

<b>Application:</b> Cleaning truck transmission components	<b>Date:</b> 10/07/24
<b>Serial number:</b>	<b>Machine model:</b> Aquamaster CI-2808F
<b>Machine type:</b> Conveyorized Indexing	<b>Industry:</b> Automotive

<b>Customer summary:</b>	Customer is a global supplier for CNC machined castings.
<b>Item to clean:</b>	Transmission Components
<b>Contamination:</b>	Light soils. Parts will have been pre-cleaned and will come from a leak test.
<b>Cleanliness requirement:</b>	Part cleanliness is check in combined groups of three (3) parts. Maximum particle size to be less than 800 microns. Total mass does not exceed 70 mg.
<b>Dryness requirement:</b>	As dry as possible using a heated blowoff.
<b>Production rate:</b>	1.75 to 2 minutes per part.
<b>Process parameters:</b>	Wash (heated) and heated blowoff.

### Customer background:

Customer is a family-owned CNC shop in Wisconsin providing precision machining, assembly, and value-added services for industries like agriculture, automotive, construction, and industrial equipment.

### Challenge:

The customer needed a system to efficiently clean Allison Transmission channels with light soils after leak testing. Parts require consistent cleanliness with strict limits on particle size ( $\leq 800 \mu\text{m}$ ) and total residue mass ( $\leq 70 \text{ mg}$ ), while minimizing water spotting and ensuring fast production of 1.75–2 minutes per part.

### Solution:

The Aquamaster CI-2808F conveyorized index parts washer meets these requirements by combining a heated wash with a heated blowoff, precisely timed conveyor indexing, and custom UHMW fixtures that hold parts securely for optimal cleaning and drainage. The system's automated controls, adjustable conveyor speed, and safety interlocks ensure consistent part quality and operator safety.

### Cleaning Method:

Parts are washed with heated solution sprayed from multiple angles, followed by high-velocity heated air knives and timed compressed air cycles to remove residual moisture. RO-quality water, lower wash chemistry concentration, and slow indexing help prevent water spotting while delivering as-dry-as-possible parts ready for assembly or shipping.



Caption A



Caption B



Caption C