

#### **Product Benefits & Solutions**

MFG Tray has a line of versatile utility, high-strength fiber-reinforced polymer (FRP) composite metal parts wash-boxes whose composite material construction costs approximately one-third the price of traditional stainless steel counterparts. Designed to handle heavy payloads (150 lb. capacity), the stackable design wash-box's FRP composition is also engineered to withstand small-part washing system chemicals and provide continuous operation at temperatures to  $250^{\circ}$  F.

They also serve as a labor-saving solution-from secondary process cleaning to work-in-process primary housing. By minimizing the "dumps" from high-speed conveyor-to-container, the use of the wash-box results in less labor and reduced part damage/scrap.

The standard proprietary corrosive formulation is engineered for advanced chemical resistance over oils, grease, degreasing operations, cutting oils, etc. and can be customized per client request to meet advanced corrosion specifications. Available in a variety of sizes, the wash-boxes are also easily cleaned in hot water or steam using standard detergents.

The FRP composition provides dimensional stability and consistency for MFG Tray's in-house machining of the wash-box bottom holes ( $^{1}$ / $_{4}$ " or  $^{3}$ / $_{8}$ " diameter) and elongated side slots (2  $^{1}$ / $_{2}$ " x  $^{5}$ / $_{16}$ ) — which are also available in a variety of sizes for custom orders.

Another key end-use advantage of the durable FRP wash-box construction vs. metal wash baskets is safety. The fact is, metal wash baskets frequently break and can leave dangerous wires poking out-which presents an employee safety hazard and could also damage sensitive parts.



Fibers in MFG Tray products are multidirectional or random for optimal tensile and torsion strength of the finished part. Fiber lengths vary from 1" to 2". The composites can contain up to 35 percent of randomly oriented fibers by weight.

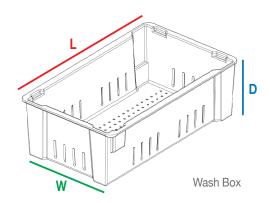


# **Metal Parts Washing Totes**

• Fiberglass-reinforced thermoset composite construction

Load capacity: 150 lb.
Temp. range: -60° to 250° F

Stackable boxes are kinder to metal parts than metal baskets. Easily cleaned in hot water or steam using standard industrial detergents. Holes in bottom are  $^{1}/_{4}$ " dia., and slots in sidewalls for faster draining are 2  $^{1}/_{2}$ " x  $^{5}/_{16}$ ". Gray color. No. 1UVP5 includes molded-in handles.



### Metal Parts Washing Totes

Outside Top			Inside Bottom			Item
L	W	D	L	W	D	No.
16 <sup>1</sup> / <sub>2</sub> "	11 <sup>3</sup> / <sub>8</sub> "	4 <sup>5</sup> / <sub>8</sub> "	14 <sup>5</sup> / <sub>8</sub>	10 1/2	4 1/2	1UVP4
17 <sup>3</sup> / <sub>4</sub> "	10 <sup>1</sup> / <sub>2</sub> "	4 1/8"	15 <sup>5</sup> / <sub>8</sub>	9 1/2	4	1UVP5
21 <sup>1</sup> / <sub>8</sub> "	15 <sup>5</sup> / <sub>8</sub> "	6"	19 <sup>1</sup> / <sub>4</sub>	13 <sup>5</sup> / <sub>8</sub>	5 <sup>7</sup> / <sub>8</sub>	1UVP3







## The material matters in material handling



"MFG Tray provided a turnkey solution as the new holes/slots provided more open space to maximize cleaning and the new formulation provided stronger resistance against the alkaline solution."



Kinder than metal. Composite containers are easier on end products than metal baskets and eliminate the damage or hazard posed by broken wire baskets.

#### How FRP takes Stainless Steel to the Cleaners

A leading manufacturer of precision screw machined components and assemblies implemented the new FRP wash-boxes to great effect for its screw machined parts cleaning and work-in-process material movement. Their purchasing manager noted their value-added versatility stating, "the pans serve a dual purpose and they certainly have a long, useful life."

As part of his role to save money, the manager sought to increase the box's value by having

MFG Tray customize them. MFG Tray was able to reconfigure the holes and slots and change the chemical resistance formula to maximize usage against their harsh alkaline mixtures used in the cleaning process. When asked about MFG Tray's performance overall, "MFG Tray provided a turnkey solution as the new holes/slots provided more open space to maximize cleaning and the new formulation provided stronger resistance against the alkaline solution. In fact, to date NO boxes have been damaged or destroyed (during our process.)"

