

optical adhesives

broad range of adhesives, plus solutions for dispensing, curing & fume extraction









AMS Technologies — where technologies meet solutions

AMS Technologies is a leading solution provider and distributor of high-tech, leading-edge components, systems and equipment, with more than 35 years of experience to date and currently serving more than 2000 European customers.

We are the specialists in both components and complete solutions for Optical Technology, Thermal Management and Power Technology fields, with access to and long standing relationships with the most advanced manufacturers in each of those fields. Drawing extensively on our experience in each of these differing technologies, and coupling this with our broad system-level competence, we are able to offer seamless and comprehensive solutions incorporating complementary aspects from all three key technology fields.

With an appropriate technical education, an element of entrepreneurial spirit and many years of design and consultancy expertise, our sales engineers can rapidly comprehend system requirements and provide you the customer with a solution that goes way beyond a simple understanding of our product datasheets. We take active involvement in the design cycle, defining and re-defining your specifications, and leading in many cases to highly specific, customized products and solutions.

Helping you to effectively outsource your production line, we can even provide you with the necessary leading turnkey contract manufacturing services in our key competency fields.

AMS Technologies has been delivering solutions into a variety of high-tech markets, including renewable energies, medical, defence & aerospace, research & scientific and various other industrial segments. Our customer base consists of Europe's largest leading technology corporations, a network of universities and research institutes as well as the most promising start-ups.

We thrive by working in a 'customer first' environment. Our pan-European customers are serviced from a network of local offices in Germany, the UK, France, Italy, Spain, Poland and Sweden, with a focused operations and logistics centre located in Munich, Germany.

Our commitment: Identifying the best solution for your project enabling you to become your customers' first choice!

Your AMS Technologies team



- Optical Technologies
- Power Technologies
- Thermal Management







optical adhesives for glass, metal, ceramics and plastics

Bonding is an essential technological process in many industries. Our state-of-the-art adhesives are used for bonding of optical components, where the adhesive is index matched to the used components. While highly specialized, the adhesives are especially designed to meet a very wide range of applications.

They are simplifying bonding processes, guaranteeing high processing speed combined with high reliability. Special glues are developed to fix fibers in v-grooves or for sealing of optical components. Curing conditions can differ, using either heat or UV light to reach the optimum adhesion.

dispensing solutions

Our dispensing systems, including a large choice of consumables like syringes, nozzles and adapter hoses, cover all customer needs in numerous industrial applications. These high precision systems provide permanent monitoring and control of important

parameters like stability, flow volume and the curing profile of the used materials – ensuring absolute even dispensing of UV curing adhesives, silicone, cyanoacrylate adhesives and other liquid materials.

curing solutions

After dispensing, optical adhesives must be cured by either heat or UV light. AMS Technologies provides remote controlled curing ovens for horizontal and vertical curing as well as a broad portfolio of industrial UV LED systems for UV curing applications, ranging from handheld devices to semi-automated UV cabinets.

Combining quality, robustness and reliability, these curing solutions meet the requirements of the industrial world. All devices ensure a controlled process regardless of the surface and insolation power.

fume extraction solutions

Dispensing and processing optical adhesives can generate harmful gases that are hazardous to health if inhaled. Our highperformance local exhaust ventilation fume extraction systems capture and filter those gases at the source thereby preventing any gases or fumes escaping into the workplace. Their gas extraction rate can be altered precisely to suit the application.





NTT-AT index matching adhesives

UV-curable Ad	UV-curable Adhesives for Fiber Array										
Type Main Component Visco		Viscosity @+25 °C	Refractive Index	Refractive Index Curing Conditions UV Intensity		Tg	Shrinkage				
		mPas	@589 nm	mW/cm²	min	°C	%				
AT3925M	Ероху	200	1.519	100	10	219	3				
AT9390	Ероху	600	1.492	30	10	131	4				
AT9968	Ероху	70	1.512	100	10	181	4				
AT3727E	Ероху	400	1.574	10	10	107	4				
AT3728E	Ероху	400	1.573	10	10	55	3				
AT9575M	Ероху	Paste	-	100	10	42	4				
AT8105	Acrylate	Paste	-	10	5	103	7				

High	Dofract	ive Ind	lav Ca	riae

Туре	Main Component	Viscosity @+25 °C	Refractive Index	Curing Conditions UV Intensity	Time	Tg	Shrinkage	
		mPas	@589 nm	mW/cm²	min	°C	%	
#18165	Acrylate	9	1.675	10	5	113	9	
#18109	Acrylate	360	1.661	10	10	150	-	
#6205	Acrylate	20	1.720	100	5	68	8	
E3754	Ероху	1,200	1.603	100	5	73	5	
#7200	Ероху	7,000	1.627	100	10	63	3	

High Refractive Index Series – Nano Imprint Resin

Туре	Solvent	Viscosity @+25 °C	Refractive Index	Curing Conditions UV Intensity	Time	Tg	Shrinkage	
		mPas	@633 nm	mW/cm²	min	°C	%	
#18210	With Solvent	15	1.725	100	5	100	6	
#18247	No Solvent	138	1.704	100	1	125	7	

High Precision Adhesives

Туре	Main Component	Viscosity @+25 °C	Curing Conditions UV Intensity	Time	Tg	Shrinkage	Hardness	
		mPas	@633 nm, mW/cm²	min	°C	%	Shore D	
AT3862P	Ероху	500,000	100	2	195	0.5	94	
AT3916P	Epoxy	20,000	100	5	233	0.9	91	

UV-curable Adhesives for Optical Path

Туре	Main Component	Viscosity @+25 °C	Refractive Index	Curing Conditions UV Intensity	Time	Tg	Shrinkage	
		mPas	@589 nm	mW/cm²	min	°C	%	
Low-Tg Type	Ероху	200-560	1.458-1.567	10	10	40-50	4-8	
High-Tg Type	Ероху	250-2000	1.458-1.567	30	10	140-150	3-5	
GA700H	Ероху	280	1.458	30	10	145	4	
GA700L	Ероху	250	1.456	10	5	46	4	
AT6001	Acrylate	470	1.505	10	5	0	7	
AT8224	Acrylate	145	1.505	10	5	115	9	

Low Refractive Index Series

Туре	Main Component	Viscosity @+25 °C	Refractive Index	Curing Conditions UV Intensity	Time	Tg	Hardness	
		mPas	@589 nm	mW/cm²	min	°C	Shore D	
#18204	Acrylate	7	1.375	10	1	18	20	
#18114	Acrylate	25	1.400	10	5	94	72	
E3810	Ероху	100	1.438	10	10	103	78	

Sealants for Optical Devices

Туре	Main Co	mponent	Color Condition		Weight Ratio	Pot Life	Curing Conditions	
	Α	В	Appearance A	Appearance B	A/B	h		
OS5958	Ероху	Amine	White/Paste	Yellow Clear Liquid	10/3	2	24 h at room temperature	
0S5962	Ероху	Amine	White/Paste	Yellow Clear Liquid	21/3	2	or 1 h at +80 °C	
OS5980	Amine	Modified Epoxy	Transparent	Black	1/2	2		
0S-48	Butylene	Butylene	White/Paste	Black	1/1	3	24 h at T _{mom} or 1 h at +100 °C	

Connected Fibers heat-curing epoxy

Туре	Main Component	No. of Components	Curing Conditions Temperature	Time	Pot Life	Shelf Life @+23 °C	
			°C	min	h	years	
EPO-TEK 353ND	Ероху	2	+110	30	≤3	1	



NTT-AT index matching adhesives

Hardness	Bond Strength		Optical Transn	nittance [%]	
Shore D	kgf/cm²	400 nm	850 nm	1330 nm	1550 nm
88	>99	65	90	91	89
81	>194	45	92	91	89
85	>143	74	90	90	85
83	>147	63	89	89	87
20	>232	80	89	90	88
35	>221	29	71	80	79
78	>226	0	0	0	0

Hardness	Bond Strength	0	ptical Transmittance [%	6]
Shore D	kgf/cm²	450 nm	540 nm	630 nm
67	>48	94	96	96
79	>107	93	96	97
70	35	72	78	81
76	>280	92	96	96
83	55	78	88	92

0	ptical Transmittance [%]
450 nm	540 nm	630 nm
94	95	95
95	96	97

	Bond Strength
Initial Period, kgf/cm ²	+121 °C, 100%, after 10 h, kgf/cm²
>210	>114
>220	>128

Hardness	Bond Strength	Optical Transmittance [%]				
Shore D	kgf/cm²	400 nm	850 nm	1300 nm	1550 nm	
23-45	>100			86-90		
75-78	>100			89-90		
80	>247	72	92	91	88	
44	>154	82	94	94	92	
24	99	87	93	91	86	
38	>209	72	86	89	82	

Bond Strength	Optical Transmittance [%]					
kgf/cm²	450 nm	540 nm	630 nm			
27	89	91	91			
26	92	94	94			
>61	76	86	89			

Tg	Hardness	Bond Strength	Special Features
°C	Shore D	kgf/cm²	
45	47	131	Moisture Proof, Long Pot Life, Low Viscosity
49	66	146	Moisture Proof, Long Pot Life, High Viscosity
	20	24	S3903-5 RoHS Conform, High Flexibility
-46	66 (Shore A)	11	Long Pot Life

ldeal for bonding	Benefits
fiber optics, glass, ceramics & most plastics	changes color on cure; easily applied using syringe or automated dispensing system; proven performance in GR-326 testing

Norland index matching adhesives

Туре	Description	Cure
NOA 60	General purpose adhesive for bonding doublets, prisms or mounting components	UV
NOA 61	Preferred adhesive for military optics; meets MIL-A-3920; used for optics exposed to temperature extremes; low shrinkage	UV
NOA 63	Cures well in thick sections; use as fillet bond to hold lenses in place or for bonding where low fluorescence or good transmission in UV range is required	UV
NOA 65	Flexible adhesive suitable for low strain applications or for cold blocking of lenses	UV
NOA 68	Flexible adhesive for glass or plastics such as polycarbonate, CAB or acrylic	UV
NOA 68T	Screen printable flexible adhesive for glass and plastic such as polycarbonate, CAB or acrylic	UV
NOA 68TH	Screen printable flexible adhesive for glass and plastic such as polycarbonate, CAB or acrylic	UV/HEAT
NOA 71	Provides a strong bond to glass surfaces and has excellent clarity for light guides and other applications	UV
NOA 72	Low viscosity adhesive for bonding glass or plastics such as polycarbonate, CAB or acrylic; cures with UV or visible light	UV/VIS
NOA 73	Flexible adhesive with low viscosity for bonding delicate parts	UV
NOA 74	Low viscosity adhesive for bonding CAB, other plastics and glass	UV
NOA 75	Low viscosity adhesive used for bonding polarized and polyester film, nylon, glass and other plastics	UV/VIS
NOA 76	High viscosity adhesive for bonding glass to plastic; cures with UV or visible light	UV/VIS
NOA 78	High viscosity adhesive for bonding plastic to plastic, cures with UV or visible light	UV/VIS
NOA 81	Fast curing adhesive for tacking or bonding; excellent adhesion to glass or metal; produces a hard, resilient bond	UV
NOA 83H	Fast curing adhesive that will cure with UV or heat for tacking or bonding UV opaque materials	UV/HEAT
NOA 84	Low refractive index, very low viscosity adhesive for bonding or coating glass and plastic	UV/VIS
NOA 85	Low refractive index, higher viscosity adhesive for bonding glass and plastic	UV
NOA 85V	Low refractive index (1.46), low viscosity(200), visible light curing adhesive recommended for bonding plastics that absorb UV light	UV/VIS
NOA 86	Low viscosity adhesive that meets Bellcore specification of 85C/85RH for bonding glass	UV/VIS
NOA 86H	Low viscosity adhesive that meets Bellcore specification of 85C/85RH for bonding glass	UV/VIS/HEAT
NOA 87	High viscosity adhesive that meets Bellcore specification of 85C/85RH for bonding glass	UV/VIS
NOA 88	Low outgassing adhesive for aerospace or electronic applications; excellent transmission in UV range	UV
NOA 89	Low viscosity adhesive for spin coating and bonding delicate parts	UV
NOA 1315	Low viscosity adhesive with a refractive index of 1.315 for bonding glass or plastic	UV/VIS
NOA 132	Low viscosity adhesive with a refractive index of 1.32 for bonding glass or plastic	UV/VIS
NOA 1327	Higher viscosity adhesive with a refractive index of 1.327 for bonding glass or plastic	UV/VIS
NOA 1328	Higher viscosity adhesive with a refractive index of 1.328 for bonding glass or plastic	UV/VIS
NOA 133	Low viscosity adhesive with a refractive index of 1.33 for bonding glass or plastic	UV/VIS
NOA 1348	Low viscosity adhesive with a refractive index of 1.348 for bonding glass or plastic	UV/VIS
NOA 136	Low viscosity adhesive with a refractive index of 1.34 for bonding glass or plastic	UV
NOA 13685	Low viscosity adhesive with a refractive index of 1.3685 for bonding glass or plastic	UV
NOA 1369	Low viscosity adhesive with a refractive index of 1.369 for bonding glass or plastic	UV/VIS
NOA 1375	Low viscosity adhesive with a refractive index of 1.375 for bonding glass or plastic	UV
NOA 13775	Low viscosity adhesive with a refractive index of 1.377 for bonding glass or plastic	UV/VIS
NOA 13773	Low viscosity adhesive with a refractive index of 1.3775 to boilding glass or plastic	UV
NOA 13825	Low viscosity adhesive with a refractive index of 1.3825 for bonding glass or plastic	UV/VIS
NOA 13025	Low viscosity adhesive with a refractive index of 1.39 for bonding glass or plastic	UV
NOA 142		UV
NOA 142	Low viscosity adhesive with a refractive index of 1.42 for bonding glass	
	Adhesive with a refractive index of 1.44 for bonding glass	UV
NOA 146H	Low viscosity adhesive with a refractive index of 1.46 for bonding glass or plastic	UV
NOA 160	Adhesive with a refractive index of 1.48 for bonding glass	UV
NOA 160	Higher viscosity, high refractive index adhesive (1.60) for bonding glass to glass or plastic	UV
NOA 162	Higher viscosity adhesive with a refractive index of 1.62 for bonding glass	UV
NOA 1625	Low viscosity adhesive with a refractive index of 1.625 for bonding glass	UV
NOA 164	Low viscosity adhesive with a refractive index of 1.64 for bonding glass	UV
NOA 1665	High refractive index adhesive (1.665) for bonding glass, plastics and metal	UV/VIS
NOA 170	High refractive index adhesive (1.70) with higher viscosity for bonding glass or plastics	UV/VIS



Norland index matching adhesives

Glass	Metal	Plastics	Color	Viscosity @ +25 °C [mPas]	Refractive Index	Modulus [PSI]	Tensile [PSI]	Elongation @ Failure [%]	Hardness [Shore D]
**	**	*	Clear	300	1.56	135,000	2,800	35	81
***	***	*	Clear	300	1.56	150,000	3,000	38	85
**	**	*	Clear	2,500	1.56	240,000	5,000	6	90
**	**	*	Clear	1,000	1.52	20,000	1,500	80	50
***	**	***	Clear	5,000	1.54	20,000	2,500	80	60
***	**	***	Clear	22,000	1.54	12,400	714	59	50
***	**	***	Clear	22,000	1.54	12,400	714	59	50
***	***	*	Clear	200	1.56	55,000	1,300	43	86
***	**	***	Clear	155	1.56	2,400	500	34	75
***	**	*	Clear	140	1.56	1,600	200	16	60
***	**	***	Clear	80-95	1.52	2,900	217	10	30
***	**	***	Yellow Tint	80-95	1.52	2,610	164	7	25
***	**	****	Clear	4,500	1.51	970	450	47	60
***	**	***	Yellow Tint	9,000	1.50	1,140	649	57	55
***	***	*	Clear	300	1.56	200,000	3,000	25	90
***	***	*	Clear	250	1.56	160,000	3,500	30	85
***	**	***	Clear	55	1.46	1,140	649	57	55
***	**	***	Clear	200	1.46	9,340	1,500	111	40
***	**	***	Clear	200	1.46	9,340	1,500	111	40
***	**	***	Clear	200-300	1.55	360,400	7,834	2.8	75
***	**	***	Clear	200-300	1.55	360,400	7,834	2.8	75
***	**	***	Clear	900-1,500	1.52	209,700	4,880	13	50
***	***	*	Clear	250	1.56	112,000	1,900	43	90
***	**	*	Clear	20	1.51	N/A	N/A	N/A	40
**	**	**	Clear	15	1.315	N/A	N/A	N/A	N/A
**	**	**	Clear	15	1.32	N/A	N/A	N/A	N/A
**	**	**	Clear	4,700	1.327	N/A	N/A	N/A	15
**	**	**	Clear	2,400	1.328	N/A	N/A	N/A	15
**	**	**	Clear	15	1.33	N/A	N/A	N/A	N/A
**	**	**	Clear	1,600	1.348	22,927	948	18	30
***	**	*	Clear	160	1.36	N/A	N/A	N/A	20
***	**	*	Clear	15-25	1.3685	N/A	N/A	N/A	N/A
**	**	**	Clear	2100	1.369	10,578	1,130	52	30
***	**	*	Clear	45-60	1.375	N/A	N/A	N/A	N
**	**	**	Clear	4,000	1.3775	58,984	1,744	42	45
***	**	*	Clear	45-60	1.38	N/A	N/A	N/A	N/A
**	**	**	Clear	5,600	1.3825	42,176	1,599	56	45
***	**	*	Clear	865	1.3025	42,176 N/A	N/A	N/A	45
***	**	*	Clear	20-40	1.42	N/A	N/A	N/A	N/A
***	**	*	Clear	45-60	1.44	N/A	N/A	N/A N/A	N/A
***	**	*		45-60 175					N/A
***	**	*	Clear	1,500-2,000	1.46	N/A	N/A	N/A	N/A N/A
***	**	*	Clear		1.48	N/A	N/A	N/A	
***	**	*	Clear	2,200	1.60	N/A	N/A	N/A	N/A
***	**	*	Clear	800	1.62	N/A	N/A	N/A	10
***	**	*	Clear	60-80	1.625	N/A	N/A	N/A	N/A
****	**	***	Clear	60-80	1.64	N/A	N/A	N/A	N/A
****	**	***	Clear	800-1,000	1.665	N/A	N/A	N/A	60
2004	^^	2006	Clear	4,500-5,500	1.70	90,200	863	1.3	75



dispensing units and accessories for fiber optics patchcord production

The dispensing systems from MUSASHI are used in numerous industrial processes, such as automotive, cable assembly, optical module manufacturing, electronics, solar cell manufacturing and medical technology. A large choice of consumables, like syringes, nozzles and adapter hoses cover all customer needs.

When handling liquid materials process parameters like stability, flow volume and the curing profile of the used materials are of paramount importance. Permanent monitoring and control of these parameters is essential to ensure stable dispensing during the process, even with self-curing materials.

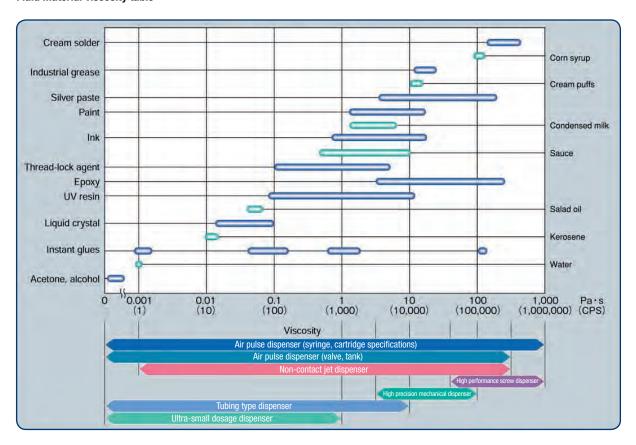
High precision systems optimize the production flow, lower the costs and maximize throughput for electrical and electromechanical manufacturing sequences. When used in medical applications Musashi's solutions ensure absolute even dispensing of UV curing adhesives, silicone, cyanoacrylate adhesives and other liquid materials.

- Manual dispenser for syringes
- Syringes & syringe holder
- Adapter tube for pneumatic dispenser
- Plunger & needle for threaded syringe
- Pneumatic syringe dispenser





Fluid material viscosity table





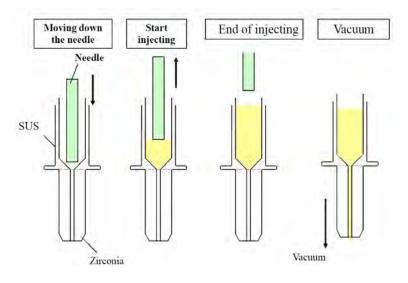
adhesive injection systems for ferrules

Shotmaster is an automated solution for dispensing adhesives into ferrules of fiberoptic connectors. The robot arm allows for precise positioning of the syringe needle in relation to the ferrule hence avoiding later failure of connectors due to glue misplacement. The integrated dispense system corrects for the glue changing its viscosity over time hence making sure always same volume is injected in the ferrule. Shotmaser is the ideal solution for todays high volume, high quality fiber optic connector assembly lines.

This robot is equipped with a high precision pneumatic dispenser that accurately corrects for fluctuations in the dose volume caused by changes in viscosity, such as occur with twopart resin material.

- Streamline the injection operation
- Compatible with large variety of ferrule
- Improve workability
- Stabilizing adhesive spread
- Temperature control by peltier device
- Stabilizing of quality









ML-808AMS: High precision dispenser flexible with viscosity change

Stable dispensing of two-liquid type cure adhesive With the <auto increment function>, dispensing set conditions automatically switches step-by-step. With the <auto slope function>, the channel is set automatically just by inputting the start and end dispensing conditions.

Variable line width at a constant drawing speed. Ideal for automation lines and centralized control from host computer because the RS-232C communication function is provided.

Centrifugal bubble eliminator for syringes



This bubble eliminator removes bubbles that are generated when filling material into syringes using centrifugal force. Simple operation: Put liquid-filled syringes into the machine and press the switch. Two models are available depending on the syringe size. Clean and simple bubble removal for various fluids such as epoxy resin and grease.



Bevore removing the bubbles

After removing the hubbles



remote controlled curing oven

1Cure is the first curing oven for MT and single mode fibers that can be remotely controlled. The 4" full color LCD touch-screen enables to set up and adjust the temperature. Temperature monitoring at the actual connector fixture eliminates temperature error. The systems utilizes "ramp cure" technology for eliminating fiber cracking especially on larger core fibers by utilizing ramp and soak cycles. This significant advancement is useful for large core and multifiber applications. It also allows for the potential to standardize on one epoxy for various applications by customizing time and temperature profiles.

1Cure can be used for both horizontal (MT) and vertical curing applications. The oven features a horizontal curing base with a removable 24 position fixture for MT (MPO) and a convertible lid providing cable access to a block to accommodate up to 96 single fiber termini (72 for the 1Cure-200) to cure in a vertical position.



The internal 15 degree tilt mechanism for the horizontal cure allows for 0 or 15 degree curing angle to prevent fibers from retreating during bare, buffered or ribbon fiber applications. 1Cure features network connectivity with remote programmability and access, and stores up to 999 programmes.

Key Features

- Remote monitoring and programming of ovens
- IT networkable
- Touch screen interface
- MT or Single-Fiber curing
- Flat to angled internal tilt for horizontal curing

Applications

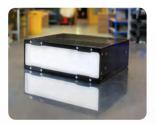
- Cable Assembly Fabrication
- Data Center
- Telecom, Central office
- CATV, Head ends
- Medical, Military, Specialized

curing equipment – UV

Combining quality, robustness and reliability, our industrial UV LED systems for UV curing applications meet the requirements of the industrial world. All devices ensure a controlled process regardless of the surface and insolation power.

Utilize our UV LED solutions for UV-curing (photoinduced polymerization) of your adhesives, inks or coatings. The energy of UV light will allow the chemical compound to cure instantly.









Туре	Description						
UTARGET	Powerful, flexible and easy-to-use UV LED spot curing system for a wide range of applications						
UV CHAMBER	Ergonomic and powerful UV LED curing cabinet for reliable and repeatable curing						
UBAR	Homogeneous, Flexible & Reliable - can be installed in series without shadowed areas						
UCUBE	Two maximal power options (250/1000 mW/cm²), best performance at high working distance						
UFIBER	Powerful, Flexible & Compact UV LED spot curing system with controller and up to 6 heads						
ULINE	Water-cooled UV LED system reaching 16 W/cm² with latest UV LED generation						
UPIN	Powerful and Accurate UV LED system with up to 4 W/cm² for pinning processes						
USHARP	Ultra-Flexible & Compact UV LED spot system with adjustable optics allowing sharp spots						
USPOT	Compact & Powerful UV LED spot to speed up processes, high irradiance at high working distance						
USTRAIGHT	Air cooled system, up to 12 W/cm², various lengths (75 mm, 150 mm, 225 mm, 300 mm,)						
UPOWER	UV LED system power supply for up to 6 light sources - PLC, timer and switch modes						



oven for vertical curing applications

Our 1Cure-VO epoxy curing oven is used for vertically bonding fiber optic termini used in telecom, aerospace, medical, and other industrial applications. Precision PID temperature control with up to 9 programs for single or multiple step curing processes allows the user to follow industry best practices to improve cross linking of epoxies and ensure long term reliability of products. 1Cure-VO also utilizes ramp curing technology for better epoxy bonding through improved cross-linking, eliminating core cracking on large core fibers and allowing to standardize on one epoxy for various applications by utilizing ramp/soak capabilities.

Three models are available: Depending on the choice of curing block, the single-block oven 1Cure-VO-S features up to 30 ports, while the dual-block oven 1Cure-VO-D allows up to 60 ports and the quad-block oven 1Cure-VO-Q accommodates up to 120 ports



total. Various oven blocks and accessories allow for processing of all standard connector types (SC, LC, ST, FC, MU), Uniboot and MIL 29504 connectors.

Key Features

- Ramp Step Cure Capable
- Vertical Curing Applications
- Thermocouple in fixture for accurate temperature control
- 9 Programs with up to 64 steps per program

Applications

- Cable Assembly Fabrication
- Medical Applications
- Aerospace / Military Terminations
- Custom Applications

This low temperature curing is due to the crosslinking of molecular chains which compose the material and differs from conventional thermal drying relying on evaporation.

The portfolio of our UV LED solutions offers the choice between different illumination shapes like circular, spot, line or flood. The spectrum of maximum UV power or irradiance ranges from 0.25 W/cm² to 16 W/cm².





Make your choice from small and flexible handheld systems to larger systems that can be installed in series to reach larger exposure areas all the way to fully automated UV cabinets.

Max. Irradiance @ Wavelength [mW/cm²]				Mains Supply	Dimensions	
	365 nm	385 nm	395 nm	405 nm		
	1,400	1,900		100 V - 240 V AC	Ø 36 mm x 150 mm	
	250 / 1,000				100 V - 240 V AC	Interior 300 mm x 300 mm x 300 mm
		50	00		24 V DC	209 mm x 121 mm x 67 mm
	900	1,000			48 V DC	180 mm x 110 mm x 110 mm
	550				N/A	Ø 12 mm x 92 mm
	14,000		16,000		48 V DC	165.5 mm x 100 mm x 65 mm
	3,200		4,000		48 V DC	233.9 mm x 78 mm x 41 mm
	700	900		24 V DC	Ø 32 mm x 144200 mm	
	3,300	3,650			24 V DC	116 mm x 65 mm x 65 mm
	10,000		12,000		48 V DC	214 mm x 173 mm x 82 mm (+ other lengths)
	N/A	N/A	N/A	N/A	100 V - 240 V AC	210 mm x 160 mm x 3600 mm







fume extraction systems

Many industrial processes can generate harmful dust and fume. Any operation where a material is cut, marked, heated, burned or physically altered in any way has the potential to produce harmful materials. Some common hazards are: gases from adhesives, solvents, a.s.o; solder fume; weld fume; laser fume from plastics, metals, wood etc.; respirable dust. Many types of gases, dust and fume created by these applications are hazardous to health if inhaled. They can also cause damage and problems to the process they are being used on.

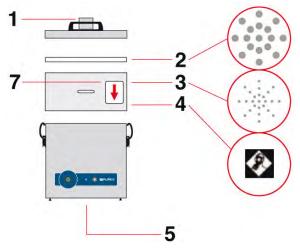


Our high performance fume extraction systems will help to

- Protect employee health
- Ensure compliance with Health & Safety regulations such as OSHA, NIOSH, COSHH, MAK, AFNOR and HSG258 or equivalent
- Increase production speeds
- Reduce complaints by operators due to odours, dust and vapours
- Avoid the possible cost of health compensation claims
- Reduce the cost & time to clean laser lenses, conveyors, guarding, soldering machines and other equipment
- Reduce product contamination
- Provide a better working environment
- Reduce downtime

Local exhaust ventilation (LEV) system operation

Our high performance internal or LEV (local exhaust ventilation) fume extraction systems capture fumes at the source thereby preventing fumes escaping into the workplace. They also filter hazardous particles and gasses which an external system would pump into the outside environment causing pollution. Using an internal filter system also avoids issues with environmental regulations and potential complaints from neighbouring businesses about fumes and odours. Our LEV systems sit next to the process, and the extraction rate can be altered precisely to suit the application. The machines are precision made from stainless steel, simple to install, quiet in operation and easy to move if the process moves.



- 1) Air inlet
- 2) Quick change pre-filters deliver longer filter life
- 3) Submicronic (HEPA) filtration removes 99.997% of particles down to 0.3 microns
- 4) Activated carbon filtration removes harmful gas
- 5) Clean air returned to workplace
- 7) Filter identification label





FumeBuster

System Features

- Single arm and dual arm versions available
- Audible and visual filter blocked alert
- Low capital and running costs







Main filter – HEPA Chemical, FumeSafe for FumeBuster

Pre-filter – Pad F5 for FumeBuster

FumeCube

System Features

- Single arm and dual arm versions available
- Automatic electronic flow control keeps extraction constant even as the filter blocks
- Adjustable airflow
- VariColour LED filter status monitor with audible warning
- Low capital and running costs





Main filter – HEPA Chemical for FumeCube



Pre-filter – Pad F5 for FumeCube

FumeCube MAX

System Features

- Hose kit, single arm kit & dual arm kit available
- Automatic electronic flow control maintains a constant extraction rate even as the filter blocks
- Adjustable airflow
- VariColour filter blocked warning system
- Low capital and running costs





Main filter – HEPA Chemical for FumeCube MAX



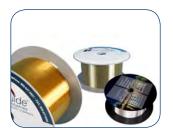
Pre-filter – Labyrinth F8/F9 for FumeCube MAX





associated products

optical fibers



Our large portfolio of optical fibers — including specialty fibers — spans from just a few meters of highly engineered fiber to several kilometers of SMF-28 compatible material. For a wide wavelength range we are offering single mode

fibers, multi mode fibers and polarization maintaining (PM) fibers as well as doped fibers or plastic optical fibers (POF). Cover your specific requirements with features like extended temperature range, high index of refraction, bend insensitivity, variations of cladding diameters or different coating options ranging from acrylate to aluminium or gold for very high temperatures.

fiber optic components



Our broad range of fiber optic components provide detachable as well as reliable connections of optical fibers with low insertion loss and high return loss. Connectors are available for standards like ST, SC, FC, DIN PC, LC, MTRJ,

SMA and others in different ferrule versions, suitable for a broad range of fibers. High quality connector adapters for almost every standard connector style as well as hybrid versions guarantee a very low insertion loss at MM and SM. These light weight products are easy to handle and allow fast panel mounting.

equipment for fiber test & inspection



Our portfolio of small and lightweight test equipment for measurement of the transmitted power in an optical fiber comprises light sources for various wavelengths, power meters for the visible and infrared do-

main and integrated solutions for sources and meters as well as OTDRs. And with our fiber optic inspection equipment like small handheld tools for inspection of fiber optic connectors or high resolution type microscopes, users can verify, certify and repair fiber optic systems in all phases of fiber optic manufacture, installation and maintenance.

fiber processing equipment



Contamination and mechanical stress from improper handling of fiber cables and connectors can harm the transmission properties enormously. AMS Technologies provides professional

hand-held tools for processing optical fibers like fiber optic strippers and cutters as well as laser-based cleaving systems or polishing machines and polishing films ensuring a scratch-less surface with best optical characteristics. In case of contamination or damage we help our customers with dedicated fiber optic cleaning tools and accessories like dedicated microfiber tissues to maintain the highest service level possible. Products include cleaning tools for the end-faces and ferrules of fiber optic connectors as well as for the end-faces of plugged connectors through an adapter.

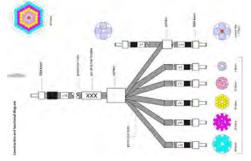


from technology components to turnkey solutions

fiber bundles

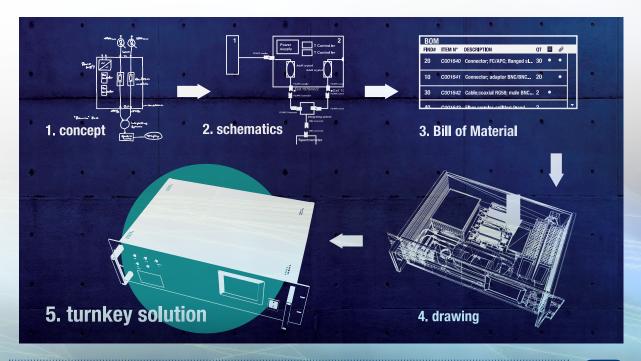
AMS Technologies has a proven track record of working with our OEM customers to design and build the most different configurations of bundled assemblies for a wide variety of photonics systems. These are used for performing optical sensing and laser power delivery for industrial, medical, military and research applications. We design and engineer assemblies using not only our range of silica core, polarization maintaining, erbium-doped and plastic optical fibers, but also borosilicate glass or chalcogenide fiber. Our assemblies are available with various numerical apertures as well as with the widest range of custom and standard endfittings/connectors and outer jackets to tailor a product exactly to your technical and economic requirements.





optical racks

Based on customer requests, AMS Technologies develops and delivers optical racks. These customized solutions integrate, active components like lasers, LEDs or amplifiers with passive components (fibers, lenses, mirrors, filters, connectors, attenuators...), optomechanical parts (fixtures, holders, translators, stages...), thermal management (TECs, heatsinks, cooling plates, temperature sensors...) electronics (power supplies, drivers, temperature controllers, interface...), user interface and software. Starting with a concept, the AMS experts provide every project step from schematics, BOM creation and drawings all the way to manufacturing your turnkey solution.













enabling your ideas.

Optical, Power and Thermal Management Technologies

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