VANES

DC WORT cc IS THE LEADING SUPPLIER OF ROTOR VANES IN SOUTH AFRICA AND FOR OVER 40 YEARS HAS MANUFACTURED VANES FOR USE IN PUMPS, COMPRESSORS AND AIR TOOLS AND MOTORS. OUR PROVEN GRADES CONTINUE TO SET THE INDUSTRY STANDARD FOR TOUGH INDUSTRIAL DUTY. DC WORT cc VANES CAN BE MACHINED TO ANY LENGTH, THICKNESS AND TOLERANCE. ONLY HIGH PRESSURE LAMINATE MATERIALS, THAT MEET SPECIFIC PERFORMANCE CHARACTERISTICS OF EACH DEMANDING ROTOR VANE APPLICATION, ARE USED BY DC WORT cc. THESE MATERIALS ARE MANUFACURED FOR SPECIALENVIRONMENTAL CONDITIONS REQUIRING LONG WEAR, RESISTANCE TO HIGH TEMPERATURES, SHOCK, VIBRATION & MOST CHEMICALS WHILE REMAINING DIMESIONALLY STABLE.

DESCRIPTION OF VANE MATERIAL

ARC-2: MEDIUM WEIGHT COTTON FABRIC REINFORCED HIGH TEMPERATURE PHENOLIC LAMINATE. CONTAINS INTERNAL LUBRICANT OF MOLYBDENUM DISULFIDE, WHICH IS ABLE TO WITHSTAND HIGH PRESSURE.

ARK-2: ASBESTOS REPLACEMENT KEVLAR MADE FROM PROPRIETY HIGH TEMPERATURE PHENOLIC RESIN SYSTEM.

LPFG: FINE WEAVE COTTON FABRIC REINFORCED PHENOLIC LAMINATE. CONTAINS LUBRICANT THAT INCREASES WEAR RESISTANCE.
RECOMMENDED USE: SMALL AIR TOOLS.

LEL-365: LOW WATER ABSORPTION, STABILITY, HIGH WORKING TEMPERATURE, EXCELLENT WEAR RESISTANCE, VERY GOOD DIMENSIONAL STABILITY & EXCELLENT CHEMICAL RESISTANCE.
RECOMMENDED USE: AIR TOOLS AND MOTORS.

ARG: GLASS REINFORCED PHENOLIC LAMINATE. MOISTURE (HUMIDITY OR WATER) HAS LITTLE DIMENSIONAL EFFECT.
RECOMMENDED USE: PUMPS.

TECHNICAL DATA

GRADE THICKNESS (INCHES)	ARC-2.125	ARK-2.125	ARG-290.125	EL-635.125	UNIT
MAX OF TEMP.	300	300	350	285	F
WATER ABSORPTION COND.D-72/23	3.54	4.87	0.67	1.58	%
DENSITY	1.38	1.31	1.69	1.35	GM/CM^3
FLEXURAL STRENGTH LW COND.A	18790	31610	28310	20250	Psi
FLEXURAL STRENGTH CW COND.A	15240	30890	24670	16600	Psi
FLEX MOD. LW COND.A	1.26	1.08	1.84	1.1	Psi x 10^6
FLEX MOD. CW COND.A	0.98	0.95	1.56	0.85	Psi x 10^6
IZOD IMPACT LW COND.A	2.23	13.41	11.17	1.34	FT-LBS/IN
TABER WEAR VOLUME LOSS AFTER 8 HOURS	0.184	0.308	0.260	0.277	FT-LBS/IN
*BOND 1/2" COND.D-A	2160	1910	1560	1850	LBS
*BOND 1/2" COND.D-48/50	1805	1735	1375	2180	LBS
*COTE 3/8" LW	1.460	0.474	1.40	1.82	CM/CM/DEG.C x10^{-5}
*COTE 3/8" CW	2.240	0.375	1.82	2.18	CM/CM/DEG.C x10^{-5}
*GRTH HUM 3/8" LW COND.C-336/20/99	0.0005	0.0007	0.0003	0.0002	IN/IN
*GRTH HUM 3/8" CW COND.C-336/20/99	0.0008	0.0007	0.0005	0.0004	IN/IN
*GRTH WATER 1/8" LW COND.D-72/23	0.0018	0.0025	0.0004	0.0009	IN/IN
*GRTH WATER 1/8" CW COND.D-72/23	0.0003	0.0023	0.0008	0.0016	IN/IN
*GRTH WATER 1/8 THK COND.D-72/23	0.0152	0.0118	0.0009	0.0033	IN/IN

KEY:

LW = LENGTHWISE	**C** = 336/23/98 HUMIDITY FOR 336 HRS AT 23°C
CW = CROSSWISE	**D** = 24/23 WATER FOR 24 HRS AT 23°C
THK = THICKNESS	**D** = 48/50 WATER FOR 48 HOURS AT 50°C
COTE = COEFFICIENT OF THERMAL EXPANSION	**D** = 72/23 WATER FOR 72 HOURS AT 23°C
CON = CONDITION	**E** = 1/105 TEMPERATURE FOR 1 HOUR AT 105°C
A - AS RECEIVED	**E** = 48/50 - FOR 48HOURS AT 50°C