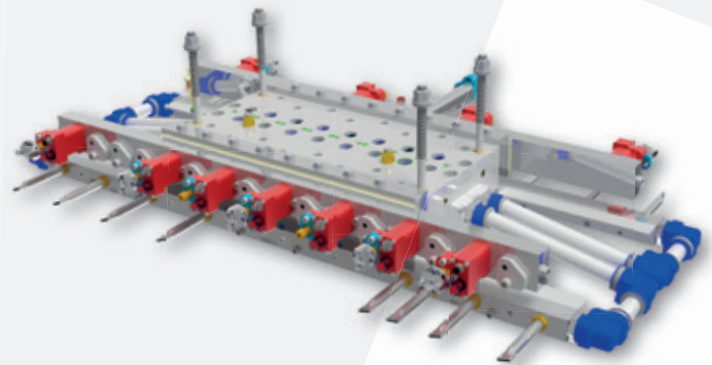
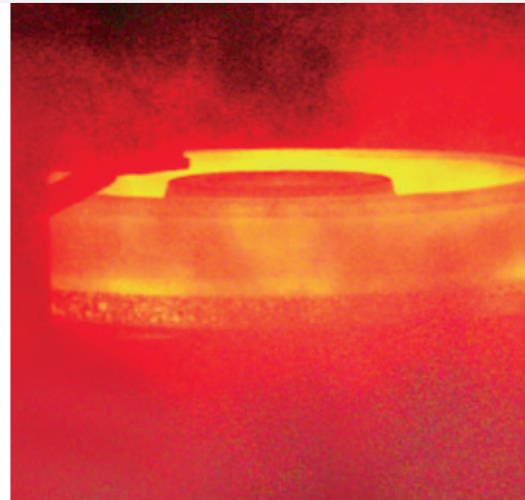
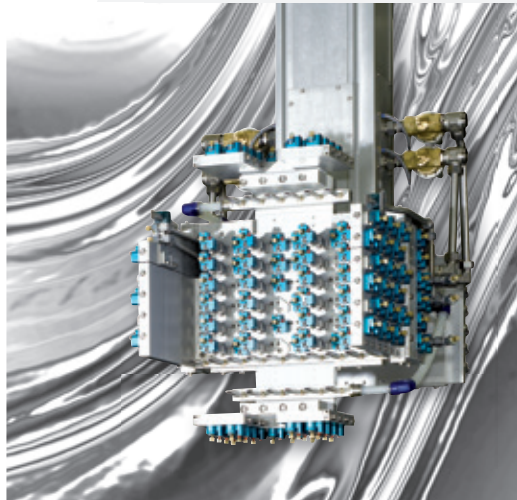


EXCELLENCE IN SPRAYING SOLUTIONS

Always at Your Service - AED



DELTASPEED

State of the Art
Minimum Quantity Spraying

www.aed-automation.com

AED AUTOMATION
Excellence in Spraying Solutions

EXPERIENCE

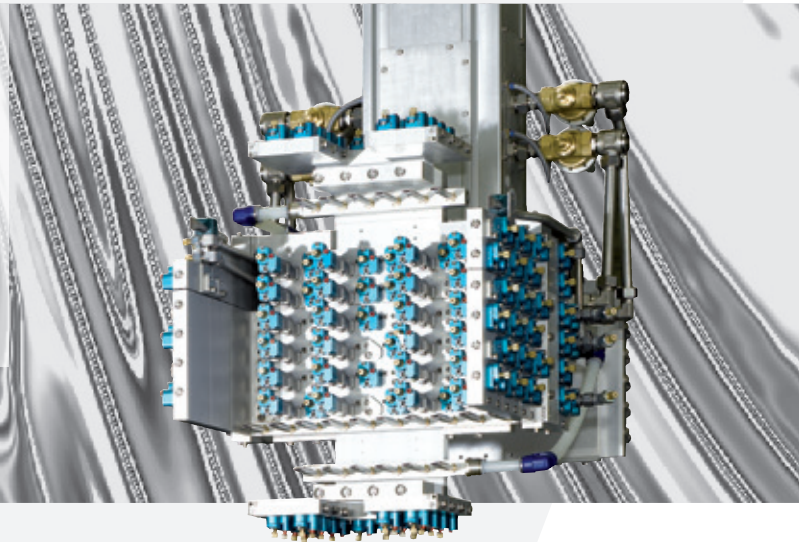
Since 1973 AED Automation - formerly known as Acheson - is an innovative leader in spraying automation for casting and forging industries. Over the years, several generations of spraying automation technology were introduced to the market. Using Acheson technology has improved many processes of numerous customers.

1999 the Deltacast® Liquid Powder™ system was introduced. This revolutionary technology was another step ahead in foundry spraying technology. The technology follows the rules of minimum quantity media use. Liquid Powder systems have proven their performance in many customer processes.

2011 AED introduced a new technology - based on well proven Flextool technology, following the new trend for micro spray applications in die casting.

DELTASPEED

A Perfect Combination of Precision and Speed for Minimum Quantity Spraying of Release Agents



The DELTASPEED technology is a special upgrade for our Flextool™ spraying tools. A combination of Flextool™ modules plus the DELTASPEED kit is allowing the application of minimum lubricant quantities.

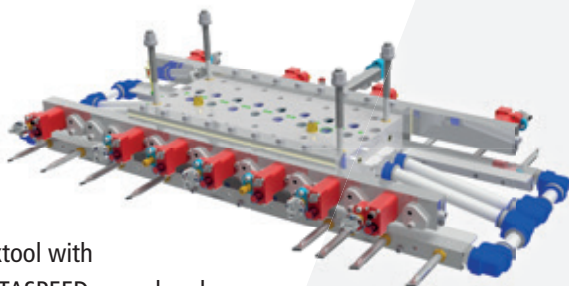
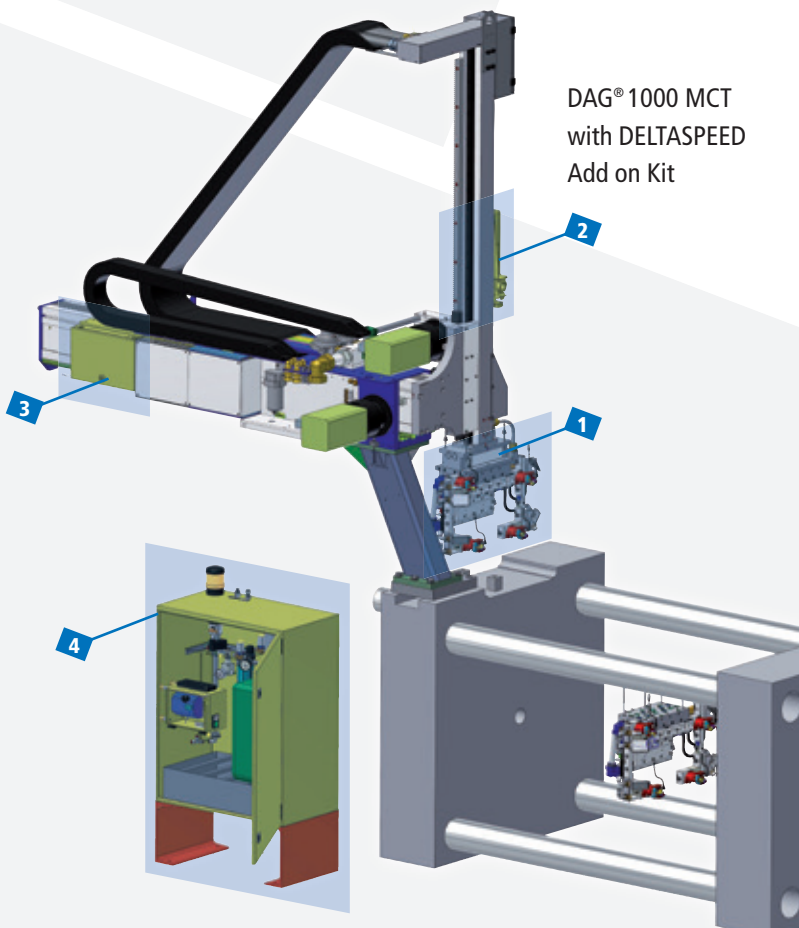
The installation of the DELTASPEED system can be based on a standard DAG® 1000 MCT linear sprayer or a DAG® 3000 RSFLT robotic spray system.

The complete DELTASPEED technology consists of:

- 1** = DELTASPEED spray heads on Flextool base
- 2** = Connector box for lubricant and energy
- 3** = DELTASPEED control module
- 4** = DELTASPEED supply unit

Flextool FLT 8
Die Geometry

DAG® 1000 MCT
with DELTASPEED
Add on Kit



Flextool with
DELTASPEED spray heads

SOME PERFORMANCE FIGURES

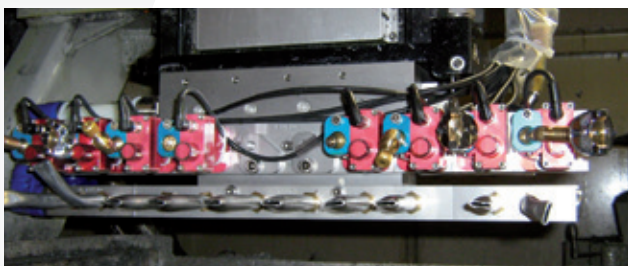
- Total spray volume per DELTASPEED nozzle = 0,3 or 0,8 or 1,7 ml
- Flow rate per DELTASPEED nozzle = 0,03 to 0,17 ml/s
- Maximum spray time = 10 sec
- 2 to 5 ml per m² are required to form a reliable coating on the die surface



EXCELLENCE IN SPRAYING SOLUTIONS

FEATURES

- Fully integrated system - turn-key solution
- Upgrade of existing equipment is possible in most cases
- Robots or 2-axis linear reciprocators can be used
- Static and dynamic spray application is feasible
- Low(er) number of nozzles - easy setup and maintenance
- Lower spraying time even at "big" dies
- Combinable with external die cooling - "hybrid" applications
- AED process know how and services for installation, set-up and process optimization
- Individually programmable DELTASPEED spray heads
- Function monitoring individually for each DELTASPEED spray head optionally possible



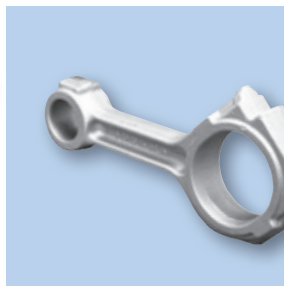
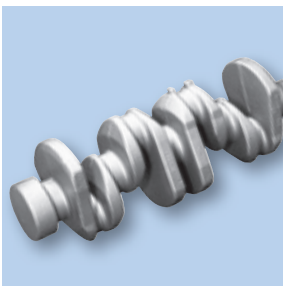
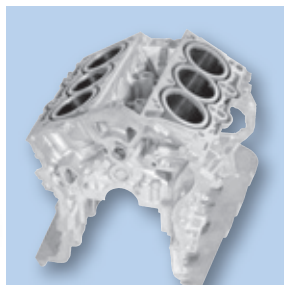
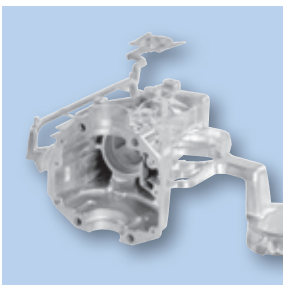
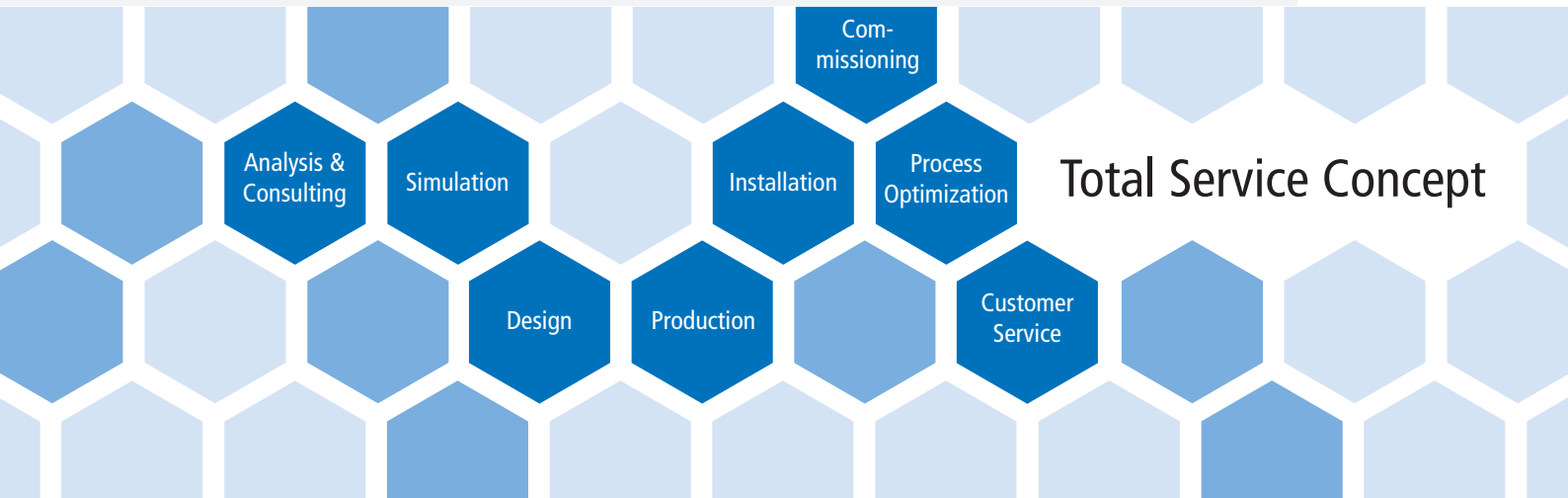
* Rem.: Arguments are valid for high quality lubricants with 100% active content (oils) or highly concentrated emulsions

ADVANTAGES

- ◆ **Lubricant***
 - Excellent wetting properties
 - No or less contamination of waste water with lubricant
 - Less fumes
 - Significantly less lubricant necessary
 - No risk of bacterial contamination
- ◆ **Die and Casting**
 - Excellent release properties
 - Very clean surfaces
 - Min. porosity of castings
 - No corrosion
 - Separation of cooling and lubrication (hot spot cooling possible)
 - Increased die life
- ◆ **Spraying Process**
 - Emissions minimized
 - No "Black Hole" effects
 - Variable tool set-up for perfect surface coverage
 - Very short spraying times in case there is no spray cooling needed.
 - Well suited for bigger dies (e.g. for structural parts)
 - Modular setup allowing step by step technology change
 - Fully controllable spray parameters
 - Documentation of all relevant process parameters
 - Highest reproducibility
 - Traceability of process parameters

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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