DESCO INDUSTRIES INC

926 JR INDUSTRIAL DRIVE, SANFORD, NC 27332 • PHONE (919) 718-0000 | (909) 627-9634 • StaticControl.com

QUALIFICATION REPORT – ANSI/ESD S20.20

SCS 1000 Series

	ANSI/ESD S20.20	SCS Test Results	Test Methods
Surface Resistance (ohms) @ 12% RH, 23°C, 48-72 hours conditioning, N=10 specimens, 100V			
Interior (Sealing Surface)	≥ $1.0x10^4$ to < $1.0x10^{11}$	See Table 1	ANSI/ESD STM11.11
Exterior	≥ $1.0x10^4$ to < $1.0x10^{11}$	See Table 1	ANSI/ESD STM11.11
Surface Resistance (ohms) @ 50% RH, 23°C, 48-72 hours conditioning, N=6 specimens, 100V			
Interior (Sealing Surface)	≥ $1.0x10^4$ to < $1.0x10^{11}$	See Table 1	ANSI/ESD STM11.11
Exterior	≥ $1.0x10^4$ to < $1.0x10^{11}$	See Table 1	ANSI/ESD STM11.11
Discharge Shielding (nJ) @ 23°C, minimum 48 hours conditioning, N=6 specimens @ 6 individual readings per specimen			
@ 12% RH	< 20	See Table 1	ANSI/ESD STM11.31
@ 50% RH	< 20	See Table 1	ANSI/ESD STM11.31

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

For Test Method ANSI/ESD STM11.11:
- ETS Controlled Environment Chamber (Model 5532)
- SCS Surface Resistance Meter (Model 770761)
- SCS Concentric Ring Probe (Model 770007)

For Test Method ANSI/ESD STM11.31:
- ETS Controlled Environment Chamber (Model 5532)
- ETS Shielded Bag Test System (Model 4431T)

Table 1: Test Results:

	Surface Resistance (ohms) 48-72 hours conditioning				Discharge Shielding (nJ) min. 48 hours conditioning	
Specimen	**Interior @ 23°C, 12%RH**	**Exterior @ 23°C, 12%RH**	**Interior @ 23°C, 50%RH**	**Exterior @ 23°C, 50%RH**	**@ 23°C, 12%RH (avg 6 individual)**	**@ 23°C, 50%RH (avg 6 individual)**
1	3.66×10^{10}	2.27×10^{10}	1.07×10^{10}	9.53×10^{8}	7.01	10.32
2	4.06×10^{10}	2.84×10^{10}	5.77×10^{9}	7.35×10^{8}	8.37	10.62
3	4.47×10^{10}	2.96×10^{10}	6.76×10^{9}	1.12×10^{9}	6.80	7.53
4	5.02×10^{10}	3.47×10^{10}	3.74×10^{9}	1.34×10^{9}	5.34	8.09
5	5.41×10^{10}	3.17×10^{10}	7.04×10^{9}	1.35×10^{9}	6.26	7.89
6	6.07×10^{10}	4.56×10^{10}	1.33×10^{10}	1.29×10^{9}	5.71	6.89
7	4.40×10^{10}	3.11×10^{10}				
8	4.88×10^{10}	3.17×10^{10}				
9	4.78×10^{10}	3.15×10^{10}				
10	5.67×10^{10}	3.02×10^{10}				
Min Ind=	3.66×10^{10}	2.27×10^{10}	3.74×10^{9}	7.35×10^{8}	5.07	0.78
Max Ind=	6.07×10^{10}	4.56×10^{10}	1.33×10^{10}	1.35×10^{9}	8.45	10.92
Mean of Ind=	4.84×10^{10}	3.17×10^{10}	7.89×10^{9}	1.13×10^{9}	6.58	8.56
Std Dev Ind =	7.38×10^{9}	5.78×10^{9}	3.49×10^{9}	2.47×10^{8}	1.00	1.90