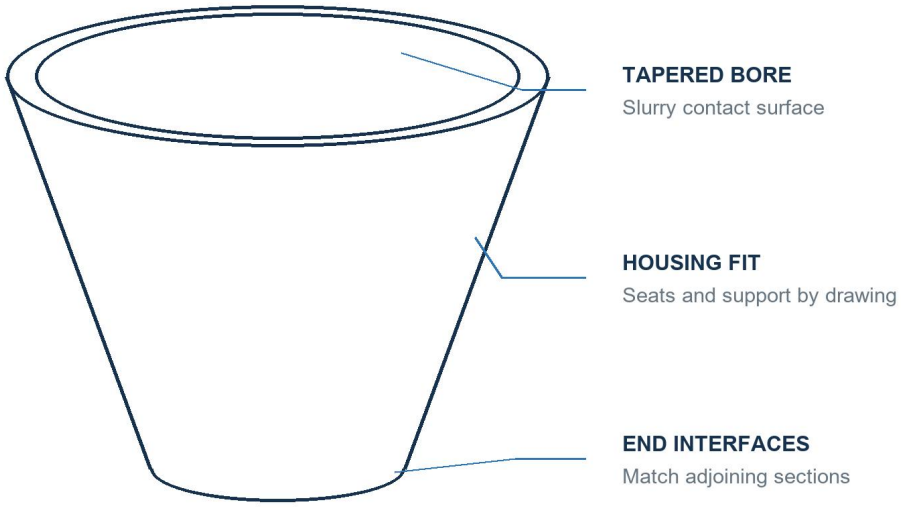
ADCERAX
ADVANCED CERAMICS

ENGINEERING PRODUCT CATALOG

Silicon Carbide Hydrocyclone Cone Liners

Drawing-based ceramic wear parts
for slurry classification and replacement projects



Illustrative plain cone form | Not to scale

Category illustration only; not evidence of a specific replacement part. Actual cone profile, end details and material grade follow the order drawing.

SiC cone liners form the slurry-contact wear surface inside a hydrocyclone cone section. Define the cone position, tapered bore, housing interfaces and slurry duty to prepare a specific liner enquiry.

AT-SIC-ZT1001 | Custom sizes | RBSiC or SSiC review

Find the information you need

Position and applications 2 · Drawing inputs 3

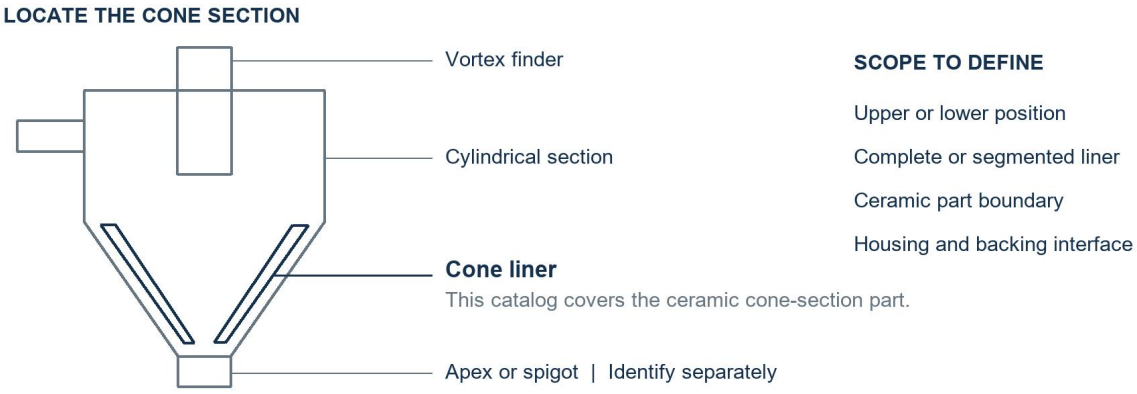
Material review 4 · Wear review 5 · Acceptance 6 · RFQ 7

ADCERAX | China-based advanced ceramics manufacturer
HUNAN ATCERA CO.,LTD

01 | PRODUCT SCOPE

Identify the liner and the service

Start with the exact cone section. The ceramic liner, backing, housing and apex are separate scope items; a matching equipment name alone does not define the replacement part.



Example arrangement, not to scale. Component positions are illustrative; the equipment drawing controls the actual assembly.

Drawing or replacement route

New design: provide the cone drawing, mating housing and required liner sections.
Replacement: add equipment identification, the part or drawing revision, installation photographs and the worn liner measurements.

Application information to send

Project context	Details that guide the liner review
Mineral classification	Mineral type, solids loading, particle distribution and cone wear position.
Gold, copper, iron or lithium processing	Ore and slurry composition, process stage and operating records.
Desander or desilter	Cone identification, sand and debris content, housing support and replacement history.
Chemical slurry	Fluid composition, pH, additives, temperature and wetted assembly materials.
Ceramic powder or pigment	Particle characteristics, contamination limits, surface and cleaning requirements.
Wet flue gas desulfurization	Slurry chemistry, suspended solids, temperature and backing or adhesive exposure.

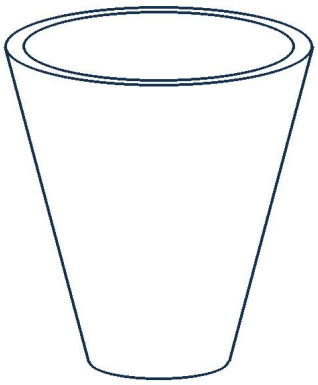
State whether the enquiry covers a complete ceramic cone or individual segments. Define any backing, bonding or housing work separately in the project scope.

02 | DIMENSIONS AND INTERFACES

Define the custom cone geometry

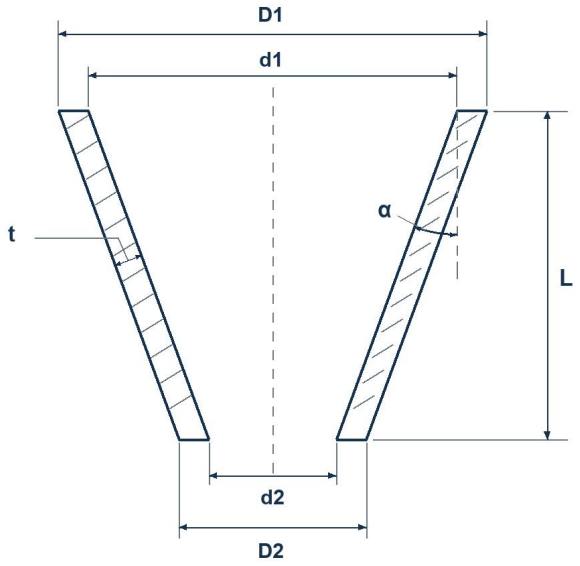
AT-SIC-ZT1001 identifies the custom cone-liner entry. Diameter and height are customized; the drawing revision defines the ordered dimensions, tolerances and fit.

3D FORM RECOGNITION



Plain taper shown for field definition.
End features follow the part drawing.

AXIAL SECTION AND DIMENSION KEY



D outside diameter d bore diameter α bore half-angle

Dimension key, not to scale. Plain taper only; not a manufacturing or inspection drawing. Symbols below are RFQ inputs, not standard dimensions.

Field and unit	Definition to include in the drawing or enquiry
D1 / d1 · mm	Large-end outside diameter / bore diameter, at the same named end plane.
D2 / d2 · mm	Small-end outside diameter / bore diameter, at the same named end plane.
L · mm	Axial distance between the two defined end planes of this liner section.
t · mm	Wall thickness at identified locations; the illustrated span is normal to the wall. State the measurement direction and any local thickness changes.
α · degrees	Bore half-angle to the axis for the illustrated straight taper. If your drawing uses an included angle, identify that convention. Define each section of a compound profile.
Interfaces and surface	Detail seats, steps, grooves, joints, end faces, edge radii and surface finish on the part and mating-housing drawings.
Datums and acceptance	Specify datum references, general and critical tolerances, inspection locations and the drawing revision.

For a worn sample, record where each measurement was taken. Separate worn slurry-contact areas from locating surfaces; do not use a worn bore as the intended new-part dimension.

03 | MATERIAL ROUTE AND DUTY

Prepare the material review

RBSiC and SSiC are distinct silicon carbide routes. Specify the route and grade with the geometry and operating conditions so that the material and assembly can be reviewed together.

State your requirement: RBSiC / SSiC / To be advised. Add an approved grade or material data-sheet reference when available.

Route	Material distinction	What to review
RBSiC Reaction-bonded silicon carbide	SiC with a residual-silicon phase.	Slurry chemistry, additives and temperature; cone geometry, support and assembly requirements.
SSiC Sintered silicon carbide	A sintered SiC material route.	Selected grade and material acceptance; slurry exposure, working surfaces, geometry and assembly.

Build a useful operating brief

Input	Useful definition
Solids	Mineral or solid type; particle size distribution and coarse particles; solids concentration with mass or volume basis.
Chemistry	Fluid composition, pH range, salts, additives, cleaning chemicals and exposure duration.
Operation	Normal and peak temperature; feed pressure and flow; start-stop conditions and relevant process changes.
Assembly	Housing support, contact areas, joint layout, backing or adhesive and wetted materials.
Current performance	Existing liner material, operating hours, wall-loss records, wear location and reason for replacement.

Compare materials on the same basis

For a change from polyurethane, rubber, alumina or metal, compare the same cone position under comparable slurry and operating conditions. Review wear, impact damage, chemistry, fit and change-out records together; a hardness or strength value alone is not a selection rule.

Keep material and assembly limits separate

A material data sheet describes the selected grade under stated conditions. It does not establish the installed liner pressure rating, slurry compatibility, allowable flow velocity, service life or separation performance. Agree any required assembly checks and service-trial criteria separately.

04 | CONDITION REVIEW AND HANDLING

Use wear evidence to guide replacement

Record the observed condition before assigning a cause. Similar damage can arise from different combinations of slurry, handling, geometry and assembly; the observations below guide review rather than provide a diagnosis.

Observed condition	Evidence and checks for the next liner
Chipped end or damaged edge	Photograph the large and small ends, note when damage was first seen, and review handling, edge protection and contact with adjacent parts.
Uneven wall loss or a polished band	Map the location against the feed direction and cone position. Review housing seating, alignment, support and slurry operating records.
Groove or step at a segment joint	Record the joint position, flow-facing step and adjoining faces. Review segment order, alignment, gaps and the specified joint arrangement.
Cracking or detached backing	Photograph both faces where accessible. Review support, backing condition, assembly loads, impact history and operating changes.
Pitting or an etched surface	Record the actual material grade, slurry and cleaning chemistry, concentration, temperature and exposure. Review chemical and abrasive mechanisms.

Before installation

Check the liner against its drawing and inspect the edges and surfaces. Prepare clean housing and mating surfaces, remove trapped particles, and confirm the prescribed locating, backing and support arrangement.

During handling and fitting

Support the ceramic section evenly, protect thin end edges and avoid forcing alignment. Use the equipment-specific assembly method and specified fastener, adhesive or backing requirements.

At inspection and storage

Keep location-based records of wall loss, edge condition and joints. A process change is a reason to inspect the system, not proof of liner failure. Store separated liners on protective supports with their drawing and part identification.

05 | DRAWING REVIEW AND SUPPLY

Agree the part and its acceptance

ADCERAX supports drawing review, material selection and ceramic supply for the specified cone section. The quotation should identify the ceramic part boundary, selected route, drawing revision and agreed inspection scope.

From enquiry to a controlled order

1 Define the part. Identify the cone position, complete or segmented scope, mating housing and drawing or old-part reference.
2 Review the build. Confirm material route, wall sections, critical interfaces and surface requirements; select forming, sintering and finishing steps for the part.
3 Agree acceptance. Set dimensional and visual checks, material records, sampling and any assembly or service trial.
4 Confirm supply. Fix quantity, identification, packing, destination and the quoted production schedule.

Acceptance stage	Define before ordering
Material	Route and grade, required material records, test basis and any batch-specific requirements.
Ceramic liner	Cone profile, paired end diameters, length, wall sections, datums, tolerances, surface and edge-condition limits.
Assembly	Housing fit, locating surfaces, support, joints, backing or bonding; any required assembly or leakage checks.
Service trial	Slurry and operating conditions, observation locations, comparison period and acceptance criteria for the project.

Packing and repeat orders

Specify support and separation that protect the tapered wall and both end faces during transport. For segmented sets, agree part identification and assembly sequence. Confirm the packing arrangement, required records and destination with the quotation.

For repeat supply, cite the accepted drawing revision, material route, part identification and any approved changes. Include the existing order reference when available.

Price, quantity, production schedule, final tolerances, inspection documents and packing are confirmed for the individual quotation and order.

06 | ENGINEERING REVIEW AND QUOTATION

Start your cone liner enquiry

Send three things to begin

A drawing or old-part photographs
The application and cone position
The required quantity

Use catalog reference AT-SIC-ZT1001 and document ADC-CAT-SIC-CL-001, Rev 01. Add the available details below; the first enquiry does not need a completed engineering specification.

Enquiry detail	Include when available
Existing reference or replacement	Previous drawing or order reference; equipment and part identification; revision; installation and damage photographs.
New drawing	Drawing or 3D model and revision; material requirement; cone profile, interfaces, datums and tolerances.
Geometry	Large and small end ID/OD, axial length, angle convention, wall sections, end details and housing fit.
Slurry and operation	Mineral or fluid, solids basis and concentration, particle distribution, pH and additives; temperature, pressure and flow.
Supply and acceptance	Complete or segmented scope; backing or assembly review; quantity and repeat demand; inspection and document needs.
Delivery	Destination, target schedule and any packing or handling requirements.

Send the drawing or liner details

info@adcerax.com

Telephone +86-0731-84428843

https://adcerax.com/product/silicon-carbide-cyclone-cone-liner/

ADCERAX replies within 24 hours with the next steps for review. Quotation and technical evaluation depend on the project information.

ADCERAX
China-based advanced ceramics manufacturer for custom precision ceramic components
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