Die Freezing

Problem	Typical Cause	Effect	Side effect to other equipment	Solution	Action
Die Freezing	1. Die sector temperature non-uniformity 2. Die plate heating medium inlet / outlet manifold design problem 3.Too Low melt temp or PEW temp	1. Die plate pressure (PI17105) high 2. Non-Uniform Pellets-size (Pellet per gram decrease) - Found a lot of over- and under- size pellet 3. Higher Dust and fine pellet	1. Highly Cutter/Screw speed ratio (ratio > 6.0) 2. R-1901 Current High (at steady Production rate and PEW) 3. Pressure diff of Filter Highly Increase (such as Demister (PDI19103) 4. Found the increasing of dust in TK1902	<u>Analyst Freezing situation</u> 1. **<u>Low</u>** - No abnormal pellet found - Product quality still in control spec	□ Do nothing
				- Found a little of un-cleaned cut & under-over size pellet	Increase melt temp or equipment temp to maintain freezing rate □ Increase HS header to pressure/Temp; 39/250 (max) Monitoring pellet appearance at S5101 (1-2 days) If freezing rate still increase do next step □ Increase PEW Temp (↑ ≤ 45 ℃) □ Increase Barrel Temp (↑ ≤ 180℃) □ Decrease PEW flow rate (↓ ≥ 750 m3/hr) □ Increase After cooler Temp (↑ ≤ 243 ℃) ** Monitor Sticking Pellet, Agglomerate, Stretch Pellet, and Angel Hair after adjust each step
				<u>2. High</u> - Found a lot of Over- & Under-size pellet & after adjust cutter speed non-uniform pellet still found - Found a lot of dust and also angel hair or un-cleaned cut due to unbalance of melt pressure through at die plate. - **<u>Can't control product quality</u>** and have to judge product to NP	**<u>DO!!</u>** □ SP3A to purge EX1701