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 1500 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), 10V (Exterior)			
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), 10V (Exterior)			
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	4.10×10^9	1.09×10^5	1.32×10^8	1.57×10^5	8.68	8.55
2	3.99×10^9	2.52×10^5	1.51×10^8	3.01×10^4	9.03	11.59
3	4.42×10^9	6.06×10^4	1.39×10^8	3.44×10^4	8.72	9.50
4	4.19×10^9	1.59×10^5	1.20×10^8	2.34×10^5	8.40	9.30
5	3.21×10^9	3.91×10^5	1.21×10^8	3.58×10^5	8.30	7.97
6	3.36×10^9	6.85×10^4	1.25×10^8	4.49×10^5	8.18	9.58
7	3.86×10^9	3.50×10^4				
8	4.61×10^9	5.23×10^4				
9	4.33×10^9	1.84×10^5				
10	3.58×10^9	9.35×10^4				
Min Ind=	3.21×10^9	3.50×10^4	1.20×10^8	3.01×10^4	7.85	7.77
Max Ind=	4.61×10^9	3.91×10^5	1.51×10^8	4.49×10^5	9.56	11.95
Mean of Ind=	3.97×10^9	1.40×10^5	1.31×10^8	2.10×10^5	8.55	9.42
Std Dev Ind =	4.62×10^8	1.11×10^5	1.20×10^7	1.71×10^5	1.00	1.19