

# Jvtech silicone technology

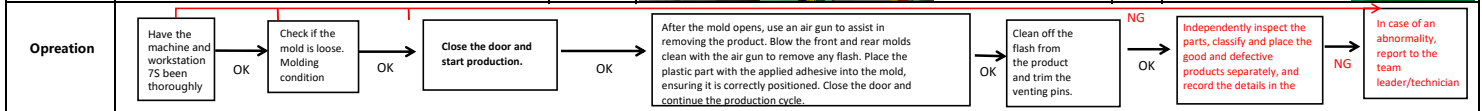
## Standard book of injection molding operation

IT-3-C-145

Mould No.:	JT23F019P	Product name	Speaker Enclosures			Machine Type.	160T	Net weight	46g									
Production Date.	2023.8.1	Release Date.	2023.8.1			Material:	2003-40/FJ-1884											
Operating Tools:	Air guns, plastic parts, gloves,			Cavity:	1*1	Edition:	A	Preface:	0									
<b>Molding conditions</b>																		
Front Mold Temp:	135°C	Actual:	125-130°C		post-mold temperature:	115°C	Actual:	110-112°C										
Switch mode setting page					Injection Page					Material loading page			Ejector page		Injection unit page			
Clamp	First	Second	Third	Moide	Oppressive	Clamp	First stage	Second stage	Third stage	Fourth stage	Clamp	First stage	Second stage	Ejector forward		Injection unit forward		
Flow rate %	35	55	15	10	75	Flow rate%	35	18	\	\	Pressures bar	65		Clamp	First stage	Second stage	Flow rate%	15
Pressures bar	60	60	65	30	165	Pressures bar	75	55	\	\	Flow rate%	55	\	Flow rate%	5	20	Pressures bar	15
Positon mm	285.0	100.0	10.0	2.5		Positon mm	80.0	75.0	\	\	Back Pressures bar	5.0	\	Pressures bar	35	45	Time s	3.0
Mold holding time	1s					Injection Time	15s	Screw set position		67.5mm	Position mm	80	\	Position mm	5	45	Injection unit retract	
Mold open	Fifth	Fourth	Third	Second	First	Fourth	Third stage	Second stage	First stage	Clamp	Clamp	D&R	D/R	Ejector retract		Flow rate%	10	
Flow rate/%	25	55	65	45	40	\	\	\	3	Flow rate%	Flow rate/%	\	\	Clamp	First stage	Second stage	Pressures bar	15
Pressures/bar	35	70	85	85	65	\	\	\	25	Pressures /bar	Pressures /bar	\	\	Flow rate%	5.0	20.0	Time s	0.3
Positon/mm	400.0	300.0	200.0	50.0	5.0	\	\	\	1.5	Holding time	Position /mm	\	\	Pressures	25.0	35.0	Carriage retract mode	
Vacuuming time	30s					Cooling Time	60s	Cycle time	150s		Time/s	\	\	Position mm	5.0	35.0	Auto	

### Operation step picture

STEP1		STEP2		STEP3	
STEP4		STEP5		STEP6	



### Operation step

1. At the beginning of the shift, check the 7S of the machine and the surrounding area for thoroughness and any safety hazards.
2. Properly hand over with the incoming shift, while checking for scratches on the mold surface, loose screws, and whether the molding parameters match the standard documentation.
3. Immediately report any abnormalities to the team leader or technician for handling. After confirming everything is normal, close the door and start the machine for production.
4. After the mold opens, use an air gun to assist in removing the products one by one, then blow the front and rear molds clean with the air gun to remove any flash. Close the door and continue the production cycle.
5. Remove any flash from the products, then independently inspect the parts, and check the color samples. Examine the product's appearance for defects such as impurities, black spots, bubbles, whitening, lack of material, deformation, adhesive residue, and flash (refer to the silicone cover defect image table).
6. Classify the inspected parts into good and defective products and place them in the corresponding boxes for continued operation.

### Other parameters

Set the following adjustments based on the characteristics of the mold products:

- Injection pressure: ±10 bar
- Main pressure: ±10 bar
- Molding temperature: ±10°C
- Injection speed: ±10%
- Pressure deviation of Agent A and Agent B: ≤10 bar
- Cooling time: ±2 seconds
- Injection time: ±2 seconds
- Water circulation temperature: 24°C

Packaging standards: Plastic box dimensions: inner length, width, and height 55\*45\*40 cm. PE plastic bag dimensions: length\*width\*corner\*width 1050 mm\*1050 mm\*2  
One bag per box, 200 pieces per bag.

- Precautions:**
1. During the operation, you must conduct self-inspection. If any abnormalities are found, report them to the shift leader/technician in a timely manner.
  2. According to product requirements, wear gloves or finger cots during operation to avoid contaminating the product and prevent finger burns.
  3. During operation, ensure that the air gun head is covered with a rubber hose. The length of the rubber hose protruding from the gun head should be at least 5 mm to prevent the metal gun head from scratching the mold surface.
  4. Technicians should measure the actual mold temperature at regular intervals during each shift and fill in the corresponding forms. If the temperature is abnormal, it must be reported and handled immediately. After debugging is normal, IPQC will produce the first piece. To ensure quality, the first 10 molds of products produced before mass production must be confirmed and scrapped by IPQC.
  5. At the end of the shift, ensure a proper handover with the incoming shift personnel. Complete the 7S thoroughly before leaving.
- Note:** The raw material production ratio is 1:1 with a tolerance of 10%. The injection material quantity should be based on the actual parameters of the A/B agents from the dosing machine. The pressure difference