including the ability to incorporate unique conical geometry providing a smooth acceleration of particles to promote a sharp particle separation at a low cost. The increased wear life and improved ease of maintenance keeps downtime to a minimum. Once it's time for a liner change out — it's quick, safe and easy, thanks to the design and limited number of parts.

#### Manifold design for accurate distribution

Metso designed its radial hydrocyclone manifolds to accurately distribute the feed and collect the underflow and overflow from multiple hydrocyclones operating in parallel. Wear-resistant linings are incorporated into the feed distributor, as well as the overflow and underflow launders. Metso's hydrocyclone manifolds incorporate all required work platforms with special attention to safe access for monitoring, sampling, and maintaining the hydrocyclones.

#### Broad product line offering

Metso's MHC Series hydrocyclones are designed specifically for grinding circuit classification duties, ranging from primary grinding to fine regrinding applications across the full range of mineral types, allowing our engineers to help you select the ideal hydrocyclone size and quantity for any grinding circuit duty.

Model name	Diameter (mm)
MHC-100	100
MHC-150	150
MHC-250	250
MHC-375	375
MHC-500	500
MHC-650	650
MHC-800	800



## Our range of complementary products and services

Metso is able to offer industry-leading technology and services for the complete range of comminution circuit equipment, including horizontal tumbling mills, vertical stirred mills, mill discharge pumps, slurry lines, and classification hydrocyclones.



The Metso Way –

### Making the big difference to our customers

Everything we do is based on deep industry knowledge and expertise that makes the big difference to our customers. Decades of close customer collaboration and adapting to our customers' ever changing needs have transformed us into a knowledge company.



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