

■ Robot Protection Covers

Product Overview / Quick Selection

Based on actual robot working conditions, quickly match protection products, typical scenarios and core protection capabilities.

No.	Product	Typical Working Conditions	Core Protection	Application
01	Robot Dust-Proof Cover	Dust, waste, water vapor	Dust-proof, moisture-proof, wear-resistant	Automated / semi-automated equipment
02	Robot Spray-Painting Cover	Spraying, static, chemicals	Anti-static, dust-proof, pollution isolation	Spraying / coating stations
03	Robot Water / Acid & Alkali Resistant Cover	Water, oil, acid & alkali corrosion	Waterproof, acid & alkali resistant, corrosion resistant	Cleaning / corrosive environments
04	Robot High-Temperature Resistant Cover	Welding, casting, high-temperature sources	High-temperature resistant, flame-retardant, heat-insulating	Chemical / steelmaking / welding
05	Robot Temperature-Control Cover	Low temperature, constant-temperature requirements	Heating, temperature control, environmental adaptability	Low-temperature / constant-temperature production
06	Robot Sand-Blasting Cover	Sand-blasting, grinding, shot impact	Impact-resistant, wear-resistant, dust-proof	Sand-blasting / shot-blasting / grinding
07	Robot Welding-Gun Protective Shield	Welding spatter, high temperature	Flame-retardant, spatter-proof, wear-resistant	Automotive / shipbuilding welding
08	Robot Cable Wrap	External cables, air pipes, harnesses	Flame-retardant, wear-resistant, tear-resistant	Robotic-arm cable & pipe protection

■ Selection Guide

1. First identify the main on-site risk: dust, moisture, acid & alkali, high temperature, sand-blasting impact, welding spatter or cable wear.
2. Then match material performance and structure: sealing, wear resistance, flame retardancy, heat insulation, temperature control, and ease of installation/maintenance.
3. Robot protection covers are customized products. Providing the robot model, cable routing positions and front/ rear/left/right site photos is recommended.

■ Robot Protection Covers



01. Robot Dust-Proof Cover

The dust-proof and wear-resistant robot protection cover effectively prevents large amounts of dust, waste and water vapor in the working environment from entering the robot interior, ensuring smooth and normal operation. It delivers reliable dust-proof and moisture-proof performance, making it the preferred choice for a wide range of automated and semi-automated machinery.

■ Material: **Wear-Resistant Composite Coating Fabric**

Fabric Performance	Design Detail	Protection Type	Application Industry
Tensile strength: warp 1652N / weft 1003N	Elastic-band design with magic-tape fit; supports flexible robot movement	Palletizing robots	Food packaging
Temperature resistance: 150°C – 200°C	Segmented design; easy installation and removal; convenient robot maintenance	Handling robots	Automotive manufacturing
Excellent flame retardancy and dust/water resistance	Segmented design; easy installation and removal; convenient robot maintenance	Loading/unloading robots	Machinery processing
Anti-pollution / anti-UV	Segmented design; easy installation and removal; convenient robot maintenance	Pick-and-place robots	Logistics & warehousing

■ Robot Protection Covers



02. Robot Spray-Painting Protective Cover

Industrial robots handle various chemical components in coating materials over long working periods that attack the robot arm. During operation the robot is inevitably exposed to chemicals. Installing an anti-static robot protection cover to isolate static electricity, dust and flammable materials is therefore of great importance.

■ Material: **High-Performance Anti-Static Fabric**

Fabric Performance	Design Detail	Protection Type	Application Industry
Anti-static performance: $10^8 \Omega$	Magic-tape fit with elastic-band design; easy installation and removal	Paint-mist molecule contamination	Automotive manufacturing
Fiber shedding rate: 4 pcs/mm ²	High-elastic fabric and special design prevent multi-angle rotation abrasion	Dust contamination	Furniture painting
Elasticity: 35%	High-elastic fabric and special design prevent multi-angle rotation abrasion	Anti-static contamination	Steel-wood insulation
Water-repellent	High-elastic fabric and special design prevent multi-angle rotation abrasion	Anti-dust & water mist	Furniture coating

■ Robot Protection Covers



03. Robot Water / Acid & Alkali Resistant Cover

The water, acid and alkali resistant protection cover adopts a high-toughness, high-strength PVC-coated fabric. It is waterproof, acid- and alkali-resistant and corrosion-resistant, effectively blocking corrosive molecules, water and oil stains, thereby protecting the robot and extending its service life.

■ Material: PVC Coated Fabric

Fabric Performance	Design Detail	Protection Type	Application Industry
Tensile strength: warp 2550N / weft 2297N	Special stitching process adopted to enhance sealing performance	Acid & alkali resistant	Pharmaceutical & chemical industry
Softness: 65PURC	Special elastic band at the opening with double waterproof magic tape	Fog-proof	Automotive manufacturing
Tear strength: warp 111N / weft 102N	Increased needle-punch density	Corrosion resistant	Industrial cleaning industry
Extra-strong acid & alkali resistance	Unique design enhances water-pressure resistance	Washable	Electronic processing industry

■ Robot Protection Covers



04. Robot High-Temperature Resistant Cover

The high-temperature resistant robot protection cover withstands temperatures up to 1200°C and reflects 90% of the ambient radiant heat. Within its rated service life it offers sufficient strength, rigidity, stability, corrosion resistance and wear resistance, and can be applied to high-temperature operations such as chemical processing, steelmaking, casting and welding.

■ Material: **Kevlar Fiber Composite Fabric / High-Silica Insulation**

Fabric Performance	Design Detail	Protection Type	Application Industry
Tear strength: warp 1900N / weft 1700N	Integral multi-piece design	Molten-metal splash	Automotive manufacturing
Flame-retardant rating: Class A	Key joints feature a piano-hinge structural design	Heat radiation	Chemical industry
Maximum temperature resistance: 1000°C	Heat-dissipation hole design	High-temperature splash	Casting industry
Wear-resistant, reflects 90% of ambient radiant heat	Bottom protection with customized design	Welding slag	Steelmaking industry

■ Robot Protection Covers



05. Robot Temperature-Control Protective Cover

The temperature-control robot protection cover uses a customized composite material with an integrated heating system and temperature-control system inside. The temperature can be set freely between -40°C and 90°C according to customer requirements, meeting operating conditions; heating stops automatically once the target temperature is reached.

■ Material: **Composite Coating + Composite Thermal Insulation Cotton**

Fabric Performance	Design Detail	Protection Type	Application Industry
Excellent thermal insulation, wind-proof and waterproof properties	Flexible heating system; safe and reliable rapid heating	Cold protection	Chemical industry
Excellent flame retardancy	Flexible heating system; safe and reliable rapid heating	Freeze protection	Agricultural industry
Good weather resistance	High-precision temperature-control instrument; on-site temperature adjustment	Heating	Logistics & warehousing
Soft material; fits the robot closely	High-precision temperature-control instrument; on-site temperature adjustment	Heat preservation	Pharmaceutical manufacturing

■ Robot Protection Covers



06. Robot Sand-Blasting Protective Cover

The sand-blasting robot protection cover combines a high-elastic rubber sheet with a PVC composite fabric, offering excellent sealing, dust-proof, impact-resistant, high-strength and wear-resistant performance. It withstands high-speed shot/abrasive impacts at 200 m/s, with super-tough, bending-resistant elastic membrane of 2-4 MPa.

■ Material: High-Elastic Rubber Sheet / PVC Composite Fabric

Fabric Performance	Design Detail	Protection Type	Application Industry
Impact at every square meter: over 10 million times	Fully enclosed design; truly isolates the interior from the external environment	Shot-blasting equipment	Light decoration & polishing
Super toughness, bending resistance and elasticity: 2-4 MPa	Super-strong shrink-fit; firm contraction	Shot-blasting equipment	Shot-blasting & sand-blasting
Anti-static	Pressing-plate fixation; easy installation and removal	Shot-blasting equipment	Welding & electricity
Waterproof, dust-proof and oil-proof	Surface coating for easy cleaning	Shot-blasting equipment	Welding & electricity

■ Robot Protection Covers



07. Robot Welding-Gun Protective Shield

The robot welding-gun protective shield prevents the welding-gun body and cables from being damaged by high-temperature welding spatter. It offers excellent flame retardancy, spatter resistance, high-temperature insulation and wear resistance, and can be applied to various welding industries such as automotive manufacturing and shipbuilding.

■ Material: **Kevlar Composite Fabric + Flame-Retardant Rubber Sheet**

Fabric Performance	Design Detail	Protection Type	Application Industry
Tear strength: warp 1900N / weft 1700N	Ceramic-cloth technique adopted; movable three-layer structure enhances performance	Molten-metal splash	Automotive manufacturing
Flame-retardant rating: Class A	Anti-penetration design enhances flame retardancy	Heat radiation	Chemical industry
Peel strength: 2.6 MPa	Anti-penetration design enhances flame retardancy	High-temperature splash	Casting industry
Wear strength: 400 N/m	Add rubber sheet in areas prone to spatter, or adopt a four-layer design	Welding slag	Steelmaking industry