

DESCO INDUSTRIES INCORPORATED

QUALIFICATION REPORT – ANSI/ESD S20.20

DESCO STATSHIELD® SMOCKS WITH CONVERTIBLE SLEEVES

| ANSI/ESD S20.20 | DESCO Test Results | Test Methods |
|-----------------|--------------------|--------------|
|-----------------|--------------------|--------------|

Rpp (Resistance Point-to-Point) (ohms), 48-72 hours, 10V/100V, N=3 specimens

| | | | |
|---------------|-------------------------|-------------|-----------------|
| @ 12%RH, 23°C | < 1.0 x 10 ⁹ | See Table 1 | ANSI/ESD STM2.1 |
| @ 50%RH, 23°C | < 1.0 x 10 ⁹ | See Table 1 | ANSI/ESD STM2.1 |

Rppg (Resistance Point-to-Groundable-Point) (ohms), 48-72 hours, 10V/100V, N=3 specimens

| | | | |
|---------------|-------------------------|-------------|-----------------|
| @ 12%RH, 23°C | < 1.0 x 10 ⁹ | See Table 1 | ANSI/ESD STM2.1 |
| @ 50%RH, 23°C | < 1.0 x 10 ⁹ | See Table 1 | ANSI/ESD STM2.1 |

Test Equipment (Calibration records and test results are located at our corporate lab (Sanford, NC)):

For Test Method ANSI/ESD STM2.1:

- ETS Controlled Environment Chamber (Model 5532)
- SCS Surface Resistance Meter (Model 770761)
- DESCO Electrode, 5 lbs. (Model 50784)

Test Conditions:

| Environment | Moderate | Low |
|-------------|----------|-------|
| Humidity | 50%RH | 12%RH |
| Temperature | 23°C | 23°C |

Test Data:

Table 1 – Resistance results at Moderate and Low test conditions, 48 – 72 pre-conditioning hours

| Test Type | Test Location | Sample#1 | | Sample#2 | | Sample#3 | |
|-----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | Moderate | Low | Moderate | Low | Moderate | Low |
| Rpp | LS to LFP | 6.19 x 10 ⁵ | 2.05 x 10 ⁵ | 5.74 x 10 ⁵ | 4.52 x 10 ⁵ | 5.94 x 10 ⁵ | 4.55 x 10 ⁵ |
| | LS to RFP | 4.30 x 10 ⁵ | 2.24 x 10 ⁵ | 7.81 x 10 ⁵ | 8.48 x 10 ⁵ | 9.80 x 10 ⁵ | 5.90 x 10 ⁵ |
| | LS to LBP | 4.10 x 10 ⁵ | 1.68 x 10 ⁵ | 6.67 x 10 ⁵ | 6.86 x 10 ⁵ | 8.66 x 10 ⁵ | 5.55 x 10 ⁵ |
| | LS to RBP | 4.02 x 10 ⁵ | 2.61 x 10 ⁵ | 9.73 x 10 ⁵ | 9.02 x 10 ⁵ | 9.02 x 10 ⁵ | 5.25 x 10 ⁵ |
| | LS to RS | 1.56 x 10 ⁵ | 4.22 x 10 ⁵ | 9.93 x 10 ⁵ | 7.50 x 10 ⁵ | 9.60 x 10 ⁵ | 7.30 x 10 ⁵ |
| | BCP to BCP | | | | | | |
| Rppg | LS to Gp | 1.34 x 10 ⁶ | 1.12 x 10 ⁶ | 1.23 x 10 ⁶ | 1.28 x 10 ⁶ | 1.97 x 10 ⁶ | 1.12 x 10 ⁶ |
| | LFP to Gp | 1.36 x 10 ⁶ | 9.66 x 10 ⁵ | 1.22 x 10 ⁶ | 1.20 x 10 ⁶ | 1.79 x 10 ⁶ | 1.15 x 10 ⁶ |
| | RFP to Gp | 1.27 x 10 ⁶ | 9.47 x 10 ⁵ | 8.48 x 10 ⁵ | 1.03 x 10 ⁶ | 1.58 x 10 ⁶ | 9.27 x 10 ⁵ |
| | LBP to Gp | 1.34 x 10 ⁶ | 9.53 x 10 ⁵ | 1.18 x 10 ⁶ | 1.25 x 10 ⁶ | 1.73 x 10 ⁶ | 1.19 x 10 ⁶ |
| | RBP to Gp | 1.34 x 10 ⁶ | 9.73 x 10 ⁵ | 7.98 x 10 ⁵ | 1.05 x 10 ⁶ | 1.56 x 10 ⁶ | 9.60 x 10 ⁵ |
| | RS to Gp | 1.39 x 10 ⁶ | 1.16 x 10 ⁵ | 9.40 x 10 ⁵ | 1.25 x 10 ⁶ | 1.83 x 10 ⁶ | 1.12 x 10 ⁶ |
| | BCP to Gp | | | | | | |

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Reference:

Test Location:

| | |
|-----|--------------------------|
| LS | Left Sleeve |
| RS | Right Sleeve |
| LFP | Left Front Panel |
| RFP | Right Front Panel |
| LBP | Left Back Panel |
| RBP | Right Back Panel |
| BCP | Body Contact Point |
| Gp | Garment Groundable Point |