# PROBLEM/SOLUTION SMOKING CASINGS

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSES</th>
<th>SOLUTIONS, COMMENTS</th>
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<tbody>
<tr>
<td>Casing is breaking and falling to smoker floor</td>
<td>High humidity in first cycle</td>
<td>Collagen must be dried in the first cycle to toughen the casings before finish cooking.</td>
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<tr>
<td>Casings are dry and breaking when stuffing</td>
<td>Rehydrate casing</td>
<td>Collagen needs to be stored in a cool place. If casings get dry, open caddy and store in the refrigerator overnight. This will add moisture back to the casing.</td>
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</table>
| The casings seem to have shrunk (prior to soaking and stuffing) | 1) Check flat width  
2) Rehydrate casing | 1) Check flat width against allowable flat width in the size being used.  
2) Casing may have dried some. Open bag and store in the refrigerator at least 24 hrs. |
| Casing tough                                   | Too little humidity in last cycle              | 1) After casing is dried in first cycle, product should then be smoked to desired color. High humidity of a minimum of 50% should be used in the cooking cycle. |
| Finished product wrinkling                     | 1) Product too dry  
2) Improper cooling  
3) Under stuffing  
4) Closures are slipping | 1) High humidity of at least 50 percent should be used in the end cook cycle.  
2) Upon reaching required internal temperature, product should be showered, then room temp for 30-40 min, then put in refrigerator.  
3) Product should be stuffed tightly and completely.  
4) Rings were not closed tightly enough or string was not tied tightly. |
| Sausage does not look smoked or have the “pink cured color” | Over drying of product before smoke is started | Casings should only be dried until tacky to the touch before smoke is started. |
| Products streaking                             | 1) Under drying of product before smoke is started  
2) Humidity too high before and during smoking | 1) Product not being dried properly will cause drops of water to run down the casing causing streaking.  
2) If product is not dry and moisture droplets are running down the sausage the smoke will be washed off by the running droplets of water. |
| Casings splitting                              | 1) Over stuffing  
2) Too dry during entire cook cycle  
3) Insufficient soaking  
4) Burrs or nicks  
5) Poor quality meat | 1) Casing was over stuffed.  
2) Casings should be dried until sweat is out, then smoked. Finished at humidity of at least 50% in cook cycle.  
3) Soak casings in 90-100°F water for 20-30 minutes. Make sure the water gets inside the casing.  
4) Burrs or nicks can be on the stuffing tube, table or racks in the smoker.  
5) Meat with high loads of bacteria will gas and explode during cooking. |
<p>| Not taking smoke                               | Casing too dry                                  | Product was over dried. Smoke should be started when product has been dried so that it is tacky to touch. |</p>
<table>
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<tr>
<th>Muddy color</th>
<th>Humidity too high during entire smoke cycle</th>
<th>1) Smoke should be started when product is tacky to touch. Product should be smoked at approximately 25-30 percent relative humidity, then finish product at least 50 percent humidity.</th>
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</table>
| Casing separating from meat       | 1) Casings not being soaked properly      | 1) Soak in 80-90°F water for 20-30 minutes. Make sure water gets inside.  
2) Very high humidity in drying cycle  
3) Clip slippage  
4) Under stuffing  
3) Check clip tightness on casings  
4) Stuff casing fully. |
|                                  | 2) Very high humidity in drying cycle     | 2) Very high humidity and no drying in first cycle can cause early casing release. |
|                                  | 3) Clip slippage                          |                                                                                               |
|                                  | 4) Under stuffing                         |                                                                                               |
| Casing will not peel             | 1) Too dry during entire cook cycle       | 1) Dry to set casing and smoke, then finish with at least 50 percent relative humidity.  
2) Not showering or cooling properly  
3) Check clip tightness on casings  
4) Stuff casing fully. |
|                                  | 2) Not showering or cooling properly      | 2) Not showering can cause wrinkling and hard-to-peel casings.                                  |
| Does not stuff same diameter end to end | Not soaking properly                     | Soak in 80-90°F water for 20-30 minutes. Make sure water gets inside.  
2) Under stuffing  
3) Clip slip  
4) Too much weight to hang  
3) Check tightness of clips.  
4) On larger diameter casings, very long casings may contain too much weight for the casing walls to stand. |
| Pear or water drop shape         | 1) Not soaking properly                   | 1) Soak in 80-90°F water for 20-30 minutes. Make sure water gets inside.  
2) Stuff casing fully.  
3) Check tightness of clips.  
4) On larger diameter casings, very long casings may contain too much weight for the casing walls to stand. |