

Procurement List - Consumable Items - for the FY 2026-27 out of CSIR Grant / Lab Grant / Contract R&D projects

Sl. No	Name of the Item	Approx Cost Rs. In Lakhs
1	Batteries	1
2	Sputtering targets	14
3	Silicon Wafers	8
4	Metallography polishing papers, Powders and pastes	2
5	Glassware	5
6	Acids	2
7	Bases	1
8	Organic Solvents	3
9	Gases (Ar, N)	1.5
10	Hydraulic and Vacuum pump oil	1
11	Thermocouples	0.5
12	Workshop Consumables	1
13	SEM Spares such as vibration damper, apertures and aperture clamps	1.8
14	Thermocouples	2
15	Metallography Consumables	0.5
16	Conducting Phenolic powder	0.5
17	Organic Solvents	3
18	Argon and Nitrogen Gases	4
19	Spares for XRD Equipments	1
20	Workshop Consumables	5
21	Spares and consumables for Thermogravimetric Analysis (TGA) Equipment	1
22	Spares and consumables for Dilatometer	2
23	National/International Conference on Structural Health Monitoring	16
24	Spares for Optical and Stereo binocular microscopes	7
25	Methyltrichlorosilane	8
26	One-day workshop on Carbon Fibers and Prepregs	5
27	Coating paper- easy release	1.8
28	Coating paper- Medium release	1.8
29	HDPE release film	1
30	TGPAP -25 kg	1.9
31	TGDDM-25kg	3.6
32	TGMAP-15kg	1.8
33	33 DDS-25 kg	1.8
34	44 DDS- 25 kg	1.8
35	Carbon Fiber	11
36	Bobbins	1
37	Consumables for process utilities	5.5

38	Computer consumables	1
39	Other Consumable items	0.7
40	Computer Maintenance Charges	0.2
41	Replacement of spare parts of equipment	0.6
42	Proc. of radome material	10
43	Proc. of substrate laminate	4
44	Computer Consumables	4
45	Other Consumable items	2
46	Computer hire charges	10
47	Procurement of Aircraft materials for coupon level testing	10
48	Testing/Outsourcing charges	3
49	Charges for trainings/workshops/conferences	1
50	Computer accessories	2
51	Evaluation Boards, power supply modules, conversion modules	5
52	Components for testing	3.5
53	Miscellaneous items, wiring accessories for ground station and test rig	3
54	Division ORE	17
55	SW Group Consumables	1.5
56	FMCD group consumables	1
57	ORE (Software Group)	1
58	Chemicals and Consumables	1
59	Cutting tools and Inserts	5
60	Lubricants, Cutting Oil, Hydraulic oils, etc.	2.5
61	DM Water, Hardware, Grinding Wheels, Fasteners, Soldering Wirtes, Brass Wire for W-EDM, Emery Sheets, M-Seal, Araldite, etc.	1.75
62	Compressor servicing, certification and spares	1.5
63	Maintenance of equipments, Overhead cranes & its certification, Machines, Inspection equipments, Calibration and spares	5
64	Chemicals for NDT Lab and Electroplating Section	1.25
65	Safety Equipments	0.75
66	Chemial Analysis, Calibration and Maintenance / spares for Electroplating Lab	1.25
67	Painting consumables	1
68	PU Rubber for Rubber Press	2

69	Punch and Die for Press Brake	1
70	Furnace & Cold Storage calibration	0.75
71	Welding Consumables and Spares	1
72	Computer Consumables	0.5
73	Furnace - Mechanical and COntrOl System Accessories	0.75
74	I4.0 wiring, connectors, converters, consumables	4
75	Installation - Commissioning	26
76	Software/Engineering	15
77	Tools and Spare accessories	2
78	Flight testing consumables	2
79	Other Consumables	1.5
80	Wind Tunnel drive and other machine ma	1.5
81	Hyd Fluid, filters,hoses,O-rings, Seals, end fittings, connectors, Sealants, Adhesives,Primer, paints, Tapes,etc	2
82	Raw materials Sheet metal, Billets,pipes - AL alloy, Steel Sections	5
83	Bearings, Bellows, Fittings, Cables	4
84	Clamps, Clips, Plugs,Caps, Rivets,Bolts, Nuts, Special Fasteners, Drill bits, Reamers	2
85	Telemetry modules(Air unit & Ground unit) Microhard	4.1
86	Autopilot	1.41
87	GPS HERE 4	0.84
88	Transmitter	0.85
89	Miscellaneous accessories	0.015
90	Receiver	0.48
91	8V BEC	0.1
92	3D Printer consumable	0.025
93	Quad propeller set	0.18
94	catridges	2
95	computer peripherals and spares	1
96	Hydraulic Oil	4
97	Steel Fabrication Raw Materials	10
98	Strain Gages, / Sensors (load cell, LVDT, pressure sensor, displacement, temperature etc.)	6
99	Sensor Interconnection Wires	4
100	tools & spares for fabrication	1
101	hydraulic fittings and hoses	1
102	welding electrode, fasteners	1
103	safety gears	1
104	Printer and Plotter Cartridges	8

105	A4 Sheets and Drawing Sheets/Rolls (A0, A3)	3
106	Stationery Items	2
107	Calibration of Equipments	2.5
108	Consumables towards Operational Safety	1.5
109	General Testing Consumables	1.3
110	General Repair / Maintenance and required consumables	1
111	Computer Accessories / Consumables	1
112	Sensors and transducers	6
113	Strain Gauge, Bonding Adhesives, Servicing and calibration of UTM	6
114	Cables, sensors for the testing	2.5
115	Raw materials like prepreg/semipreg/thermoplastic films	15
116	Autoclave Consumables for welding Trials	7
117	Fixtures, rigs	5
118	Computer Consumables i.e SSD, RAM, Mouse and Keyboard	0.72
119	Toner Cartridges	0.4
120	Replacement of Spare Parts of Equipment's	1
121	Computer Consumables	1
122	Other consumables items	1
123	Hydraulic and Gear oil plus consumables	1.2
124	M25 bolts with nuts Length 100mm, gaskets etc	0.8
125	Engine oil and general consumables	1.2
126	replacement of spare parts of equipments and general consumables	3
127	maintenance.of equipment other than computer and consumables	4
128	Replacement of optics of PSP setup and misc items	3

129	FDM-filaments- PLA (5kg), FDM-filaments- CPLA (3kg), LCD 3D printer ABS Resin (5 kg), Araldyte (LY556,HY951,klar etc) IPA liquid and acetone -50ltrs, RPT Machine consumables (smpls, nozzle, extruder, glass bed, PEI sheet, coolant, glue for glass bed, ptfе tube, heat breaker, bed level sensor, etc	2.4
130	Replacement -IV spare part-Base flow facility and general consumables for 1ft tunnel	2.05
131	1.15 MW DC Motor health monitoring labour charges	2.00
132	Procurement of raw material for the test articles	5.00
133	Procurement of raw material for the test rig	5.00
134	Fabrication of the test section candidates, for some preliminary tests	6.00
135	Material procurement combustor fabrications and testing	9.00
136	Consumables for injector and burner testing	4.50
137	Upgradation of annular aero engine combustor	15.00
138	Test Rig components like orifice meter, heater, settling chamber manufacturing	19.50
139	Fabrication of test rig fixtures	5.00
140	Raw materials	7.00
141	Cutting tools, Lubricants, Oils etc.	10.00
142	Machine spares and maintenance	6.00
143	Fasteners, lubricants, tools, chemicals, gaskets, o-rings	5.00
144	Cascade blades, end plates	10.00
145	6" Pipe Line , Flanges/ Bellows in SS	4.20
146	Absolute Pressure Transmitters (0-6 bar a)	3.50
147	SS 316/L Tube	2.80
148	Lab Control Equipment for TERF	7.00
149	Steel Alloy Raw Matl. SS 316L, 17-4 PH etc.	2.80
150	Monel tubes and fittings	3.00
151	K Type and B Type Thermocouple	2.30
152	Drill bits, Adhesive, and Sealants	1.00

153	Compressor and pneumatic system maintenance	2.00
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Procurement during the FY 2026-27 out of CSIR Grant / Lab Grant / Contract R&D Projects

Sl. No	Materials description	Nature	Total Quantity Required
154	Carbon UD Prepreg Hexply 914/34%/UD 160/AS4-12K/300 mm	Consumables	4300 SQM
155	Carbon BD Prepreg Hexply 914/40%/285H5/AS4C- 3K/1170 mm (with various width, i.e. 1170 /1200 /1500 mm)	Consumables	2100 SQM
156	Film Adhesive HexBond 319A – 400 GSM	Consumables	480 SQM
157	Film Adhesive HexBond 319A – 240 GSM	Consumables	480 SQM
158	Copper Mesh Hexply 914–Copper Mesh- 40 %	Consumables	1020 SQM
159	Glass BD Prepreg Hexply 914G-120--45 %	Consumables	2160 SQM
160	Glass BD Prepreg Hexply 914G-7781--37 %	Consumables	1440 SQM
161	Impregnated Peel Ply Hexply 914/45%/9842/1300 mm	Consumables	1200 SQM
162	IM7-Carbon UD Prepreg Hexply 8552/33%/134/IM7 (12K)/1200 mm	Consumables	18000 SQM
163	IM7-Glass BD Prepreg Hexply 8552/37%/7781	Consumables	2550 SQM
164	IM7-Copper Mesh Hexply Epoxy Matrix/ 8552/40%/72/Cu	Consumables	1650 SQM
165	Aramid Fiber / Phenolic Hexagonal Core HexWeb HRH-10 Hex core	Consumables	40 SHEETS
166	Aramid Fiber / Phenolic Hexagonal Core HexWeb HRH-10 Flex core	Consumables	40 SHEETS
167	BMI-Carbon UD Prepreg CYCOM 5250-4 IM7-G-145/32	Consumables	1800 SQM
168	Tooling Prepreg LTM 217 – 100T LTM 217-T-3KHS-4X4T-283-1250 mm	Consumables	400 SQM
169	Tooling Prepreg LTM 217 – 700T LTM 217-T-12KHS-2X2T-660-1250 mm	Consumables	2000 SQM
170	Expanded Copper Foil (ECF) 4 Cu (110)12-125FA (356 GSM)	Consumables	600 SQM
171	Structural Assembly Sealant	Consumables	
172	PR 1422-A2	Consumables	15 Kits
173	PR 1422-B2	Consumables	15 Kits
174	PR 1782-A2	Consumables	75 Kits
175	PR 1782-B2	Consumables	225 Kits
176	PR 1782-C12	Consumables	150 Kits
177	PR 1764-B2	Consumables	100 Kits
178	Chobond-2465	Consumables	65 Kits
179	388-P MIXER ASSEMBLY	Consumables	03 Kits
180	PR 1005L	Consumables	15 Kits
181	PR-812 firewall sealant	Consumables	20 Kits
182	Seal Cap	Consumables	
183	PR1782B002AB006SCE Empty Seal cap	Consumables	4300 No's
184	PR1782B002AB025SCE Empty Seal cap	Consumables	27500 No's
185	PR1782B002AB012SCE Empty Seal cap	Consumables	3800 No's
186	PR1782B002CA601 NSE Empty Seal cap for Anchor Nut	Consumables	8120 No's
187	PR1782B002 Empty Seal cap (with various sizes)	Consumables	5000 No's
188	Epoxy Filler Adhesive - Hysol EA934NA	Consumables	40 Kits
189	Gore Tape	Consumables	
190	GSC-21-96399-C027 Sheet Thickness - 0.6 mm	Consumables	65 Sheets

191	GSC-21-97009-027 Rev A - Roll Width 30 mm and 100 feet Length	Consumables	35 Rolls
192	GSC-21-97157-027 Rev B – Roll Width 30 mm and 100 feet Length	Consumables	05 Rolls / 1500 feet
193	Uncured Non-Silicone Tooling Rubber AIRPAD	Consumables	800 SQM
194	Uncured Fibre Glass Reinforced Rubber AIRPAD HTS 5553	Consumables	1000 SQM
195	Peel Ply 60 BR ORANGE	Consumables	4000 SQM
196	Peel Ply PES 90 / 1650	Consumables	5500 SQM
197	Araldite AV 138 and Hardener HV 998	Consumables	25 Kits
198	Tooling Resin - RENLAM LY 5210 Tooling / Laminating Resin – HIGH HEAT RESISTANT EPOXY SYSTEM	Consumables	2000 Kgs
199	Tooling Hardener - ARADUR 2954 / REN HY 2954 Tooling / Laminating Hardener – HIGH HEAT RESISTANT EPOXY SYSTEM	Consumables	1200 Kgs
200	Tooling Gel coat Resin - REN GEL SW 5200 Tooling / laminating Gel coat Resin – HIGH HEAT RESISTANT EPOXY SYSTEM	Consumables	180 Kgs
201	Structural Adhesive - Aerospace Adhesives Araldite 403 A/B - Two component epoxy paste adhesive (A/B)	Consumables	48 Kits
202	Polyaryletherketone (PAEK) / UD Carbon fiber prepeg - Cetex TC1225 LM PAEK, T700, 145 gsm, 34% RC, 12	Consumable	50 Kgs
203	Multi-Purpose General Sealant Tape with high tack. Base material : Synthetic Rubber Size : 1 Roll = 1/8 inch thick X 1/2 inch width X 25 feet Length or as per the manufacturer's standard roll size. 3 mm thick x 12 mm width x 7.5 meter Length Packing : 40 Rolls per Box Shelf Life : Minimum 10 months Maximum Use Pressure : 100 PSI Maximum use Temperature : 204 Deg C Colour : Yellow Note : Suitable for Autoclave Curing and removes easily from metal or composite tools. Product Code : AT 200Y or Equivalent	Consumables	6000 Rolls
204	RELEASE FILM – POROUS (PERFORATED) High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 % Tensile strength : Minimum 20 MPa Perforation details : Perforation style : P3 Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg Centigrade (260°C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature. Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems Product Code : A4000 – RP3 or Product Code : A5000 – RP3 Product Code : FIA5N25 or Equivalent	Consumables	8700 SQM
205	RELEASE FILM – NON POROUS (PLAIN) High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 %	Consumables	6400 SQM

	<p>Tensile strength : Minimum 20 MPa Perforation details : Perforation style : No perforation - Plain Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg centigrade (260° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature. Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems</p> <p>Product Code : A4000 r – or Product Code : A5000 – R Product Code : FIA5N25 or Equivalent</p>		
206	<p>One side Bondable Release film (Non porous) RELEASE FILM - Bondable One Side (BOS) – NON POROUS (PLAIN) High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 % Tensile strength : Minimum 20 MPa Perforation details : Perforation style : No perforation - Plain Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg centigrade (260° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems</p> <p>Product Code : A4000 BOS – or Product Code : A5000 – ONE SIDE BONDABLE Product Code : FIA5N25 ONE SIDE BONDABLE or Equivalent</p>	Consumables	1500 SQM
207	<p>BAGGING FILM - Nylon Vacuum bagging film with elongation Material : Nylon / soft Nylon Vacuum bagging film Thickness : 50 Microns or 75 microns Elongation at break : Minimum 400 % Tensile strength : Minimum 48 MPa Roll size : 60 inch width x 1000 feet length or as per the manufacturer's standard roll size. Max. Use Temperature: 212 Deg Centigrade (212° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Green / Pink Shelf life : Minimum 2 years / Unlimited when stored in original packaging at 22°C / Room Temperature Suitable for High temperature Autoclave Curing and to be Compatible with Epoxy resin systems</p> <p>Product Code : KM 1300 or Product Code : HK7400 or Product Code : FIPA205-20/155 or Equivalent</p>	Consumables	8700 SQM
208	<p>BREATHER Heavy Weight Non-woven polyester Breather / Bleeder Fibre Type : Polyester Weight : 339 GSM (+/- 5 GSM)</p>	Consumables	12750 SQM

	<p>Roll Size : 50 inch Width X 50 meters Length or as per the manufacturer's standard roll size.</p> <p>Max. Use Temperature: 204 Deg Centigrade (204° C)</p> <p>Max. Use Pressure : 100 PSI</p> <p>Colour : White</p> <p>Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature</p> <p>Suitable for High temperature Autoclave Curing.</p> <p>Product Code : Airweave N10</p> <p>Product Code : Resin Bleeder 3000-10 or Equivalent</p>		
209	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.005 inch / 125 microns thickness)</p> <p>Tooltec / Toolkote / Pressure Sensitive Tape</p> <p>Total Thickness (Film / Carrier + Adhesive) : 125 Microns (0.005 Inch)</p> <p>Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive</p> <p>Semi permanent Tool Release Film and Tool surface reconditioning.</p> <p>Specification :</p> <p>Film / Carrier Thickness : 70 Microns to 80 Microns (0.003 Inch)</p> <p>Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch)</p> <p>Total Thickness (Film / Carrier + Adhesive) : 125 Microns (0.005 Inch)</p> <p>Carrier type : PTFE/ Glass</p> <p>Adhesive type : Silicone</p> <p>Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size.</p> <p>Max use Temperature : 260 Deg C (260° C)</p> <p>Max use Pressure : 100 PSI / 7 bar</p> <p>Colour : Brown</p> <p>Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature</p> <p>Suitable for High Temperature Autoclave Curing.</p> <p>Product Code : ToolTec A005 or</p> <p>Product Code : Toolkote 03S or Equivalent</p>	Consumables	3200 SQM
210	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.007 inch / 175 microns thickness)</p> <p>Tooltec / Toolkote / Pressure Sensitive Tape</p> <p>Total Thickness (Film / Carrier + Adhesive) : 175 Microns (0.005 Inch)</p> <p>Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive</p> <p>Semi permanent Tool Release Film and Tool surface reconditioning.</p> <p>Specification :</p> <p>Film / Carrier Thickness : 120 Microns to 130 Microns (0.005 Inch)</p> <p>Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch)</p> <p>Total Thickness (Film / Carrier + Adhesive) : 175 Microns (0.007 Inch)</p> <p>Carrier type : PTFE/ Glass</p> <p>Adhesive type : Silicone</p> <p>Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size.</p> <p>Max use Temperature : 260 Deg C (260° C)</p> <p>Max use Pressure : 100 PSI / 7 bar</p> <p>Colour : Brown</p> <p>Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature</p>	Consumables	400 SQM

	Suitable for High Temperature Autoclave Curing. Product Code : Tooltec A007 or Equivalent		
211	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.012 inch / 300 microns thickness) Tooltec / Toolkote / Pressure Sensitive Tape Total Thickness (Film / Carrier + Adhesive) : 300 Microns (0.012 Inch) Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning. Specification : Film / Carrier Thickness : 245 Microns to 255 Microns (0.010 Inch) Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch) Total Thickness (Film / Carrier + Adhesive) : 300 Microns (0.012 Inch) Carrier type : PTFE/ Glass Adhesive type : Silicone Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size. Max use Temperature : 260 Deg C (260° C) Max use Pressure : 100 PSI / 7 bar Colour : Brown Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing.</p> <p>Product Code : Tooltec A012 or Product Code : Toolkote 010S or Equivalent</p>	Consumables	1200 SQM
212	<p>Tooltec / Toolkote / Pressure Sensitive Tape (250 to 260 Microns thickness) PTFE coated fibre glass with silicone adhesive Tooltec / Pressure Sensitive Tape / Semi Permanent Tool Release film / or equivalent - suitable for High Temperature Autoclave Curing Application</p> <p>Total Thickness (Film / Carrier + Adhesive) : 250 to 260 Microns Reinforced PTFE coated fibre glass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning. Specification : Film / Carrier Thickness : 200 Microns to 210 Microns Adhesive Thickness : 45 Microns to 55 Microns Total Thickness (Film / Carrier + Adhesive) : 250 TO 260 Microns Carrier type : PTFE/ Glass Adhesive type : Silicone Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size. Max use Temperature : 260 Deg C (260° C) Max use Pressure : 100 PSI / 7 bar Colour : Brown / Light Brown or Manufacturer's colour Shelf Life : Can be minimum 11 months when stored in original packaging around 20°C to 25°C / Room Temperature Suitable for High Temperature Autoclave Curing Application.</p>	Consumables	
213	<p>Release Solution Release Solution - Water based PTFE release agent (water based PTFE release agent that contains no silicones or silanes, no CFC's and no VOC's)</p>	Consumables	40 Gal

	<p>Maximum use temperature : 200 Deg C (200°C) Max use Pressure : 100 PSI / 7 bar Solvent : Water Flammability : No Package in container : 1 Gallon (3.8 liters) Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing. To be compatible for composite and metal tools and provides release from epoxies, phenolics, BMI's and urethane resin systems. To be capable of multiple release cycles with most resin systems.</p> <p>Product Code: RELEASE ALL - SAFELEASE 30 or Product Code: HENKEL FREKOTE 770 NC or Product Code: FREKOTE 700 NC or Equivalent</p>		
214	<p>Flash Breaker Tape - All-purpose pressure sensitive tape, High temperature/ high tensile strength polyester films coated with a pressure sensitive silicone adhesive Maximum use temperature : 204 Deg C (204°C) Maximum use Pressure : 100 PSI / 7 bar Carrier type : Polyester Adhesive type : Silicone Colour : Blue / Orange Total thickness : 55 microns (0,0022 inch) Film thickness 25 microns (0,001 inch) Adhesive thickness 30 microns (0,0012 inch) Elongation at break : 100 % Roll Size : 01 inch width X 72 yards Length or as per the manufacturer's standard roll size. Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing and tapes remove easily after cure.</p> <p>Product Code: Flash tape or Equivalent</p>	Consumables	350 Rolls
215	<p>Repair Paste Adhesive High temperature quick setting filler paste with Hardener Material type : Polyester Colour Black : White (A:B) Mix ratio by weight : 100 : 1 (A : B) Pot life : 7-15 minutes (100 g at 22 °C) Mix ratio by weight : 100 : 2 (A : B) Pot life : 2 5 minutes (100 g at 22 °C) Maximum use temperature : 232 Deg c (232 °C) Maximum use Pressure : 100 PSI / 7 bar Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Package : 1.62 kg (Part A) & 0.028 kg (Part B) or as per the manufacturer's standard pack.</p> <p>Product Code : Airfill 2 A/B / or Product Code : APF 7 A/B or Equivalent</p>	Consumables	84 Kits

203	<p>Multi-Purpose General Sealant Tape with high tack. Base material : Synthetic Rubber Size : 1 Roll = 1/8 inch thick X 1/2 inch width X 25 feet Length or as per the manufacturer's standard roll size. 3 mm thick x 12 mm width x 7.5 meter Length Packing : 40 Rolls per Box Shelf Life : Minimum 10 months Maximum Use Pressure : 100 PSI Maximum use Temperature : 204 Deg C Colour : Yellow Note : Suitable for Autoclave Curing and removes easily from metal or composite tools.</p> <p>Product Code : AT 200Y or Equivalent</p>	Consumables	6000 Rolls
204	<p>RELEASE FILM – POROUS (PERFORATED) High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 % Tensile strength : Minimum 20 MPa Perforation details : Perforation style : P3 Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg Centigrade (260°C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature. Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems</p> <p>Product Code : A4000 – RP3 or Product Code : A5000 – RP3 Product Code : FIA5N25 or Equivalent</p>	Consumables	8700 SQM
205	<p>RELEASE FILM – NON POROUS (PLAIN) High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 % Tensile strength : Minimum 20 MPa Perforation details : Perforation style : No perforation - Plain Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg centigrade (260° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature. Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems</p> <p>Product Code : A4000 r – or Product Code : A5000 – R Product Code : FIA5N25 or Equivalent</p>	Consumables	6400 SQM
206	<p>One side Bondable Release film (Non porous) RELEASE FILM - Bondable One Side (BOS) – NON POROUS (PLAIN)</p>	Consumables	1500 SQM

	<p>High performance fluoropolymer release film Material Type : FEP (Fluoropolymer film) Thickness : 25 Microns Elongation at break : Minimum 300 % Tensile strength : Minimum 20 MPa Perforation details : Perforation style : No perforation - Plain Roll size : 1.2 Meter Width X 183 Meter Length or as per the manufacturer's standard roll size. Max. Use Temp : 260 Deg centigrade (260° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Red / Violet Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High temperature Autoclave Curing and to be Compatible with most resin systems</p> <p>Product Code : A4000 BOS – or Product Code : A5000 – ONE SIDE BONDABLE Product Code : FIA5N25 ONE SIDE BONDABLE or Equivalent</p>		
207	<p>BAGGING FILM - Nylon Vacuum bagging film with elongation Material : Nylon / soft Nylon Vacuum bagging film Thickness : 50 Microns or 75 microns Elongation at break : Minimum 400 % Tensile strength : Minimum 48 MPa Roll size : 60 inch width x 1000 feet length or as per the manufacturer's standard roll size. Max. Use Temperature: 212 Deg Centigrade (212° C) Max. Use Pressure : 100 PSI / 7 Bar Colour : Green / Pink Shelf life : Minimum 2 years / Unlimited when stored in original packaging at 22°C / Room Temperature Suitable for High temperature Autoclave Curing and to be Compatible with Epoxy resin systems</p> <p>Product Code : KM 1300 or Product Code : HK7400 or Product Code : FIPA205-20/155 or Equivalent</p>	Consumables	8700 SQM
208	<p>BREATHER Heavy Weight Non-woven polyester Breather / Bleeder Fibre Type : Polyester Weight : 339 GSM (+/- 5 GSM) Roll Size : 50 inch Width X 50 meters Length or as per the manufacturer's standard roll size. Max. Use Temperature: 204 Deg Centigrade (204° C) Max. Use Pressure : 100 PSI Colour : White Shelf life : Unlimited when stored in original packaging at 22°C / Room Temperature Suitable for High temperature Autoclave Curing.</p> <p>Product Code : Airweave N10 Product Code : Resin Bleeder 3000-10 or Equivalent</p>	Consumables	12750 SQM
209	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.005 inch / 125 microns thickness) Tooltec / Toolkote / Pressure Sensitive Tape Total Thickness (Film / Carrier + Adhesive) : 125 Microns (0.005 Inch) Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning.</p>	Consumables	3200 SQM

	<p>Specification :</p> <p>Film / Carrier Thickness : 70 Microns to 80 Microns (0.003 Inch) Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch) Total Thickness (Film / Carrier + Adhesive) : 125 Microns (0.005 Inch) Carrier type : PTFE/ Glass Adhesive type : Silicone Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size.</p> <p>Max use Temperature : 260 Deg C (260° C) Max use Pressure : 100 PSI / 7 bar Colour : Brown Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing.</p> <p>Product Code : ToolTec A005 or Product Code : Toolkote 03S or Equivalent</p>		
210	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.007 inch / 175 microns thickness) Tooltec / Toolkote / Pressure Sensitive Tape Total Thickness (Film / Carrier + Adhesive) : 175 Microns (0.005 Inch) Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning. Specification : Film / Carrier Thickness : 120 Microns to 130 Microns (0.005 Inch) Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch) Total Thickness (Film / Carrier + Adhesive) : 175 Microns (0.007 Inch) Carrier type : PTFE/ Glass Adhesive type : Silicone Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size. Max use Temperature : 260 Deg C (260° C) Max use Pressure : 100 PSI / 7 bar Colour : Brown Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing.</p> <p>Product Code : Tooltec A007 or Equivalent</p>	Consumables	400 SQM
211	<p>Tooltec / Toolkote / Pressure Sensitive Tape (0.012 inch / 300 microns thickness) Tooltec / Toolkote / Pressure Sensitive Tape Total Thickness (Film / Carrier + Adhesive) : 300 Microns (0.012 Inch) Reinforced PTFE coated fibreglass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning. Specification : Film / Carrier Thickness : 245 Microns to 255 Microns (0.010 Inch) Adhesive Thickness : 45 Microns to 55 Microns (0.002 Inch) Total Thickness (Film / Carrier + Adhesive) : 300 Microns (0.012 Inch) Carrier type : PTFE/ Glass Adhesive type : Silicone</p>	Consumables	1200 SQM

	<p>Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size.</p> <p>Max use Temperature : 260 Deg C (260° C)</p> <p>Max use Pressure : 100 PSI / 7 bar</p> <p>Colour : Brown</p> <p>Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature</p> <p>Suitable for High Temperature Autoclave Curing.</p> <p>Product Code : Tooltec A012 or Product Code : Toolkote 010S or Equivalent</p>		
212	<p>Tooltec / Toolkote / Pressure Sensitive Tape (250 to 260 Microns thickness)</p> <p>PTFE coated fibre glass with silicone adhesive Tooltec / Pressure Sensitive Tape / Semi Permanent Tool Release film / or equivalent - suitable for High Temperature Autoclave Curing Application</p> <p>Total Thickness (Film / Carrier + Adhesive) : 250 to 260 Microns Reinforced PTFE coated fibre glass with silicone adhesive / Non Porous PTFE coated Glass fabric with silicon adhesive Semi permanent Tool Release Film and Tool surface reconditioning.</p> <p>Specification :</p> <p>Film / Carrier Thickness : 200 Microns to 210 Microns Adhesive Thickness : 45 Microns to 55 Microns Total Thickness (Film / Carrier + Adhesive) : 250 TO 260 Microns Carrier type : PTFE/ Glass Adhesive type : Silicone</p> <p>Roll Size : 36 inch width X 18 yards Length or as per the manufacturer's standard roll size.</p> <p>Max use Temperature : 260 Deg C (260° C)</p> <p>Max use Pressure : 100 PSI / 7 bar</p> <p>Colour : Brown / Light Brown or Manufacturer's colour</p> <p>Shelf Life : Can be minimum 11 months when stored in original packaging around 20°C to 25°C / Room Temperature</p> <p>Suitable for High Temperature Autoclave Curing Application.</p>	Consumables	
213	<p>Release Solution</p> <p>Release Solution - Water based PTFE release agent (water based PTFE release agent that contains no silicones or silanes, no CFC's and no VOC's)</p> <p>Maximum use temperature : 200 Deg C (200°C)</p> <p>Max use Pressure : 100 PSI / 7 bar</p> <p>Solvent : Water</p> <p>Flammability : No</p> <p>Package in container : 1 Gallon (3.8 liters)</p> <p>Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature</p> <p>Suitable for High Temperature Autoclave Curing.</p> <p>To be compatible for composite and metal tools and provides release from epoxies, phenolics, BMI's and urethane resin systems.</p> <p>To be capable of multiple release cycles with most resin systems.</p> <p>Product Code: RELEASE ALL - SAFELEASE 30 or Product Code: HENKEL FREKOTE 770 NC or Product Code: FREKOTE 700 NC or Equivalent</p>	Consumables	40 Gal
214	<p>Flash Breaker Tape - All-purpose pressure sensitive tape, High temperature/ high tensile strength polyester films coated with a pressure sensitive silicone adhesive</p> <p>Maximum use temperature : 204 Deg C (204°C)</p>	Consumables	350 Rolls

	<p>Maximum use Pressure : 100 PSI / 7 bar Carrier type : Polyester Adhesive type : Silicone Colour : Blue / Orange Total thickness : 55 microns (0,0022 inch) Film thickness 25 microns (0,001 inch) Adhesive thickness 30 microns (0,0012 inch) Elongation at break : 100 % Roll Size : 01 inch width X 72 yards Length or as per the manufacturer's standard roll size. Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Suitable for High Temperature Autoclave Curing and tapes remove easily after cure.</p> <p>Product Code: Flash tape or Equivalent</p>		
215	<p>Repair Paste Adhesive High temperature quick setting filler paste with Hardener Material type : Polyester Colour Black : White (A:B) Mix ratio by weight : 100 : 1 (A : B) Pot life : 7-15 minutes (100 g at 22 °C) Mix ratio by weight : 100 : 2 (A : B) Pot life : 2 5 minutes (100 g at 22 °C) Maximum use temperature : 232 Deg c (232 °C) Maximum use Pressure : 100 PSI / 7 bar Shelf life : Minimum 12 months when stored in original packaging at 22°C / Room Temperature Package : 1.62 kg (Part A) & 0.028 kg (Part B) or as per the manufacturer's standard pack.</p> <p>Product Code : Airfill 2 A/B / or Product Code : APF 7 A/B or Equivalent</p>	Consumables	84 Kits