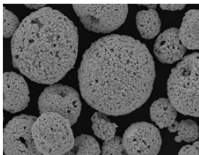
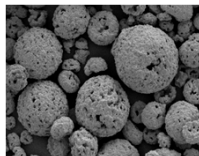


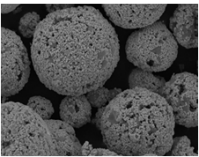
◆WC/12%Co

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX WC12J	WC/12%Co Agglomerated and sintered	SURPREX WC12L	-53+15 μm	Hardness Wear resistance Abrasion resistance	5kg
		SURPREX WC12J	-45+15 μm		
		SURPREX WC12D	-38+10 μm		
		DTS-W171-75/32	-75+32 μm		
		DTS-W76-30/5	-30+5 μm		
		DTS-W522-45/15	-45+15 μm	Lower carbon content Durability in molten alloys	

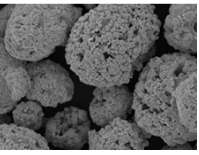
◆WC/17%Co

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX WC17J	WC/17%Co Agglomerated and sintered	SURPREX WC17L	-53+15 μm	Toughness Wear resistance	5kg
		SURPREX WC17J	-45+15 μm		
		SURPREX WC17D	-38+10 μm		

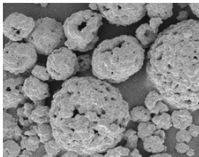
◆WC/20%CrC/7%Ni

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX W2007J	WC/20%CrC/7%Ni Agglomerated and sintered	SURPREX W2007L	-53+15 μm	Wear resistance Corrosion resistance Slurry erosion resistance Oxidation resistance	5kg
		SURPREX W2007J	-45+15 μm		
		SURPREX W2007D	-38+10 μm		
		DTS-W74-30/5	-30+5 μm		

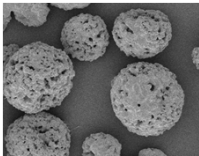
◆WC/10%Co/4%Cr

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX W1004J	WC/10%Co/4%Cr Agglomerated and sintered	SURPREX W1004J	-45+15 μm	Hardness Toughness Wear resistance Corrosion resistance Slurry erosion resistance	5kg
		DTS-W375-53/15	-53+15 μm		
		DTS-W172-38/10	-38+10 μm		
		DTS-W360-45/15	-45+15 μm	Primary particle size (Large) Corrosion resistance Cavitation erosion resistance	

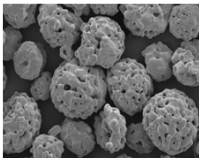
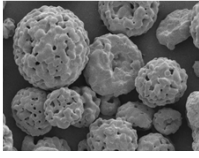
◆WC/10%Ni

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-W141-45/15	WC/10%Ni Agglomerated and sintered	DTS-W141-45/15	-45+15 μm	Wear resistance Corrosion resistance	5kg

◆WC/Hastelloy

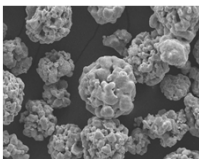
Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-W296-53/20	WC/12%Hastelloy Agglomerated and sintered	DTS-W124-45/15	-45+15 μm	Wear resistance Corrosion resistance	5kg
	WC/30%Hastelloy Agglomerated and sintered	DTS-W296-53/20	-53+20 μm	Wear resistance Corrosion resistance	

◆CrC/NiCr

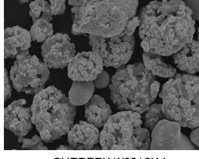
Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX CNC20J(4)	CrC/20%NiCr Agglomerated and sintered	SURPREX CNC20J(4)	-45+15 μm	Wear resistance at high-temperatures Oxidation resistance	5kg
		SURPREX CNC20J(6)			
		SURPREX CNC20J(8)			
 SURPREX CNC25J(4)	CrC/25%NiCr Agglomerated and sintered	SURPREX CNC25J(4)	-45+15 μm	Wear resistance at high-temperatures Oxidation resistance	5kg
		SURPREX CNC25J(6)			
		SURPREX CNC25J(8)			
		DTS-C105-53/10	-53+10 μm		
		DTS-C60-38/10	-38+10 μm		

(4),(6),(8) indicate the "inch" of barrel length for HVOF spraying

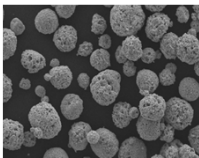
◆MoB/CoCr

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-B49-45/15	MoB/CoCr Agglomerated and sintered	DTS-B49-45/15	-45+15 μm	Durability in molten alloys	5kg
		DTS-B47-30/5	-30+5 μm		

◆Impact resistant cermets

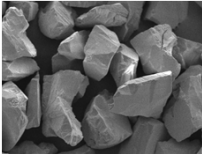
Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX W2010XJ	WC/CrNi Agglomerated and sintered	SURPREX W2010XJ	-53+10 μm	Bonding strength Impact resistance Wear resistance Slurry erosion resistance	5kg
	WC/NiCr Agglomerated and sintered	SURPREX W2011XJ	-53+10 μm		
	WC/NiCr Agglomerated and sintered	SURPREX W2021XJ	-53+10 μm		

◆WC/Fe alloy

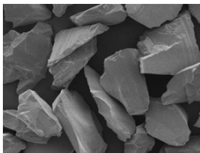
Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
	WC/Fe alloy Agglomerated and sintered	DTS-W847-25/10	-20+5 μm	Wear resistance Corrosion resistance For cold spray processes	5kg

## Ceramic Materials (Recommend for Plasma spray process)

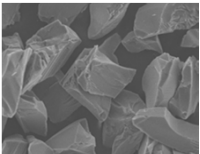
### ◆Al<sub>2</sub>O<sub>3</sub> (White Alumina)

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX AW50R	Al <sub>2</sub> O <sub>3</sub> 99.6% up Fused and crashed *Flow ability is improved	SURPREX AW36R	-53+20 μm	Whiteness Wear resistance Insulation Chemical stability Anti-plasma erosion resistance	5kg
		SURPREX AW50R	-45+10 μm		
		SURPREX AW60R	-38+8 μm		

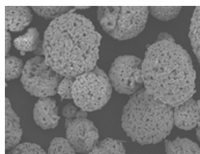
### ◆Al<sub>2</sub>O<sub>3</sub>-3%TiO<sub>2</sub> (Gray Alumina)

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX AG50R	Al <sub>2</sub> O <sub>3</sub> -3%TiO <sub>2</sub> Fused and crashed *Flow ability is improved	SURPREX AG36R	-53+20 μm	Toughness Wear resistance Heat resistance Impact resistance	5kg
		SURPREX AG50R	-45+10 μm		

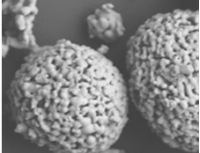
### ◆High purity Al<sub>2</sub>O<sub>3</sub>

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 SURPREX AHP60	Al <sub>2</sub> O <sub>3</sub> 99.9% up Fused and crashed	SURPREX AHP50	-45+10 μm	Low colored spot density Wear resistance Insulation Chemical stability Anti-plasma erosion resistance	5kg
		SURPREX AHP60	-38+8 μm		

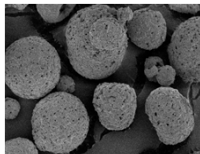
### ◆High purity Y<sub>2</sub>O<sub>3</sub>

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-Y110-63/10	Y <sub>2</sub> O <sub>3</sub> 99.9% up Agglomerated and sintered	SURPREX Y12	-63+10 μm	Heat resistance Corrosion resistance Chemical stability Anti-plasma erosion resistance	2.5kg
		DTS-Y110-63/10			

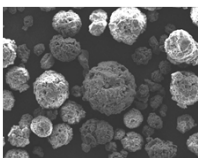
### ◆Yttrium fluoride

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-Y154-90/5	YF <sub>3</sub> 99.9% up Agglomerated and sintered	DTS-Y154-90/5	-90+5 μm	Fluoridation resistance	2.5kg

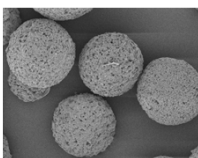
### ◆Stabilized zirconia

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 DTS-Z121-63/10	ZrO <sub>2</sub> - 8%Y <sub>2</sub> O <sub>3</sub> Agglomerated and sintered	DTS-Z121-63/10	-63+10 μm	Electrical conduction Oxygen ion-conducting Heat resistance Thermal barrier Toughness Chemical stability	5kg
	ZrO <sub>2</sub> - 8%Y <sub>2</sub> O <sub>3</sub> Fused and crashed	DTS-Z10-45/10	-45+10 μm		

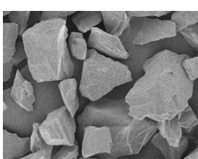
◆ Spinel

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 <p>SURPREX-Q35-53/10</p>	$\text{Al}_2\text{O}_3\text{-MgO}$ Agglomerated and sintered	SURPREX-Q35-53/10	-53+10 $\mu\text{m}$	Heat resistance Corrosion resistance	2.5kg

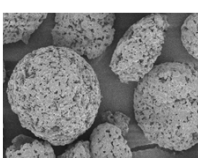
◆ Cordierite

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 <p>DTS-A76-63/10</p>	$2\text{MgO-2Al}_2\text{O}_3\text{-5SiO}_2$ Agglomerated and sintered	DTS-A76-63/10	-63+10 $\mu\text{m}$	Thermal barrier Thermal shock resistance	2kg

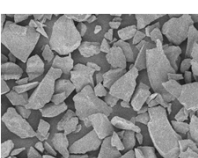
◆ Mullite

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 <p>DTS-A53-45/10</p>	$\text{Al}_2\text{O}_3\text{-SiO}_2$ Fused and crashed	DTS-A53-45/10	-45+10 $\mu\text{m}$	Thermal barrier Thermal shock resistance Chemical stability	2.5kg

◆ YAG

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 <p>DTS-YA7-75/20</p>	YAG Agglomerated and sintered	DTS-YA7-75/20	-75+20 $\mu\text{m}$	Heat resistance Chemical stability	2.5kg

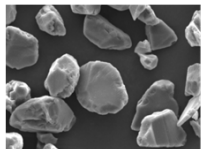
◆ Zircon

Powder image	Chemical composition & Manufacturing process	Product code	Particle size distribution	Typical properties	Packing unit
 <p>DTS-J8-45/10</p>	$\text{ZrO}_2\text{-SiO}_2$ Fused and crashed	DTS-J8-45/10	-45+10 $\mu\text{m}$	Thermal barrier Thermal shock resistance Chemical stability	5kg

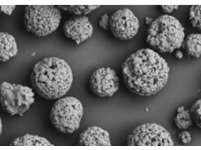
◆Slurry Materials

Product code	Chemical composition		Particle size distribution	Typical properties	Packing unit
DTS-SY17-W30	Y <sub>2</sub> O <sub>3</sub>	Water	30wt%	Heat resistance Corrosion resistance Chemical stability Higher plasma erosion resistance	2.5LT
DTS-SA29-W30	Al <sub>2</sub> O <sub>3</sub>	Water		Wear resistance Plasma erosion resistance Chemical stability	

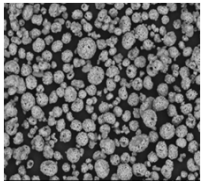
◆Blast Materials

Powder image	Chemical composition	Particle size distribution	Typical properties	Packing unit
	Al <sub>2</sub> O <sub>3</sub> SiC etc High-round product	Can be customized	Dry & Wet Long cycle life Fine abrasives Low residual grit	Can be customized

◆Plastic Composite Materials

Powder image	Chemical composition	Particle size distribution	Focus	Packing unit
 PPS/50vol%Al2O3	<b>Plastic</b> Polyester Nylon PVB PPS PEEK  <b>Ceramic / Metal</b> Oxide Nitride Carbide Ni based alloy Co based alloy	Can be customized	<ul style="list-style-type: none"> <li>• Turbine parts (abradable coatings)</li> <li>• Sliding parts (low friction coatings)</li> <li>• Medical equipment parts (self-sterilizing coatings)</li> </ul>	Can be customized

◆3D Printing Materials

Powder image	Chemical composition & Manufacturing process	Particle size distribution	Focus	Packing unit
	WC/25%Co Agglomerated and sintered	DAM-W1	-20+5 μm	3D Printing
	Can be customized WC/Co alloy, TiC/Co alloy, PPS/Al <sub>2</sub> O <sub>3</sub> , etc			

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