

The Rösler Gamma® 400 G

SHOT BLASTING for surface cleaning and surface preparation represents an indispensable manufacturing phase in many metal-processing industries. Generally, blast turbines are the most expensive component of many shot blasting systems, requiring significant upkeep in terms of maintenance and wear parts.

At the GIFA exhibition in Duesseldorf, Rösler presented its newly developed and extremely versatile Gamma® 400 G blast turbine which will be setting new standards in cost efficiency. For example, compared to conventional turbines, the Gamma® 400 G offers a 100% higher uptime and a significantly improved blast performance together with drastically reduced maintenance costs.

Distinctive features of the Gamma® 400 G are the Y-shaped throwing blades, providing many technical advantages for this innovative turbine, for which a patent application is pending. By simply turning the blades around, both sides of the throwing blades can be utilised. This design helps double the uptime and results in drastically lower wear part costs.

Quick and simple exchange of the throwing blades

With conventional twin disk blast turbines, the replacement of worn throwing blades is complicated and time consuming. The impeller and control cage must be completely disassembled before the old blades can be loosened, removed and new blades inserted through the center of the twin disks. With the new Gamma® turbine design, the worn throwing blades can be easily loosened, taken out from the side and replaced with new blades after simply removing a maintenance side cover. This quick blade exchange with easy access to all wear components makes turbine maintenance not only simple but also saves a significant amount maintenance time, further helping to increase that all important uptime and reduction in operating costs.

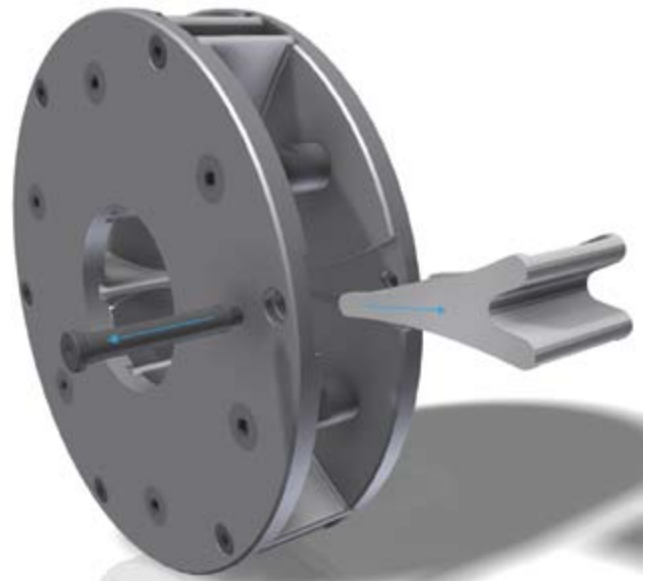
Blast performance improvement by 15% - 20%

Another key feature of this unique blade design is the improved turbine efficiency. Compared to straight blades, the curved throwing blades of the Gamma® 400 G allow a much more fluid flow of the blast media. Without increasing the turbine diameter this improves the media acceleration and produces significantly higher throwing speeds. The end result: A 15%-20% percent higher blast performance with, subsequently, shorter processing times for many shot blasting applications!

Flexible turbine drive power and media throughput

The new Rösler blast turbines have a diameter of 400 mm (about 16"). They can be equipped with drive motors from 11 up to 30 kW and generate media throughputs of up to 400 kg/min (880 lb/min). With this wide range of power options, the Gamma® 400 G is suitable for practically any shot blasting application. The Y-blades are produced by a special manufacturing process that also allows fabricating the turbine components in a highly wear resistant tool steel.

Rösler GmbH is an international market leader in the production of surface finishing, shot blasting machines, painting systems and preservation lines as well as process technology for the rational surface finishing (deburring, descaling, sand removal, polishing, grinding...) of metals and other components. Besides the German plants in Untermerzbach and Bad Staffelstein, the Rösler Group has branches in Great Britain, France, Italy, The Netherlands, Belgium, Austria, Switzerland, Spain, Romania, Russia, China, India, Brazil, South Africa and USA. ●



After simply removing a maintenance side cover, the throwing blades can be easily exchanged. Mr. Jan Reinmann, R&D manager at Rösler, explains: "Compared to conventional turbines, the technical and economic advantages of our new turbine design are so convincing that within the near future we will introduce a version with a diameter of 300 mm (about 12")."