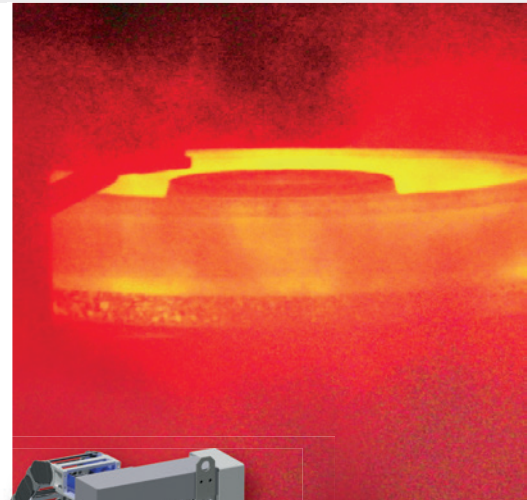
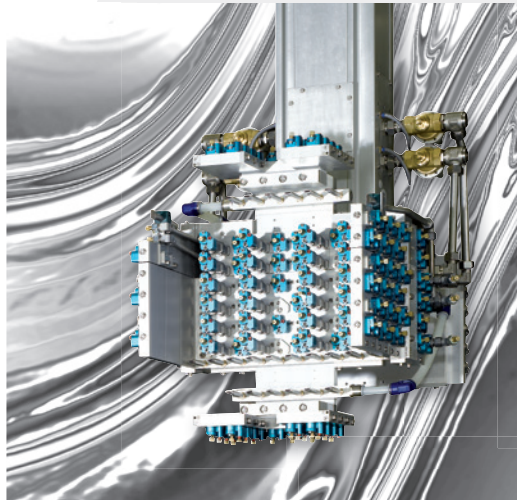
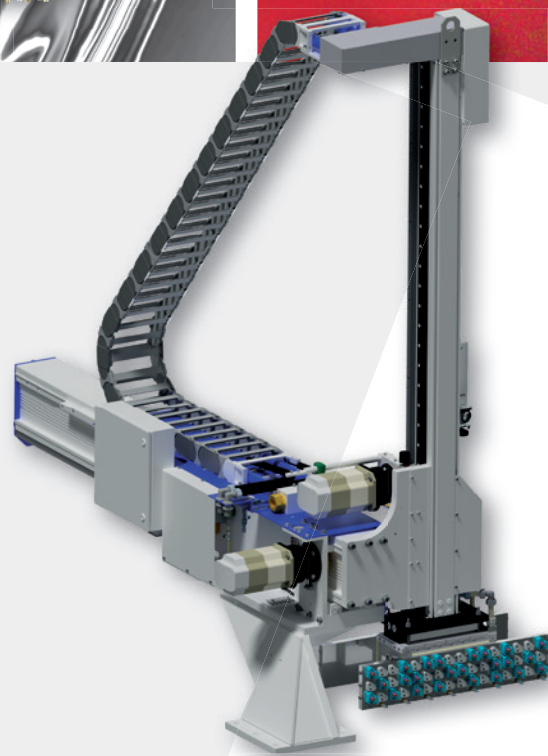


# EXCELLENCE IN SPRAYING SOLUTIONS

Always at Your Service - AED



AED 1000 LST  
Linear Spray Machine

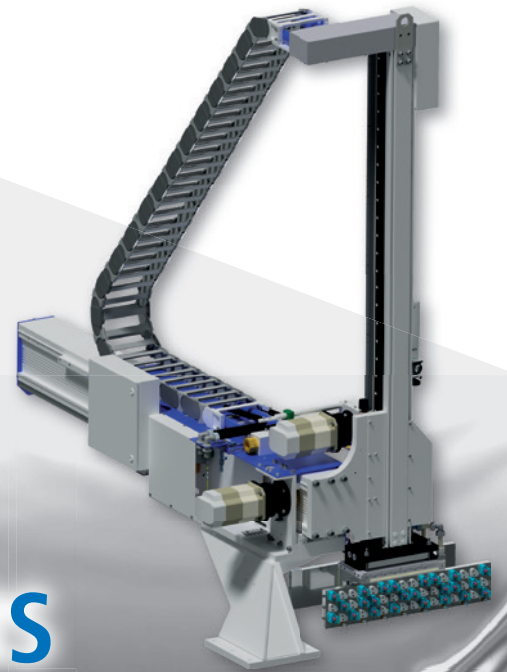


[www.aed-automation.com](http://www.aed-automation.com)

**AED** AUTOMATION  
Excellence in Spraying Solutions

The AED 1000 LST linear spray machines combine all well-proven features of more than 40 years experience.

The modular concept can be adopted to all specific customer needs. The incorporated sensors and actuators allows the monitoring of process relevant information with respect to „Industry 4.0“



# EXCELLENCE IN SPRAYING SOLUTIONS

## CUSTOMER BENEFITS

- Shorter cycle time
- Efficient spray performance and less lubricant consumption
- High reliability
- Simple maintenance
- Industry 4.0 compatibility
- Simple programming and documentation of relevant process data
- Flexible adjustment of parameters to cope with the different needs of the die

## INDUSTRY 4.0 COMPATIBILITY

- Control Siemens S7-1500 with Pro-face HMI
- IO Link Master Profinet, IO-Link connection to sensors and actuators
- Spray parameters stored in the spray program
- Plug & play for all sensors and actuators
- Status indications / information:
  - Process data in real time
  - Parameter settings
  - Monitoring and documentation of all relevant process data
  - System status
  - Status of sensors and actuators

## INTUITIVE AND SIMPLE PROGRAMMING



## FEATURES

- 5 different versions, AED 1000 LST 1/2/3/4 as well as AED 1000 LSCTC1
- Telescopic versions for AED 1000 LST 1/2/3/4
- Filter for lubricant and air
- Input-side monitoring of all media
- Rinsing with water to clean the machine
- Simple retrofit for micro spray applications
- Optional:
  - Proportional valves for lubricant and air
  - Settings easily programmable via teach panel
  - Flow measurement for lubricant and air
  - „Warm-up“-program to minimise start-up scrap

# TECHNICAL DATA

## Technical Design

Feature	AED 1000 LSTC1 Data	AED 1000 LST1 Data	AED1000LST2 Data	AED1000LST3 Data	AED1000LST4 Data
Drive	Siemens SIMODRIVE three-phase servo motors Nominal torque 6 Nm horizontal and vertical axes and safety holding brake, closed when currentless Protective rating IP 64	Siemens SIMODRIVE three-phase servo motors Nominal torque 6 Nm horizontal and vertical axes and safety holding brake, closed when currentless Protective rating IP 64	Siemens SIMODRIVE three-phase servo motors Nominal torque 16 Nm horizontal and vertical axes and safety holding brake, closed when currentless Protective rating IP 64	Siemens SIMODRIVE three-phase servo motors Nominal torque 27 Nm horizontal and vertical axes and safety holding brake, closed when currentless Protective rating IP 64	Siemens SIMODRIVE three-phase servo motors Nominal torque 27 Nm horizontal and 48 Nm vertical axis and safety holding brake, closed when currentless Protective rating IP 64
Power transmission	Via pinion/toothed rack for both axes, cyclo gear box.				
Guides	Linear guides with corrosion-resistant coating. Guide carriage with scraper on both sides and side seals. The design of the guides guarantees a long service life at maximum stroke.				
Lubrication	Automatic central lubrication for the toothed racks and guide elements of both axes.				
Pressure regulation	One manual regulator for lubricant	Depending on the option chosen, spraying and blow air as well as media pressures programmed manually or steplessly using the control unit. Option: Package 1, package 2 or package 3, flow control media / air	Depending on the option chosen, spraying and blow air as well as media pressures programmed manually or steplessly using the control unit. Option: Package 1, package 2 or package 3, flow control media / air	Depending on the option chosen, spraying and blow air as well as media pressures programmed manually or steplessly using the control unit. Option: Package 2 or package 3, flow control media / air	Depending on the option chosen, spraying and blow air as well as media pressures programmed manually or steplessly using the control unit. Option: Package 2 or package 3, flow control media / air
Finish (other finishes available on request)	Die spray equipment: RAL 5005 signal blue, Aluminium parts anodised silver Installation base/service panel: RAL 7038 agate grey Control cabinet: RAL 7035 light grey				

## Technical Data

Feature	AED 1000 LSTC1 Data	AED 1000 LST1 Data	AED 1000LST2 Data	AED 1000LST3 Data	AED 1000LST4 Data
Spraying circuits	2 spraying circuits, individually programmable	4 spraying circuits, individually programmable	6 spraying circuits, individually programmable	8 spraying circuits, individually programmable	8 spraying circuits, individually programmable
Blasting circuits	2 blasting circuits, individually programmable	2 blasting circuits, individually programmable	2 blasting circuits, individually programmable	2 blasting circuits, individually programmable	2 blasting circuits, individually programmable
Release agents	1	2	2	4	4
Horizontal strokes	800/1000/1200	800/1000/1200/1400	1000/1200/1400/1600/1800/2000	1600/2000/2500	2500/3000
Vertical strokes	800/1000/1200	800/1000/1200/1400/1600	1200/1400/1600/1800/2000	1600/1800/2000/2500	2500/3000
Weight of spraying tool	40 kg max.	40 kg max.	100 kg max.	160 kg max. (200 kg at telescopic version)	270 kg max.

## Technical Data Control

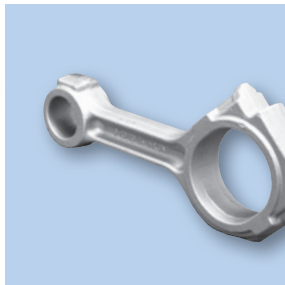
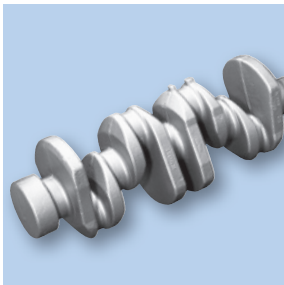
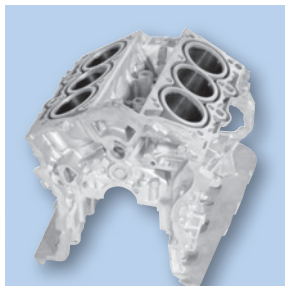
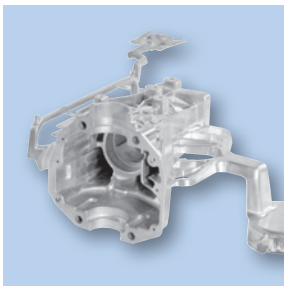
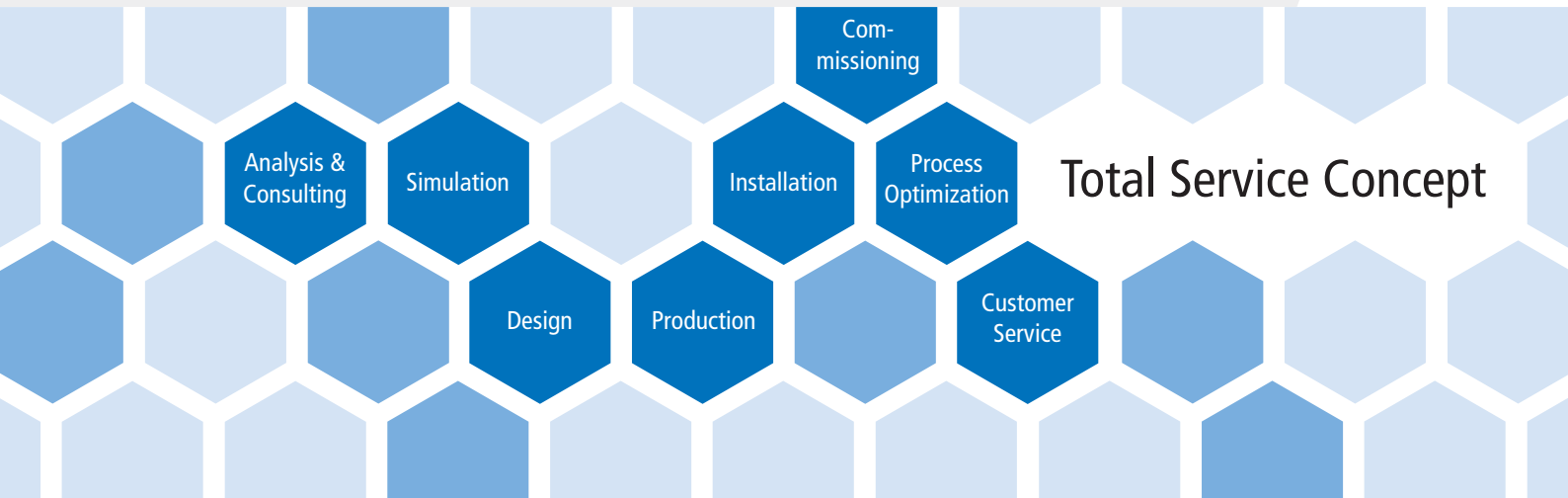
Feature	AED 1000 LSTC1 Data	AED 1000 LST1 Data	AED 1000LST2 Data	AED 1000LST3 Data	AED 1000LST4 Data
Control	Siemens S7-1500	Siemens S7-1500	Siemens S7-1500	Siemens S7-1500	Siemens S7-1500 / KUKA KMC 4
Converter	Sinamics S120	Sinamics S120	Sinamics S120	Sinamics S120	Sinamics S120 / KUKA KMC 4
Speed	0.01 - 1.5 m/s, freely programmable for both axes	0.01 - 1.5 m/s, freely programmable for both axes	0.01 - 1.5 m/s, freely programmable for both axes	0.01 - 1.5 m/s, freely programmable for both axes	0.01 - 1.5 m/s, freely programmable for both axes
Acceleration	3 m/s <sup>2</sup>	3 m/s <sup>2</sup>	3 m/s <sup>2</sup>	3 m/s <sup>2</sup>	3 m/s <sup>2</sup>
Positioning accuracy	< +/- 0,5 mm	< +/- 0,5 mm	< +/- 0,5 mm	< +/- 0,5 mm	< +/- 0,5 mm
Repeat accuracy	< +/- 0,25 mm	< +/- 0,25 mm	< +/- 0,25 mm	< +/- 0,25 mm	< +/- 0,25 mm
DCM interface	Profibus and Profinet acc. to Dispo025, others on request	Profibus and Profinet acc. to Dispo025, others on request	Profibus and Profinet acc. to Dispo025, others on request	Profibus and Profinet acc. to Dispo025, others on request	Profibus and Profinet acc. to Dispo025, others on request

## Connection Data

Feature	AED 1000 LSTC1 Data	AED 1000 LST1 Data	AED 1000LST2 Data	AED 1000LST3 Data	AED 1000LST4 Data
Compressed air	1 x DIN 2553 G 1 1/4" D35 NW32	1 x DIN 2553 G 1 1/4" D35 NW32	1 x DIN 2353 G 1 1/2" D42 NW38	1 x DIN 2353 G 2" D56 NW50	1 x DIN 2353 G 2" D56 NW50
Spray and blow air	5 - 8 bar	5 - 8 bar	5 - 8 bar	5 - 8 bar	5 - 8 bar
Air consumption	500 Nm <sup>3</sup> /h at 6 bar	500 Nm <sup>3</sup> /h at 6 bar	1000 Nm <sup>3</sup> /h at 6 bar	1000 Nm <sup>3</sup> /h at 6 bar	1500 Nm <sup>3</sup> /h at 6 bar
Release agent	1 x DIN 2553 G 3/4" D22 NW20	2 x DIN 2553 G 1/2" D15 NW13	2 x DIN 2353 G 3/4" D22 NW20	4 x DIN 2353 G 3/4" D22 NW20	4 x DIN 2353 G 3/4" D22 NW20
Lubricant pressure	4 - 7 bar	4 - 7 bar	4 - 7 bar	4 - 7 bar	4 - 7 bar
Release agent consumption (max.)	30 l/min at 6 bar	30 l/min at 6 bar	40 l/min at 6 bar	80 l/min at 6 bar	80 l/min at 6 bar
Water (rinsing)		1 x DIN 2553 G 1/2" D15 NW13, 4 bar	1 x DIN 2553 G 1/2" D15 NW13, 4 bar	1 x DIN 2553 G 1/2" D15 NW13, 4 bar	1 x DIN 2553 G 1/2" D15 NW13, 4 bar
Connected load	ca. 5 kVA	ca. 5 kVA	ca. 8 kVA	ca. 10 kVA	ca. 10 kVA
Mains voltage	3 x 400V PE +/- 10 %	3 x 400V PE +/- 10 %	3 x 400V PE +/- 10 %	3 x 400V PE +/- 10 %	3 x 400V PE +/- 10 %
Mains frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Ambient temperature	+5°C - 40°C without cooling unit	+5°C - 40°C without cooling unit	+5°C - 40°C without cooling unit	+5°C - 40°C without cooling unit	+5°C - 40°C without cooling unit

# AUTOMATION AND INTEGRATION

AED is spraying automation - but we can do more. When it comes to line automation, AED can also supply and integrate equipment for various automation functions - complete systems from one source.



Always at Your Service - AED

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