

ROBOTIC SANDING AND DEFLASHING COMPOSITE



CASE STUDY

Manufacturer boosts production and cuts costs by automating deflashing with adaptations of the TWIST COOLCUT™ XX



2500%
Parts-Per-Media Increase



95%
Uptime



CUSTOMER

Automotive OEM

INDUSTRY

Engineering and manufacturing of vehicle parts and equipment

APPLICATION

Robotic sanding and deflashing



FEEDBACK From the field

“ Working directly in partnership with the system integrator, we were able to customize the consumable product to the end-user’s current robotic cell. The purpose-built abrasive product, combined with the automatic media changer and cell design meant we could target an uptime of nearly 100%! ”

CÉDRİK ROCHON
R&D Engineer
WALTER Surface Technologies

ISSUE

Manufacturing operations were transitioning into automation.

The user required sanding discs that their robotic cell would be able to attach onto itself, use to deflash composite parts, and dispose of, all without manual intervention. The system integrator contacted the WALTER team after trying, without success, to achieve the desired functionalities with a competitor’s product. Additionally, the competitor’s support team would only be able to meet to discuss customization after 16 weeks, impacting production and revenue.

SOLUTION

WALTER delivered a high-performance customized disc in just two weeks, greatly surpassing, in terms of productivity, all other robotic cells managed by the user.

By working closely with the system integrator and user to understand the application and needs, the WALTER team modified the high-performance TWIST COOLCUT™ XX to ensure it met those needs. The designed solution made it so that the robotic arm would be able to change discs efficiently and automatically through the automatic disc changer. This delivered optimal and consistent results in terms of disc longevity, material removal and surface finish which translated to a reduction of changeovers and a 2500% parts-per-media increase due to each new WALTER disc producing 25 parts compared to the previous 1-disc-per-piece consumption ratio. This enhancement of efficiency represents a significant increase in yearly savings and a subsequent hike in production, thanks to a boosted uptime of 95%.

TAKEAWAYS

WALTER was able to provide a successful solution in record time that helped the user work better by increasing productivity, boosting uptime to 95% and reducing costs.

WALTER not only delivered on productivity but also ensured the user’s concerns were being heard and their time and resources were respected. The WALTER team quickly designed a solution that, not only answered needs, but also went beyond by increasing productivity and uptime as well as by reducing costs, all within just 2 weeks. This motivated the user to expand these operations to their other locations and to work with WALTER on enhancing other automation applications.

Boost productivity of automated processes through reliable support

Superior custom solution delivered fast

Customized discs for successful use of robotic disc changer

25 pieces-per-disc versus previous 1 piece-per-disc ratio

Increase of uptime to 95%

Hike in production and increase in yearly savings