

1. Product Introduction

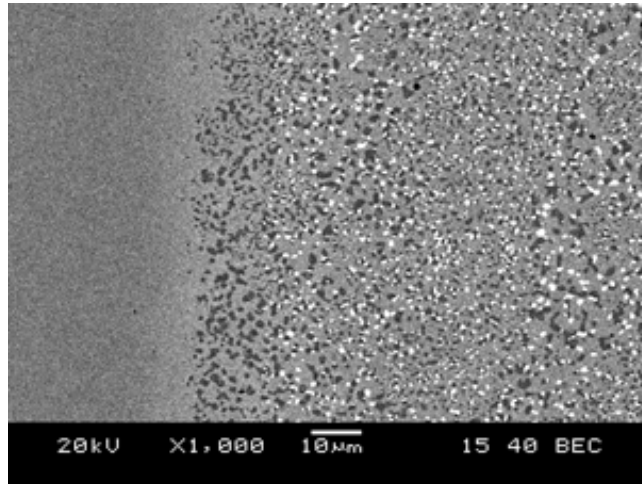
Compared with traditional metallurgy process, such as casting, forging, the materials made by PM-HIP have fine grain, uniform microstructure, and higher bonding strength with base materials. Therefore, the properties, such as wear resistance, strength and toughness have been enhanced significantly, which improved the service life of key parts of machine, such as screw and barrel. The PM-HIP has become one of important technologies in the advanced screw and barrel manufacturing.

As a leading enterprise in the field of new materials in china, AT&M has been committed to the research and development of high wear resistance and corrosion resistance alloy system in the field of plastic machinery for many years. At present, AT&M has provided customers with HIP all-alloy screw and bimetallic composite barrel in batch. Its annual production capacity is >1000 sets, which can completely replace imported products.

		specification
Extruder machine	screw	diameter $\phi 14\text{mm} \sim \phi 70\text{mm}$, length $\leq 2000\text{mm}$
	barrel	
Injection molding machine	screw	cemented carbide layer thickness $> 1.5\text{mm}$, inner diameter $\phi 15 \sim \phi 70\text{mm}$, length $\leq 2300\text{mm}$
	barrel	

2. Advantage

1. The use of raw materials is consistent with that of international well-known suppliers, and we keep purchasing and updating quarterly.



microstructure of Co-based products























3. Products have strict ex-factory inspection and attached with qualified label.



4. Reasonable price and short delivery time (about 30days)

5. product performance

HIP high performance screw, barrel

No.	main component of the cemented carbide layer		hardness	wear resistance	corrosion resistance
ATM-BMS-1	Co-based	metal	50HRC		
ATM-BMS-2	Co-based	metal	55HRC		
ATM-BMS-3	Co-based	metal	59HRC		
ATM-BMS-4	powder	alloy	60HRC		
ATM-BMS-5	powder	alloy	64HRC		
ATM-BMS-6	powder	alloy	58HRC		
ATM-BMT-1	Co-based	metal	55HRC		
ATM-BMT-2	Co-based	metal	59HRC		
ATM-BMT-3	Ni-based	metal	55HRC		
ATM-BMT-4	Ni-based	metal	59HRC		
ATM-BMT-5	Ni-based ceramic		62HRC		

6. Pictures



2100mm injection molding machine barrel blanks



extruder machine screw blanks



injection molding machine barrel blanks



injection molding machine screw