

RMA 600 Series Introduction Presentation

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CARLISLE FLUID TECHNOLOGIES | CONFIDENTIAL



Confidential RMA 600 Series Overview



PRODUCT LINE OVERVIEW



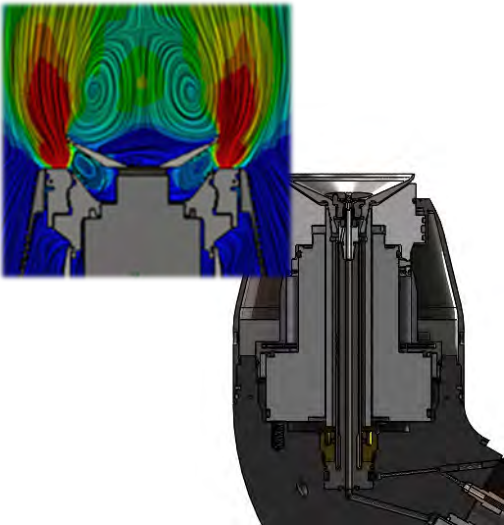
Value Proposition

- Updated design improves cleanliness of front of applicator
- Better spray pattern control recognized from new design resulting in improved transfer efficiency
- Improved components extend life of applicator

Improved Cleanliness With New Designs



Uncovered cleanliness issues causing material to get sucked behind the bell cup



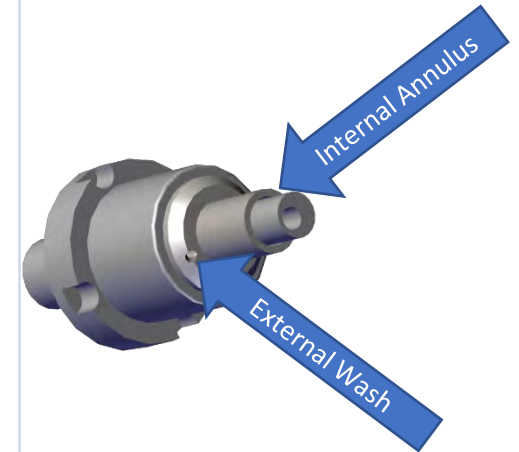
New shaping air design improved customer cleaning intervals from 2 hours to 4 hours at multiple locations



Modified bell cup and splash plate helped to decrease cleaning time of bell cup to 7.5 seconds



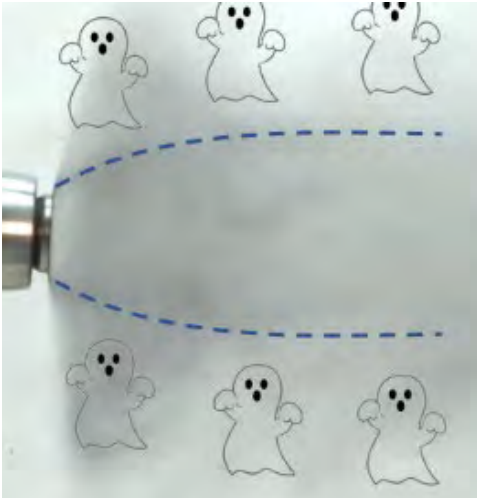
Improved fluid nozzle reduced customer solvent consumption over 70% (internal and cap cleaner flush total)



Improved Ghost Pattern & Pattern Sizes



What is a ghost pattern?



Testing proved acceptable
3.5"-16" range with
improved 65mm setup



T.E. improvements of 2-3%
compared to 500 series have
been realized



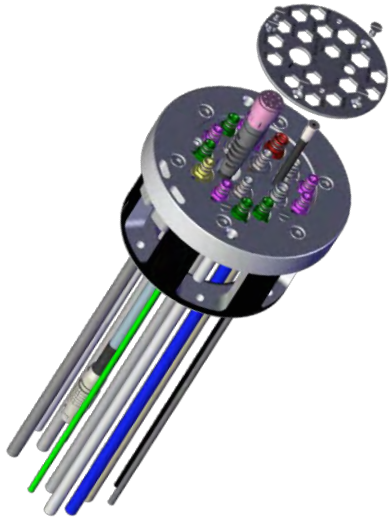
End result allows for greater
flexibility of one setup and
better penetration potential



Improved Durability Across Several Areas



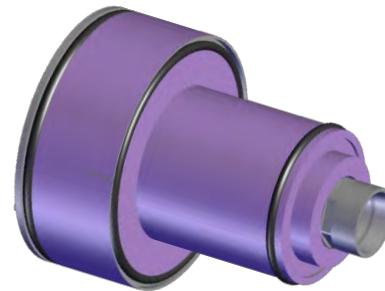
Tubing bundle improved connections
– fiber optics and voltage cables
easier to remove/new “D”
connections on other hoses



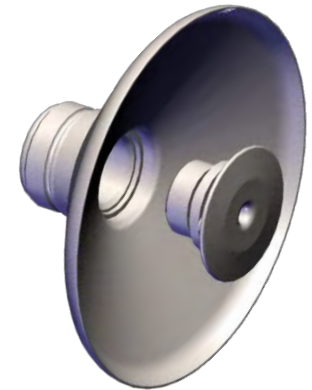
Knuckle – simpler design and routing
of components



Turbine – graphite bearings
significantly improves life. Customers
have seen 2x-3x increase in life, less
likely to be damaged when robot
crashes, rated up to 100,000 rpm



One-Piece Splash Plate – Easier and
more consistent to install, new design
makes it extremely difficult to flood
the turbine from improper
installation



Simplified Ordering RMA600 Series



- RMA660
- RMA661 (non-estat)
- RMA670
- RMA680
- Dual Shape Air for all Options
- Tubing Bundle Also Simplified (Page 83 Manual)

	Purge		Shape Air Kit		Bell Cup Size	Bell Cup Type A	Splash Plate B	Fluid Tip CC
	Single	Dual	Dual Air	Single Air				
RMA660-1230ABCC	•		•		30 - 30mm Diameter	1. Titanium Serrated 2. Titanium Serrated DLC Coated 3. Titanium Non-Serrated 4. Titanium Non-Serrated DLC Coated	1 - S.S. With Titanium Base	07 - 0.7mm/.028in Opening 09 - 0.9mm/.035in Opening 10 - 1.0mm/.039in Opening 11 - 1.1mm/.045in Opening 13 - 1.3mm/.051in Opening 16 - 1.6mm/.062in Opening
RMA660-2230ABCC		•	•					
RMA660-1265ABCC	•		•		65 - 65mm Diameter	1. Titanium Serrated 2. Titanium Serrated DLC Coated 3. Titanium Non-Serrated 4. Titanium Non-Serrated DLC Coated	1 - S.S. With Titanium Base	07 - 0.7mm/.028in Opening 09 - 0.9mm/.035in Opening 10 - 1.0mm/.039in Opening 11 - 1.1mm/.045in Opening 13 - 1.3mm/.051in Opening 16 - 1.6mm/.062in Opening
RMA660-2265ABCC		•	•					
RMA660-1281ABCC	•		•		81 - 81mm Diameter	1. Titanium Serrated 2. Titanium Serrated DLC Coated 3. Titanium Non-Serrated 4. Titanium Non-Serrated DLC Coated	1 - S.S. With Titanium Base	07 - 0.7mm/.028in Opening 09 - 0.9mm/.035in Opening 10 - 1.0mm/.039in Opening 11 - 1.1mm/.045in Opening 13 - 1.3mm/.051in Opening 16 - 1.6mm/.062in Opening
RMA660-2281ABCC		•	•					

Tool Kits



Complete Kit

- A13082-01 – RMA660 and RMA670
- A13082-02 – RMA680

Unique Parts for RMA600 Series

- A14826-00 BELL CUP ASSEMBLY TOOL
- A14828-00 THREADED SPLASH PLATE TOOL



Highly Recommended Part

- A14208-00 65mm Bell Cup Removal Tool



End Of Life Schedule



RMA 303 Series

- Top Assemblies – December 31st, 2022
- Spare Parts – December 31st, 2024

RMA 500 Series

- Top Assemblies – April 30th, 2024
- Spare Parts – December 31st, 2028

Unique Wear Parts

- Shaping Air
- Fluid Nozzles
- Bell Cups/Splash Plates



Upgrade Kits



- U660 and U670 for RMA 660 and RMA 670
- Top Assembly Discount Structure
 - Prices are in the April, 2022 Price Sheet
 - Range From \$14,000 to \$15,500
- U6X0-CCCCTTM
 - CCC - Bell Cup Type
 - 6500 – 65mm Titanium Serrated
 - 6501 – 65mm DLC Coated Titanium Serrated
 - 6502 – 65mm Titanium Non-Serrated
 - 6503 – 65mm DLC Coated Titanium Non- Serrated
 - TT – Fluid Tip Size
 - 07-16
 - .7 mm to 1.6 mm
 - M – Purge Type
 - 1 – Single Purge
 - 2 – Dual Purge

2. Replacement of Upgraded Components



Components included in U660 upgrade kit:

1. Shaping Air Kit (A14492-01)
 - A. Turbine Retaining Ring and O-Ring (A12066-01 and 79001-43)
 - B. Lower Shape Air Ring Assembly (A14656-01)
 - C. Shaping Air Shroud (A14493-01)
2. Bell Cup Assembly (A14665-XX)
3. Fluid Tip and O-Ring (A14467-XX and 79001-44)
4. Dual Purge Cup Wash Tubing Assembly (A14705-00, included with U660-XXXXXX2 kit)
5. Single Purge Cup Wash Tubing Assembly (A14704-00, included with U660-XXXXXX1 kit)
6. Port Plug (A14690-00, quantity dependent on order configuration)

Upgrade to 600 Series

- 560-660 and 570-670 base parts equivalent
- Recommended settings are provided for customers

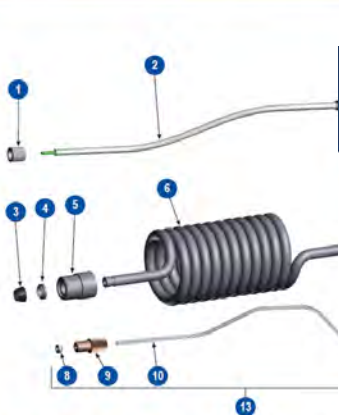


DUAL SHAPE AIR PATTERN SIZE				
Turbine Speed (krpm)	Inner Shape Air (SLPM)	Outer Shape Air (SLPM)	Fluid Flow (cc/min)	Pattern Size (mm/inches)
60	550	0	100	75/3
50	550	0	100	114/4.5
60	500	150	100	89/3.5
50	500	150	100	121/4.75
60	75	500	200	203/8
50	75	500	200	248/9.75
40	0	500	200	254/10

Placemats For Customers



RMA-660 Body Assembly (Dual Purge)



CARLISLE
A CARLISLE BRAND

North America
EMEA
China
Japan

1-800-360-4837
44-01202-01708
86-21-5111-2000
81-43-785-8427

marketing@carlisle.com
marketing_eur@carlisle.com
marketing_china@carlisle.com
jp@carlisle.com

BGK **BINKS** **DEVILBISS** **Hosco** **MS** **Ransburg**

Carlisle.com

RMA-660 Body Assembly



RMA-660 Atomization Assembly



CARLISLE
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EMEA
China
Japan

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86-21-5111-2000
81-43-785-8427

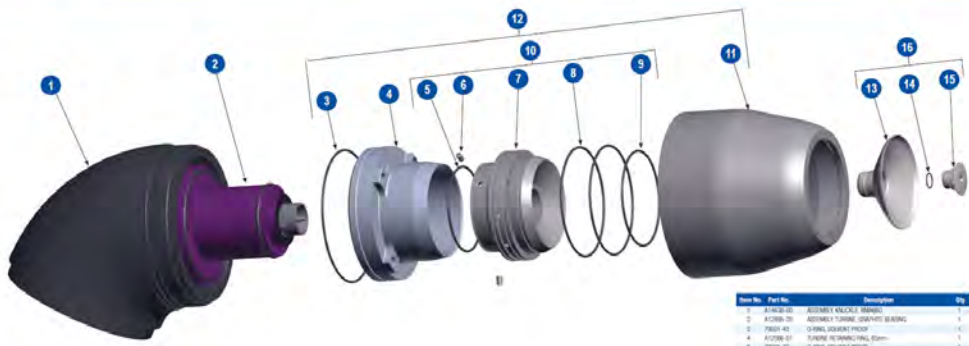
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jp@carlisle.com

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RMA-660 Atomization Assembly (65mm)



Item No.	Part No.	Description	Qty
1	A1402-00	ACCESSORY NOZZLE, REMOVAL	1
2	A1200-00	ACCESSORY TAPPING, OPERATED SEALING	1
3	F0001-00	O-RING, SEALING PROOF	1
4	A1200-01	O-RING, SEALING PROOF, 65mm	1
5	F0001-01	O-RING, SEALING PROOF	1
6	A1200-02	O-RING, SEALING PROOF, 65mm	1
7	A1400-01	O-RING, SEALING PROOF, 65mm	1
8	F0001-02	O-RING, SEALING PROOF	1
9	F0001-03	O-RING, SEALING PROOF	1
10	A1400-02	ACCESSORY LOWER SHAWL, 65mm	1
11	A1400-03	ACCESSORY LOWER SHAWL, 65mm	1
12	A1400-04	ACCESSORY LOWER SHAWL, 65mm	1
13	A1400-05	BELL COUP BUSH, 1/2, NON-REMOVABLE	1
14	A1400-06	BELL COUP BUSH, 1/2, NON-REMOVABLE	1
15	A1400-07	BELL COUP BUSH, 1/2, NON-REMOVABLE	1
16	A1400-08	BELL COUP BUSH, 1/2, NON-REMOVABLE	1

Innovation *Applied*

Opportunities



- Upgrade 500 Series Customers with upgrade kits
- Inform 300 Series Customers on end of life
- Work with Systems team for pricing and lead times
- Applicator and Upgrade Manuals will be added to the website this month
 - <https://carlisleft.com/en/product/rma-600-series-rotary-atomizers/>
 - Individual RMA 600 Series Literature Available Now
- Target e-stat and non-estat air spray robotic applicators
- Set up lab testing with your Carlisle Fluid Technology sales team

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Thank you

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