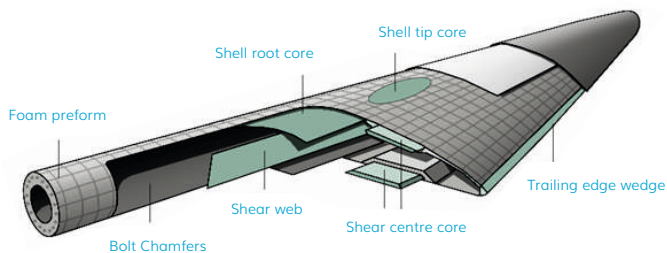




Epoxy systems for wind blades



energising possibilities
stimulating growth



Wind blade epoxy systems

Lapox systems	Mixing ratio (resin : curing agent)	Mix viscosity ¹ @ 25 °C	Pot Life ² @ 25 °C	Tg ³	Recommendations
	parts by weight	mPa s	minutes	°C	

Resin Infusion (RI)

Det Norske Veritas (DNV) certified					
ARL-125 AH-365	100 : 32	300 - 700	50 - 60	75 - 85	Preferred for small wind turbine blades and to increase reactivity of slow infusion systems.
ARL-125 AH-367	100 : 32	200 - 300	300 - 380	75 - 85	Designed for wind turbine blades and other large components.
Low viscosity					
ARL-135 LV AH-332	100 : 32	600 - 800	8 - 14	80 - 90	Variable pot life systems for desired cycle time. Suitable for small to large components.
ARL-135 LV AH-333	100 : 32	600 - 750	14 - 20	80 - 90	
ARL-135 LV AH-334	100 : 32	600 - 750	25 - 35	80 - 90	
ARL-135 LV AH-335	100 : 32	300 - 500	50 - 60	75 - 85	
ARL-135 LV AH-336	100 : 32	400 - 650	80 - 100	75 - 85	
ARL-135 LV AH-337	100 : 32	200 - 300	300 - 380	75 - 85	Suitable for small to large cured-in-place pipe (CIPP) application.

Hand lay-up (HLU)

DNV certified					
ARL-135 AH-334	100 : 32	700 - 1,200	25 - 35	80 - 90	Systems with variable pot life and viscosity for wind blades and repairs.
ARL-135 AH-365	100 : 32	300 - 700	50 - 60	70 - 80	
Low viscosity					
ARL-135 AH-332	100 : 32	700 - 1,200	8 - 14	80 - 90	Variable pot life systems for desired cycle time. Suitable for small to large components.
ARL-135 AH-333	100 : 32	700 - 1,200	14 - 20	80 - 90	
ARL-135 AH-335	100 : 32	500 - 700	50 - 60	75 - 85	
ARL-135 AH-336	100 : 32	500 - 700	80 - 100	75 - 85	
ARL-135 AH-337	100 : 32	300 - 500	300 - 380	75 - 85	

Structural adhesives

ARA-32 AH-733	100 : 45	300 - 400	55 - 65 @ 30 °C	80 - 90	Thixotropic structural adhesives with high lap shear strength suitable for blade shell bonding.
DNV certified					
ARA-32 AH-735	100 : 45	300 - 400	120 - 180 @ 30 °C	80 - 90	

¹Brookfield viscosity | ²Pot life of 100 g mix mass | ³Tg: Glass transition temperature | Mix viscosity - ASTM D2196; Pot life - ASTM D2471; Tg - ISO 11375-2

Tooling systems

Lapox systems	Mixing ratio (resin : curing agent)	Mix viscosity ¹ @ 25 °C	Pot Life ² @ 25 °C	Tg ³	Recommendations
	parts by weight	mPa s	minutes	°C	
Laminating systems					
ARL-138 AH-417	100 : 30	200 - 300	90 - 150	100 - 110	Offers excellent fibre wetting enabling high productivity.
L-552 K-552	100 : 38	600 - 700	110 - 160	115 - 130	Designed for static and dynamic applications including aerospace, tooling and aircraft repairs.
ARL-135 LV AH-411	100 : 24	250 - 400	90 - 120	125 - 135	Excellent chemical resistance and high thermal stability.
ARL-125 AH-339	100 : 30	400 - 600	120 -150	130 - 140	Long pot life and good thermal stability. Suitable for making large tooling components for wind automotive industry.
ARL-138 AH-339	100 : 30	400 - 600	120 - 180	130 - 140	High Tg system for manufacturing tools of varying sizes by HLU and RI.
ART-17 AH-454	100 : 40	200 - 300	480 - 530	155 - 165	Extended pot life with high Tg for medium and large tools.
ARL-140 AH-419	100 : 42	2,500 - 3,000	600 - 700	190 - 220	Outstanding thermal performance. Designed for aerospace, defence and wind blade component tools.
Gel coats					
ART-21 AH-326 (T-73 K-51)	100 : 15	Paste	25 - 30	80 - 90	White coloured system providing resilient and machinable surface with good edge strength.
ART-22 AH-326 (T-94 K-51)	100 : 8	Paste	15 - 20	80 - 90	Grey coloured system providing excellent hardness and high thermal conductivity.
ART-23 AH-326 (T-96 K-51)	100 : 10	Paste	15 - 20	80 - 90	Blue coloured system providing abrasion resistance, extreme hardness and good surface finish.
ART-24 AH-326	100 : 15	Paste	15 - 30	95 - 115	Natural milky white tintable system providing machinable surface with high thermal stability.

Repair and maintenance systems

HLU systems

DNV certified					
ARL-135 AH-334	100 : 32	700 - 1,200	25 - 35	80 - 90	Systems with variable pot life and viscosity for wind blades and repairs.
ARL-135 AH-365	100 : 32	300 - 700	50 - 60	70 - 80	
Medium viscosity					
ARL-135 AH-335	100 : 32	500 - 700	50 - 60	75 - 85	Field repair system.
Multipurpose					
L-12 K-6	100 : 10	5,000 - 8,000	30 - 40	110 - 130	Fast reactive system for general purpose composites.

Adhesives for repairs

Lapox systems	Mixing ratio (resin : curing agent)	Mix viscosity ¹ @ 25 °C	Pot Life ² @ 25 °C	Colour	Recommendations
	parts by weight	mPa s	minutes	°C	
A-16 AH-801	100 : 100	10,000 - 14,000	3 - 5	Resin: 1 GS Curing agent: 2 GS	Rapid cure adhesive for bonding similar dissimilar substrates (5-7 minutes).
A-31 K-31	100 : 80	30,000 - 35,000	75 - 90	Resin: off white viscous liquid Curing agent: 8 GS	Suitable for bonding glass, metal, FRP and wood with high shear strength requirements (up to 120 kgf/cm ²).
A-38 K-99	100 : 40	50,000 - 1,00,000	60 - 110	Resin: beige thixotropic paste Curing agent: off white paste	Ambient curing thixotropic system with temperature resistance up to 120 °C. Suitable for bonding a wide variety of substrates.

¹Brookfield viscosity | ²Pot life of 100 g mix mass | ³Tg: Glass transition temperature | Mix viscosity - ASTM D2196; Pot life - ASTM D2471; Tg - ISO 11375-2

KEY MARKETS

NORTH AMERICA
Canada
USA

SOUTH AMERICA
Argentina
Brazil
Colombia
Peru

EUROPE
Austria, Belgium, Croatia, Cyprus, Czech Republic,
Finland, France, Germany, Hungary, Italy, Netherlands,
Norway, Portugal, Switzerland, UK

AFRICA
Algeria
Egypt
Ethiopia
Kenya
Morocco
Nigeria
South Africa
Tunisia

MIDDLE EAST
Bahrain, Israel, Kuwait
Oman, Qatar, Saudi Arabia
Turkey, UAE

SOUTH ASIA
Bangladesh
India
Sri Lanka

FAR EAST
China, Hong Kong
Japan, Korea, Taiwan

SOUTH EAST ASIA
Indonesia
Malaysia
Singapore
Thailand
Vietnam

OCEANIA
Australia
New Zealand

INDIA

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