**JSW** Run Sheet - CONFIDENTIAL

## **VALIDATING FORM**

| Product Name         | 22HPTBH1150             |
|----------------------|-------------------------|
| Material Number      | 11125A                  |
| Material Description | RSN ULTRASN NATURAL E30 |
|                      |                         |
| Date Created         | 06/05/2019              |
|                      |                         |
|                      |                         |

| Standardization Info    | Min.    | Mid.  | Max.    |
|-------------------------|---------|-------|---------|
| Certifield Cycle Time : | 31.50   | 33.0  | 33.00   |
| Final Part(s) Weight (g | 386.060 | 388.0 | 389.940 |

| Tool Number           | 22НРТВН |       |  |  |  |
|-----------------------|---------|-------|--|--|--|
| Resin/Aditive Number  |         |       |  |  |  |
| Resin/Aditive Descrip |         |       |  |  |  |
|                       |         |       |  |  |  |
|                       | Std.    | Cert. |  |  |  |
|                       |         |       |  |  |  |
|                       |         |       |  |  |  |

| Colorant Number  |  |
|------------------|--|
| Colorant Descrip |  |
| Color Percentage |  |
| MacGuire Setting |  |
|                  |  |

| ALL DATA BELOW IS REFERENCE ONLY AND SETTINGS CAN BE ADJUSTED IF REQUIRED IN ORDER TO MEET PRODUCT STANDARDS |       |                          |         |                         |            |                    |       |       |       |       |
|--|-------|--------------------------|---------|-------------------------|------------|--------------------|-------|-------|-------|-------|
| Barrel Temperatures  | Set   | Mold Cooling Temps       | Set     | Reference Data          | Set        |                    |       |       |       |       |
| Nozzle Tip %   | 100   | Mold Gate Temp °F        | 200     | Fill Only Time          | 2.96       | Machine Number: 47 |       |       |       |       |
| Nozzle Body %  | 100   | Mold Fixed ½ °F          | 300     | Fill Only Weight        | 377.0      |                    |       |       |       |       |
| Adapter (NH)   | 650   | Mold Moving ½ °F         | 280     | Steel Temp. "A" Side °F | 280        |                    |       |       |       |       |
| Barrel Front (H4)  | 700   | Stripper or other °F     |         | Steel Temp. "B" Side °F | 315        |                    |       |       |       |       |
| Barrel Center (H3)   | 700   | Nozzle Tip Informa       | ition   | Melt Temp. °F           | 745        |                    |       |       |       |       |
| Barrel Center (H2)   | 700   | Type GP, FT, NYL         | GP      | Valve Gate              | VG1        | VG2                | VG3   | VG4   |       |       |
| Barrel Rear (H1)   | 680   | Length OAL (in.)         | 2 3/4   | Open Delay              |            |                    |       |       |       |       |
|  |       | Orifice Size (in.)       | 1/4     | Open Time               |            |                    |       |       |       |       |
|  |       | Nozzle Body Information  |         | Adv Cls Tm              |            |                    |       |       |       |       |
|  |       | Length OAL (in.)         | 6       | Close Delay             |            |                    |       |       |       |       |
| Injection Profile  | Set   | Recovery & Clamp I       | Profile | Close Time              |            |                    |       |       |       |       |
| Shot size in.  | 4.20  | PrePullbk(PB2)speed      |         | Inj HP End              |            |                    |       |       |       |       |
| Injection Press 1  | 40.00 | PrePullbck before stro   |         | Transfer                |            |                    |       |       |       |       |
| Injection Press 2  | 90.00 | Screw Start Delay        |         | Hot Tip Controller      | Box 1      | Box 2              | Box 3 | Box 4 | Box 5 | Box 6 |
| Injection Press 3  |       | Screw Chg Position 1     | 4.00    | Position 1 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Press 4  |       | Screw Chg Position 2     |         | Position 2 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Press 5  |       | Screw recovery % 1       | 50.00   | Position 3 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Velocity 1   | 5.00  | Screw recovery % 2       | 40.00   | Position 4 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Velocity 2   | 60.00 | Back Pressure 1          | 60.00   | Position 5 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Velocity 3   |       | Back Pressure 2          | 60.00   | Position 6 Gate/HB/Man  |            |                    |       |       |       |       |
| Injection Velocity 4   |       | PostPullback(PB1)speed   | 99.00   | Start-Up Instructi      | ions / Com | nents              |       |       |       |       |
| Injection Velocity 5   |       | Post Pullback stroke in. | 0.25    |                         |            |                    |       |       |       |       |
| Injection Change Pos 1   | 4.15  | Screw positon after SB   | 4.61    |                         |            |                    |       |       |       |       |
| Injection Change Pos 2   |       | Screw recovery time      | 12.22   |                         |            |                    |       |       |       |       |
| Injection Change Pos 3   |       | Cooling time secs        | 18.00   |                         |            |                    |       |       |       |       |
| Injection Change Pos 4   |       | Mold protect press       | 70.00   |                         |            |                    |       |       |       |       |
| Trans mode lvsh/lps  | IVSH  | Mold protect time        | 5.00    |                         |            |                    |       |       |       |       |
| Trans pos in.  | 0.20  | Clamp tonnage            | 260     |                         |            |                    |       |       |       |       |
| lps PSI  |       | Injection pressure gauge | 2000    |                         |            |                    |       |       |       |       |
| Inj PSI at transfer  | 2000  | Holding 1 gauge psi      | 750     |                         |            |                    |       |       |       |       |
| Injection time act. secs.  | 2.96  | Holding 2 gauge psi      | 700     |                         |            |                    |       |       |       |       |
| Hold Press 1 %   | 25    | Back pressure gauge psi  | 350     |                         |            |                    |       |       |       |       |
| Hold Press 2 %   | 20    | Back pressure gauge psi  | 150     |                         |            |                    |       |       |       |       |
| Hold Time 1  |       | Final Cushion            | 0.11    |                         |            |                    |       |       |       |       |
| Hold Time 2  |       |                          |         |                         |            |                    |       |       |       |       |
| Injection Hold Time  | 10.00 |                          |         |                         |            |                    |       |       |       |       |