# VORTEX BLUE

### THE BLUE STANDARD.



## THE BLUE STANDARD IS HERE. VORTEX BLUE" ROTARY FILES.

The distinctive color of Vortex Blue rotary files is a visible titanium oxide layer resulting from DENTSPLY Tulsa Dental Specialties' proprietary processing of NiTi wire for optimum performance. But the real differences become apparent when you try Vortex Blue rotary files for yourself.

#### GREATER RESISTANCE TO CYCLIC FATIGUE.

Cyclic fatigue is the leading cause of file separation.<sup>1</sup> Vortex Blue rotary files offer a remarkable leap forward in resistance to cyclic fatigue.<sup>2</sup> The numbers say it all:

- Minimum of 65% improvement in cyclic fatigue resistance over M-Wire® NiTi.
- Minimum of 99% improvement in cyclic fatigue resistance over standard NiTi.\*

\*Maximum results up to 353% better.

It's a new standard in durability for shaping curved canals with confidence.

#### INCREASED TORQUE STRENGTH.

In rotary file design, increased cyclic fatigue resistance usually comes with a trade-off in torque strength. Vortex Blue rotary files are different. In addition to significantly greater resistance to cyclic fatigue, they offer at least a 42% higher peak torque strength increase over M-Wire NiTi.<sup>2\*\*</sup> That's strength you can count on.

\*\*Maximum results up to 126% better.



 Ya Shen, Gary Shun-pan Cheung, Zbuan Bian, Bin Peng, "Comparison of Defects in ProFile and ProTaper Systems after Clinical Use." Journal of Endodontics, Vol. 32, No. 1, (2006), pp. 61-65.
Source: Internal testing. Data on file.



Featuring the same patented variable helical angle design as ProFile® Vortex®, Vortex Blue offers the efficiency and flexibility you have come to expect from Vortex rotary files. Note the unique changing flute pattern versus the typical uniform fluting approach.



#### STAYING CENTERED IN THE CANAL.

Known for their shape memory, standard NiTi files continually try to revert to their original straight state. The proprietary processing of Vortex Blue rotary files reduces shape memory. Once in the canal, Vortex Blue follows the natural curvature of the tooth as shown in the right canal of the micro CT scan.

This micro CT scan of a tooth instrumented with Vortex Blue (right canal) shows its ability to follow the original canal path. Red indicates original canal. Green indicates instrumented canal.

Instrumented with Profile Vortex

Instrumented with Vortex Blue

The tendency for standard NiTi instruments with shape memory to try to go back to their original straight position is not advantageous in curved canals.



With Vortex Blue, you may notice some curvature on the file as shown. You can easily straighten the file by hand, but it is not necessary for instrumentation.

#### THE COLOR OF PERFORMANCE.

It's more than a shade better. It's the color of optimum performance – with greater resistance to cyclic fatigue, increased torque strength and reduced shape memory while conforming to natural curvatures.

Step up to innovation at its best. Vortex Blue. The Blue Standard.

Call 1-800-662-1202 to order Vortex Blue or schedule your in-office demonstration.



	.04 TAPER FILES Pack of Six
White	15/.04
Yellow	20/.04
Red 📕	25/.04
Blue 📕	30/.04
Green	35/.04
Black 🗌	40/.04
White	45/.04
Yellow 📕	50/.04

#### .06 TAPER FILES Pack of Six

White	15/.06
Yellow 📕	20/.06
Red 📕	25/.06
Blue	30/.06
Green	35/.06
Black 🗌	40/.06
White	45/.06
Yellow	50/.06

1-800-662-1202 For the latest information consult www.TulsaDentalSpecialties.com



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