Casting Catalogue

Custom and replacement cast components for industrial equipment

SDW Technical Consulting (Pty) Ltd supports enquiries for cast components used in pumps, minerals processing, material handling and general plant maintenance. This catalogue shows typical component categories and the technical information needed to assess a casting request. Each item is specified and quoted to suit its service conditions, drawing and required delivery scope.

Typical casting enquiries

- **Pump wet ends:** Impellers, casings, liners, covers and wear components.
- **Process equipment:** Housings, chutes, wear plates and other plant components.
- **Grate Links:** Custom grate castings to a supplied drawing or sample, subject to technical assessment.
- **Related grate products:** Grizzly bars, screen plates, grate bars and mill discharge grate segments, assessed to drawing and operating duty.
- **Replacement parts:** Reverse engineering from a sample where drawings are unavailable, subject to assessment.

Supply may include a rough casting or a finished machined component, depending on the specification agreed in the quotation.

Component range

Use the examples below to identify the part family. Final dimensions, metallurgy, pattern requirements and machining scope are confirmed against your enquiry.

Application	Typical components
Pumps and slurry handling	Impellers, volutes, suction covers, back liners, throatbushes, bearing housings
Minerals and bulk materials	Wear liners, chute sections, hoppers, elbows, crusher and screen components
Valves and pipe systems	Valve bodies, bonnets, pump connection pieces, flanges and specialised fittings
General engineering	Brackets, bases, housings, gears and custom cast profiles
Grates and screening	Grizzly bars, screen plates, grate bars and mill discharge grate segments

Material selection

Material is selected against wear, corrosion, temperature and loading. The grades below are examples for technical discussion; the approved grade and any equivalence are recorded on the quotation or drawing.

Material family	Common selection driver
High chromium white iron	Abrasive wear in suitable slurry and solids handling duties
Carbon and alloy steel	Structural strength, impact resistance and pressure containing designs, as specified
Stainless steel	Specified corrosion resistance and selected process environments
Ductile or grey iron	General housings and components where their properties suit the duty
Non ferrous alloys	Selected bronze or other alloy applications, subject to review

From enquiry to delivery

1. Define the duty

Review dimensions, operating conditions, wear mechanism, fluid or media, and the required material.

2. Confirm the manufacturing route

Assess the drawing or sample, pattern or tooling requirement, casting route, machining allowance and quantity.

3. Agree with the inspection scope

Specify material records, dimensional inspection, testing and any hold points needed for the application.

4. Approve the quotation

Confirm the agreed drawing revision, deliverables, lead time, commercial terms and dispatch arrangements.

Quality and documentation options

The quotation should state which checks and records are required. Depending on the component and the manufacturing route, the agreed scope may cover:

- Material grade and chemistry verification
- Dimensional inspection against a controlled drawing
- Heat treatment and hardness records
- Nondestructive testing where specified
- Machining, fit checks and final inspection
- Traceability and dispatch documentation

Inspection methods, acceptance criteria and certification must be agreed before order placement. No particular certification or test is implied by this catalogue.

Request a casting quotation

Send a drawing or clear photographs of the sample, with the details below. Mark any missing information as unknown so it can be reviewed with you.

Information	What to provide
Component and equipment	Part name, pump or machine model, OEM reference and quantity
Geometry	Drawing with revision, key dimensions, tolerances or sample availability
Operating duty	Medium, solids, pH, temperature, pressure, speed and expected wear mode
Current material	Known grade, hardness, previous service life and failure history
Supply scope	Raw casting, machining, coating, testing and documentation required
Delivery	Destination, required date and any site or packing requirements

Contact

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Please refer to the equipment and component name in your enquiry.

Catalogue information is indicative. Technical suitability, availability, specifications and delivery are confirmed in a written quotation.

Casting Product Gallery

Illustrative component images. Final material, dimensions and supply scope are confirmed for each enquiry.

Grate Belt Links





Industrial Cast Components



Steel Belt Sliding Plates

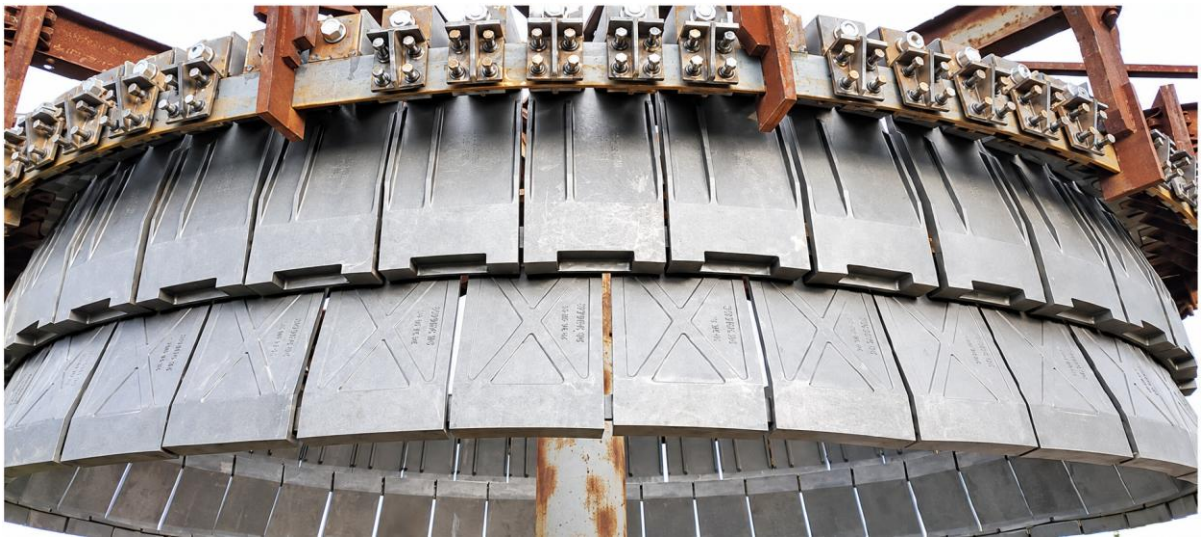




Liners and Circular Components







KILN Outlet Parts



Palletizing Drum Components



Drum Gears





Cylinder Inlet Cone Liners



Drum Cylinder Pulley