



NGK BERYLCO STANDARD CHILL VENT

***Save money on initial die costs,
improve quality and increase
the profitability of your
die casting operation.***

CHARACTERISTICS OF **NGK BERYLCO** STANDARD CHILL VENT

NGK Berylco's U.S.-Patented standard Chill Vent is superior in both chilling rate and ventilation capacity. Other benefits include:

- **Copper Alloy**

Chill Vent utilizes Beryllium Copper which has five times the cooling rate of steel and eliminates aluminum/vent reaction.

- **Compact**

Chill Vent will allow optimization of die design leading to reduction in mold size and maximize die space.

- **Combination**

Chill Vent is available in various combinations and configurations for both non-vacuum and vacuum die casting machines.

- **Cost Performance**

Chill Vent drastically reduces total production costs by significantly reducing casting rejection.

NGK BERYLCO · CHILL VENTS
PROFITABILITY FOR YOUR DIE CASTING OPERATIONS

NGK Chill Vents can be used with both non-vacuum and vacuum Die Casting Systems.

Size	NON-VACUUM				VACUUM			
	S	M	L	E	S	M	L	E
Clearance	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)	.028" (0.7mm)
	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)	.035" (0.9mm)
Part Name	N-SCL7	N-MCL7	N-LCL7	N-ECL7	V-SCL7	V-MCL7	V-LCL7	V-ECL7
	N-SCL9	N-MCL9	N-LCL9	N-ECL9	V-SCL9	V-MCL9	V-LCL9	V-ECL9
Length (inch)	4.134	4.724	5.315	5.906	5.315	6.102	6.890	7.283
Width (inch)	1.969	2.362	2.756	3.150	3.150	3.543	3.543	3.937
Height (inch)	1.968	1.968	1.968	1.968	1.968	1.968	1.968	1.968
Length (mm)	105	120	135	150	135	155	175	185
Width (mm)	50	60	70	80	80	90	90	100
Height (mm)	50	50	50	50	50	50	50	50
Wave #	4	5	6	7	4	5	6	7
Weight (lbs)	9	13	18	22	20	26	29	35

Custom Chill Vents available

The chill vent protects a vacuum system from being fouled by molten alloy and can be used in place of a vacuum valve. The simple structure of the chill vent requires no special knowledge, technique or education for the maintenance staff. Both of the above reduce down time and maintenance costs. Die Space can be reduced because the size of the vent area can be up to half the size required for an H13 vent, due to improved solidification performance. NGK Chill Vents are available in standard sizes and custom application specific engineered solutions.

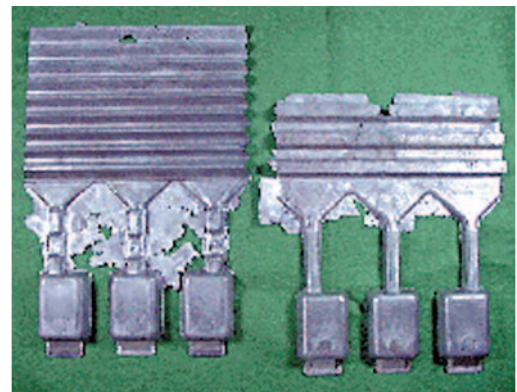
NGK Chill Vents are made from Beryllium Copper.

Why Beryllium Copper?

Because it has seven times the thermal conductivity of H13 tool steel. Therefore, molten alloy solidifies faster and allows for a larger vent gap. A larger gap provides faster escape of gases, which reduces porosity.

The resulting thicker waffle from the larger gap is easily removed and is higher quality scrap.

Beryllium Copper reduces sticking problems because it doesn't promote a chemical reaction with aluminum, as compared with H13 tool steel.



Left: Steel Chill Vent / Right: NGK Chill Vent



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