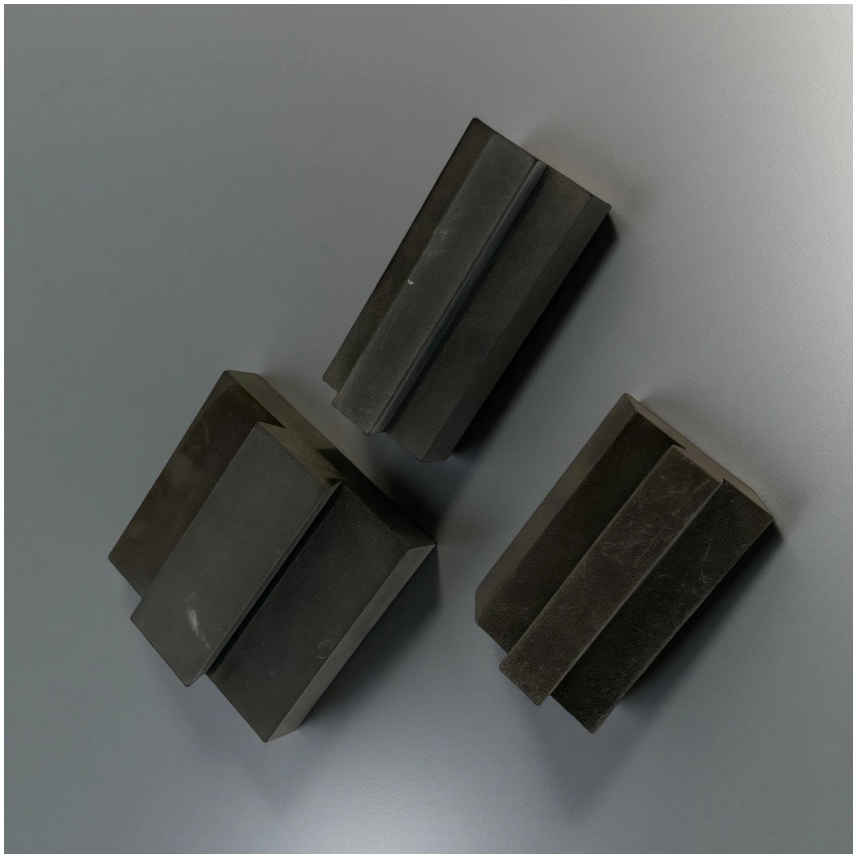
ADCERAX
ADVANCED CERAMICS

ENGINEERING PRODUCT CATALOG

Silicon Nitride Dewatering Elements

Drawing-based ceramic components for board, paper and tissue machines



Representative ceramic profiles with raised strips and side shoulders.
See the matching geometry key on page 3; the approved part drawing defines the supplied geometry.

Initial feasibility review

Use this route for a drawing-based ceramic strip or cover-component inquiry. Send the machine position, contact fabric, individual-part dimensions, profile and support interface. Identify the required supply scope; size, special features and any assembly requirement are reviewed before quotation.

Catalog reference AT-SIN-MB1001 | Geometry Custom by drawing

Inside 02 Machine position · 03 Drawing inputs · 04 Material reference
05 Acceptance and maintenance · 06 Request a quotation

Product page | HUNAN ATCERA CO.,LTD

01 / APPLICATION AND SCOPE

Identify the machine position

Match the ceramic part to the forming wire or press felt, then identify whether the inquiry covers one strip, a cover component or an assembly with its support. The positions below are inquiry routes; the drawing establishes the actual fit.



Raised strips and side shoulders correspond to the geometry key on page 3. These photographs do not establish grade, size, mounting orientation or equipment fit.

Position to identify	Contact and quotation inputs
Forming board	Forming wire. Define contact width, support level, leading and trailing edges, and the support interface.
Hydrofoil or foil	Forming wire. Provide the working profile, foil angle, edge transitions and reference datums.
Low or high vacuum suction box	Forming wire. Identify the cover or segments, opening pattern, vacuum zones, joints and supporting structure.
Transfer suction position	State the actual contact fabric and path. Define the transfer geometry, openings and support interface.
Uhle or felt suction box	Press felt in the press section. Provide felt data, suction openings, cover joints and backing interfaces.

Define the supply boundary

List ceramic parts, backing or beam, fasteners, bonding, seals and assembly work separately. A ceramic-strip inquiry does not define a complete suction box; any assembly scope must be agreed in the quotation.

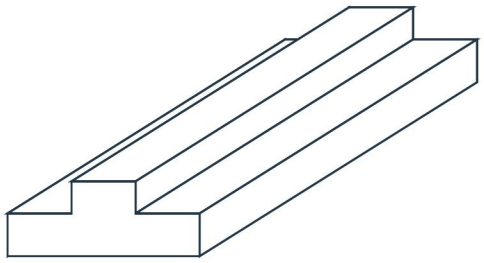
For board, tissue or specialty paper, add paper grade, basis weight and the relevant fiber, filler and paper-quality requirements.

02 / CUSTOM SPECIFICATION

Define the part on a drawing

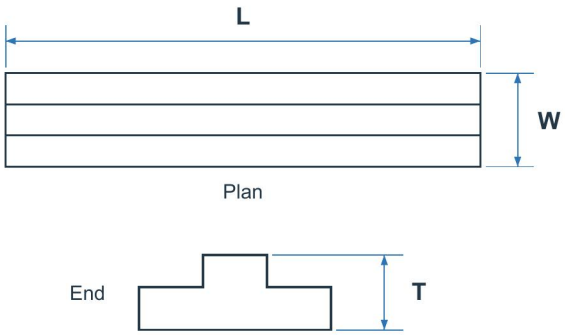
AT-SIN-MB1001 identifies the drawing-based product route. It is not a fixed size or an OEM interchange code. Specify each ceramic piece and the assembled cover separately.

3D recognition



Raised strip and shoulders shown for recognition.
Profile orientation is defined by the part drawing.

Governing dimension views



Not to scale. No numerical dimensions are implied.

Dimension key for the representative external profile shown on pages 1–2. The part drawing governs the actual profile, working face and mounting orientation; this is not a manufacturing or inspection drawing.

Symbol	Dimension to provide	Definition
L	Overall length in mm	Length of one ceramic part. Identify each segment separately.
W	Overall profile width in mm	Full outside width; specify the fabric-contact width separately.
T	Maximum section height in mm	Overall height including any raised profile; distinguish it from base thickness.

Complete the profile and interface definition

Working face and edges. Mark the surface contacting the wire or felt and the direction of travel. Dimension the contact band, foil angle or slopes, steps, radii and chamfers on the actual profile.

Openings and mounting. Where present, provide slot width, depth, spacing and angle; hole diameter, pitch and rows; mounting holes, grooves and locating features. Define their positions from drawing datums.

Surface and geometry. State tolerances, straightness, flatness, parallelism and profile requirements. Specify Ra or Rz, measurement direction and method, waviness and acceptable edge or surface defects.

Segmented covers. Add the assembly layout, individual segment lengths, total cover length, joint gaps, height differences, end positions and replacement sequence. Show how each piece locates on its support.

A worn sample records its present condition. Mark intact reference faces and distinguish measured wear from the intended replacement geometry.

03 / MATERIAL SELECTION

Structural silicon nitride reference

AD-SIN-ST is a sintered structural Si3N4 reference for preliminary material discussion. The actual grade, manufacturing route and batch for the requested element are selected and confirmed for the order.

Reference property	AD-SIN-ST	Basis and interpretation
Bulk density	3.2 g/cm³	Typical material selection value.
Apparent porosity	<0.3 vol%	Reference for the sintered structural body; not a part acceptance limit.
Flexural strength	700 MPa	Typical specimen reference. Geometry, surface and loading conditions matter.
Fracture toughness	6.5 MPa·m½	Method-dependent reference; the crack or notch method must be identified.
Thermal conductivity	20 W/(m·K)	Preliminary ambient selection; not a temperature-dependent design curve.
Poisson’s ratio	0.25	Typical dimensionless material value.
Rockwell A hardness	HRA 92–94	Typical value on the stated scale. Do not convert it from or to HV.

Source: ADCERAX Silicon Nitride Ceramic Product Comparison, Rev 06, page 1. These values are material references, not component design allowables. Purchase limits, test conditions and sampling belong in the drawing or order.

Separate material selection from machine performance

Hardness does not determine wet friction, wire or felt wear, energy use or service life. Flexural strength and fracture toughness do not establish the load capacity of a strip or an assembled cover. Assess the actual geometry, supports and contact conditions.

Compare alternative covers on the same duty

Compare	Use a common basis
Si3N4, alumina, SiC or polymer	Actual grade, working profile, drainage openings, mounting arrangement and scope of supply.
Contact and cleaning	Wire or felt, speed, tension, vacuum, finish, slurry or filler exposure, chemical concentration and temperature.
Acceptance and operating results	Defined inspection points and trial conditions for wear, fabric condition, drainage and replacement criteria.

Confirm any chemical-compatibility or thermal requirement for the actual exposure. No universal temperature limit or service-life rating is specified in this catalog.

04 / ACCEPTANCE AND SUPPLY

Agree how the part will be accepted

Define the checks and records with the order. Material tests, part inspection, assembly checks and paper-machine trials answer different questions; one does not replace the others.

Acceptance level	Requirements to agree
Material batch	Selected grade and batch identification; applicable specimens, test methods, sampling and acceptance limits.
Individual ceramic part	Drawing revision; dimensions, profile, datums, surface texture, cracks, chips, cleanliness and marking.
Cover and support assembly	Included components; joint gaps, working-face levels, mounting, alignment, sealing and any specified load or vacuum checks.
Machine trial	Actual wire or felt, speed, tension, vacuum and slurry; inspection intervals and agreed criteria for wear, fabric condition and drainage.

Use the wear pattern to define the replacement

Observed condition	Evidence to include in the review
Height loss or profile change	Measurements at defined locations, intact datum faces and a record of running conditions.
Chipped edges or cracks	Close photographs, defect location, handling history, support contact and any impact or cleaning-temperature changes.
Uneven contact or joint steps	Segment map, working-face levels, alignment measurements and the condition of the backing structure.
Loosening or separation	Attachment or bond details, support condition, chemical exposure and the sequence of the observed failure.

Handling and installation planning

Protect edges and contact faces during handling. Check supports, alignment and joint levels against the approved installation drawing. Use the machine or assembly specification for fastening, bonding and commissioning; material data cannot supply a tightening torque.

Packing and repeat orders

Agree protective separation, support for long pieces, part and segment identification, set sequence and any export packing requirements. For repeat orders, retain the drawing revision, approved deviations, material requirement and segment map.

Price, minimum order quantity, lead time, inspection reports and packing are confirmed in the quotation and order.

05 / REQUEST A QUOTATION

Send your drawing for review

Start with five lines

Copy the lines below into your first email. Cite AT-SIN-MB1001 and this catalog revision; mark unknown items “to confirm”. Incomplete drawings can start a review.

1. Position / contact fabric: [machine, section, position; wire or felt]
2. Supply scope: [ceramic parts / cover components / requested assembly]
3. Geometry: [drawing and revision / marked photos; known dimensions]
4. Order: [quantity by part; destination; target delivery]
5. To confirm: [missing details and help required]

Existing or replacement part. Add the prior reference, current material if known and intended changes. Mark worn areas and intact datums. A reference alone does not establish interchangeability.

New drawing-defined part or cover. Add part and assembly drawings and an operating brief. Identify who defines the support, mounting and machine trial. See page 3 for drawing inputs.

Before final quotation

Complete and agree the technical scope below during the review. These are follow-up details, not prerequisites for first contact.

Quotation field	Information to complete
Identity and scope	Machine or PM identifier, section and position; strip, cover component or assembly; drawing number and revision; segment layout.
Geometry and surface	Dimensioned profile and interfaces, tolerances, working-face identification, contact direction, openings, surface texture and defect criteria.
Material and conditions	Required grade or selection request; wire or press felt; paper grade, speed, tension, vacuum, fiber/filler exposure and cleaning conditions.
Acceptance and validation	Critical checks, sampling, required documents, assembly responsibilities and any defined operating trial.
Order and delivery	Quantity by part or segment, prototype/repeat requirement, packing or set identification, destination and target schedule.

Submit the technical brief

info@adcerax.com

Suggested subject: AT-SIN-MB1001 | Drawing review | Your machine position

The review confirms geometry, material and supply scope. The accepted drawing and order define the final specification.

View the product page | Online inquiry

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