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## CLEAR-CUT PROGRESS

How a Leading Medical Equipment Manufacturer Slashed Downtime by 60% – and Minimized Costly Equipment Replacements – With GMA ClassicCut™ 80

### At a Glance

Client: **Smith & Nephew**

Location: **Memphis, Tennessee, USA**

Application: **Medical equipment**

Product: **GMA ClassicCut™ 80**

Productivity: **60% less maintenance and downtime**

Cost Savings: **\$40,000 savings on filtration replacement costs**

equipment layout and design. When issues with water filtration were brought to the attention of OMAX, their team identified that poor quality garnet could be the source of the problems. Prior to the issues, garnet shortages were impacting the market. Like many industrial manufacturers, Smith & Nephew saw the quality of its supplier's garnet change seemingly overnight. The garnet abrasives they were using contained ultra-fine particles, which clogged the filters in its closed-loop water filtration system. The result? Higher consumable costs and significantly more downtime.

OMAX was determined to help its client eliminate its water filtration issues and reduce maintenance downtime. It enlisted GMA to deliver a solution. We were ready to illustrate the concrete value of switching to GMA Garnet™ – and its ability to meet the client's stringent manufacturing standards.

### On Site Evaluation

After discussing the client's application and proposing GMA ClassicCut™ 80 from our line of waterjet abrasives, we met on-site to discuss how to solve these particular challenges. A simple turbidity test was conducted with GMA ClassicCut™ 80, the client's garnet and three other common garnets. This measures how much dust is included in the bag with the garnet.

GMA ClassicCut™ 80 delivered the lowest dust levels (turbidity). It produced the cleanest water of any garnet tested. After witnessing the results, Smith & Nephew gave the go-ahead to run a full off-site validation test for GMA ClassicCut™ 80.

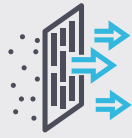
### Challenge

With a history dating back 160 years, Smith & Nephew is a trusted name in global medical equipment manufacturing. The company specializes in products for advanced wound management, trauma and clinical therapy, and orthopedic reconstruction – all of which demand the most stringent safety and manufacturing standards. Waterjet cutting is key to the Smith & Nephew manufacturing process, and the company partners with OMAX for its machinery.

Throughout their decade-long partnership, Smith & Nephew and OMAX have collaborated closely on



More Production  
and Less Costs



75%  
Reduction in  
Filter Change  
Costs



60%  
Reduction in  
Maintenance  
Downtime

"Switching to GMA ClassicCut™ 80 made a huge difference in our waterjet process. We have more uptime and less maintenance on the waterjets, plus cost savings from needing fewer filters and less cleaning. Most importantly, Smith & Nephew are able to meet the demands for each shift without dealing with filtration issues."

**James Chan**, *Manufacturing Engineer*  
Smith & Nephew

## Off-Site Validation

The most effective, objective way to illustrate an abrasive's performance is through a full-scale trial. To further demonstrate the results of our on-site test, we designed a trial using precise waterjet specifications from Smith & Nephew. The results were as clear as the water in the turbidity test: GMA ClassicCut™ 80 delivered superior cutting performance, enhanced edge quality, and resolved the water recycling issues that had long prevented peak productivity.

## Results

By making the move to GMA ClassicCut™ 80, Smith & Nephew reduced its filter component purchases by 75%. Previously, filters needed changing every two to three days, but since the switch, the filters last three to four weeks. In addition to lower consumable costs, GMA Garnet™ also decreased maintenance and downtime by 60%.

And the savings don't stop there. Determining that a low-performing, inconsistently-sized abrasive created the filtration issues eliminated the need for Smith & Nephew to purchase a new filtration system, saving \$40,000 in replacement costs.

When your manufacturing is on the line, there's no time for abrasives that clog or an unpredictable supply. With GMA Garnet™, consistency is in the bag. Ready to explore our line of superior waterjet abrasives?

**Talk to us.**