

stryker

Spinal surgery

Driven by
innovation

Signature 2

the new high speed
drill portfolio



Signature 2: Built to win¹

Bearing grease performance

4x higher at 104°F (40°C)
~2.5x higher at 212 °F (100°C)

29% decrease (3.3 lbf)
in mean peak pullout force

87% of users
preferred new pullout force interface

New durable housing and markings
preserved 4+ years
(minimum 400 cycles)

πdrive 2 motor balance
6.5% improvement vs πdrive
16% improvement vs S2

21% lighter
πdrive 2 to πdrive+

Up to 36% reduction
in cable friction (CoF)

Next-level performance

In your world, every nuance matters and superior solutions save lives. So we've reimaged and expanded Signature 2 Portfolio to provide the exact tool and touch you want with the speed, power and reliability you need. Enhanced inside and out, Signature 2 merges robust surgical essentials with unrivaled custom preferences for an exceptional experience you'll feel.

Common applications include:

Neuro; spine, including laminotomy/laminectomy and MIS spine; and ENT/otorhinolaryngology, including expanded endonasal approach (EEA)/anterior skull base and endoscopic procedures

The most comprehensive neurosurgical high speed drill suite

8

motors
(electric and
pneumatic)

40

attachments

700+

cutting accessories

πdrive 2+ motor with all-inclusive iBur angled attachment, cutting accessory and irrigator

πdrive 2+ motor with Elite attachment

"The device is entirely black anodized...you get **less light reflection** when utilizing high intensity head lamps."⁴

- Orthopaedic surgeon

It's not a single thing, it's everything.

You've made Signature Portfolio the market-leading system so when you ask for more, we respond. Here's a look at the latest π drive and iBur innovations designed to deliver even more clinical value and benefits.



"Having all the new attributes of it will collectively allow the device to be **utilized more efficiently.**"⁴

- Orthopaedic surgeon

Optimized performance¹

- π drive 2 and π drive 2+ motors continue the legacy of providing supremely nuanced power and torque control
- π drive 2 offers a maneuverable, shorter and lighter use option (requested by neuro otologists/ENTs)
- iBur angled attachments enhance access and visibility in MIS or other procedures
- iBur integrated irrigation provides efficient, on point delivery

Elevated ergonomics¹

- Matte anodizing and drill coating help reduce light reflection and glare off drill surface
- Center of gravity shifted to distal end for better motor balance
- New exclusive KnurLock machining helps secure grip
- Continued legacy of minimal vibration creates stable, high quality feel
- iBur's angled bend and low, slim profile with tapered concave design enables direct view of bur on surgical surface

Mechanical improvements^{1,2}

- Motor bearing grease boasts higher viscosity and max operating temperature (98.6°F increase; 350.6°F vs 284°F) (37°C increase; 177°C vs 140°C)
- Sound energy reduced by more than half (in π drive 2) and nearly half (in π drive 2+)
- Single piece, metal rotor simplifies repairs
- Drill tracker adapter (π drive 2 and π drive 2+) provides future-ready design
- iBur's protective shank covers shaft to minimize rotational harm

Added durability¹

- Matte finishes help reduce corrosion, improve resistance to reprocessing, and preserve exterior markings +4 years (minimum 400 cycles)

Enhanced usability¹

- Non-footed slam latch and release collar simplify use
- Reduced attachment pullout force
- Enhanced cable coating augments insulation, tactile feel and anti-friction
- iBur's all-inclusive integrated design simplifies ordering, setup and use
- Attachments and cutting accessories are forward/backward compatible

iBur™ integrated attachments: **Angled to perfection**

- For MIS or other procedures
- Angled integrated attachment, cutting accessory and irrigator
- 16 sterile, single-use attachments with 15° distal- or proximal-bend



100%
of surgeons could see
the head of the bur³

- Proximally-bent: 6 burs spanning three design styles and 2.5-4mm diameters
- Distally-bent: 10 burs spanning five design styles and 2-5mm diameters
- Reusable straight or angled hubs

"I like the fact the shaft is integrated.

The irrigation component is nice...it did not get hot at all."⁴

Spine surgeon

"The iBur provides a competitive advantage in its design, irrigation and **line of sight**"⁴

Spine surgeon

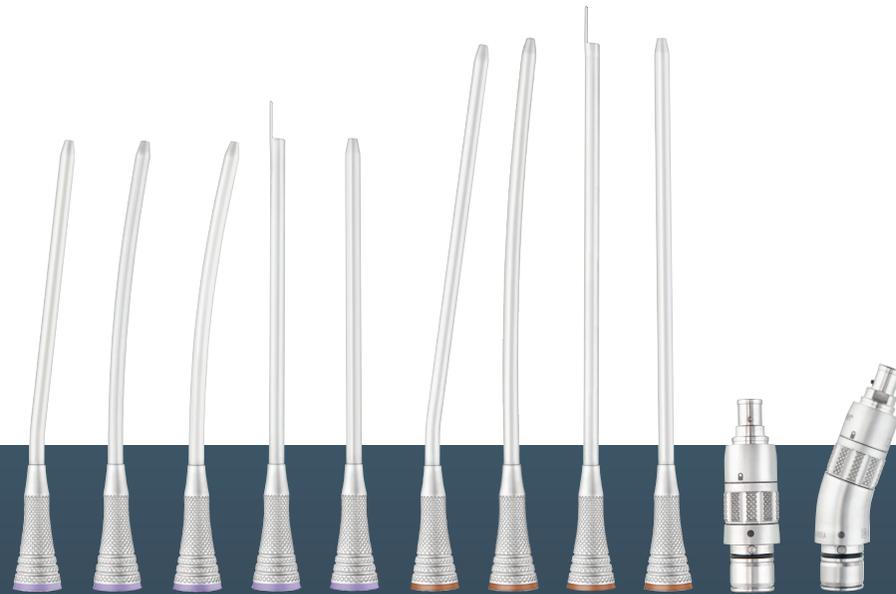


iBur™

MIS

MIS: Traditional attachments

- 50+ MIS accessories, the largest on the market
- The market's only MIS cutting accessories with multi-notch (4-10mm) telescoping ability
- Irrigation sleeves available



Elite: A notch above

- 300+ cutting tools, including nine carbide accessories (such as carbide match head which reduced chatter over tool steel by 30%)
- Patented multi-notch telescoping enables convenient customization of working length by user or application
- Adjustable up to five exposure levels (up to 10mm)
- Irrigation sleeves available



Elite

The Stryker Advantage

Underlying Signature 2 Portfolio are unique Stryker technologies that put power and preferences in your hands.

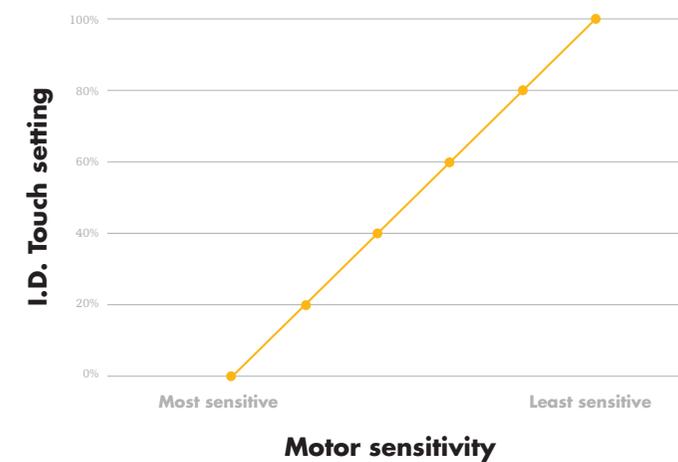
π drive motor technology

- Patented, industry unique design
- Magnets in “pie” configuration replace nonfunctioning steel core
- Flat wiring encases core, not open loop wiring
- Creates volumetric optimization to enhance performance while limiting housing size



I.D. Touch software

- Industry-exclusive software via CORE 2 Console
- Enables you to adjust torque from 0-100% to customize drill response and tactile feel (low-to-high sensitivity)



The console's ability to regulate sensitivity of the motor while in use

CORE 2 Console

- Universal control center across Signature components and clinical specialties
- Stores 100+ user profiles; transferrable via USB drive to other CORE 2 Consoles
- Powers I.D. Touch software
- Recognition of settings by user or connected instrument
- Capable of running two drills simultaneously



We've got your back

We give our all creating innovative products and technology, so you can give your all to your patients. Together with your surgical expertise, we've created a winning formula for **advancing neurosurgery and transforming lives.**

To trial today's Signature 2 Portfolio or to get more information contact your Neurosurgical sales representative, call **800 253 3210** or visit **neurosurgical.stryker.com**.

1. Stryker data on file
2. "Understanding the 3dB rule." *Pulsar Instruments*, 26 Oct. 2015, <https://pulsarinstruments.com/en/post/understanding-3db-rule>
3. Stryker design validation completed for iBur devices, data on file
4. Source and consent on file

Neurosurgical

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Part number	Product description
Motors	
5407-150-000	Pi Drive 2 Motor
5407-350-000	Pi Drive 2 Plus Motor
iBur integrated attachments, cutting accessories with irrigation	
Hubs	
5407-120-300	iBur Hub
5407-120-300A	iBur Angled Hub
15° Distal bend (12.5cm, orange color band)	
8431-107-530	3.0mm iBur Precision Match Head
8431-107-030D	3.0mm iBur Diamond Match Head
8431-009-030	3.0mm iBur Precision Round
8431-009-040	4.0mm iBur Precision Round
8431-012-020D	2.0mm iBur Diamond Round
8431-012-030D	3.0mm iBur Diamond Round
8431-012-040D	4.0mm iBur Diamond Round
8431-013-030DC	3.0mm iBur Coarse Diamond Round
8431-013-040DC	4.0mm iBur Coarse Diamond Round
8431-013-050DC	5.0mm iBur Coarse Diamond Round
15° Proximal bend (12.5cm, orange color band)	
8442-107-525	2.5mm iBur Precision Match Head
8442-107-530	3.0mm iBur Precision Match Head
8442-107-025D	2.5mm iBur Diamond Match Head
8442-107-030D	3.0mm iBur Diamond Match Head
8442-009-030	3.0mm iBur Precision Round
8442-009-040	4.0mm iBur Precision Round

Part number	Product description
Elite attachments	
5407-120-440	440 Elite straight
5407-120-450	7cm Straight
5407-120-452	7cm Angled
5407-120-470	12cm Straight
5407-120-472	12cm Angled
5407-120-480	14cm Straight
5407-120-482	14cm Angled
5407-120-484	14cm Hooded
5407-120-485	17cm Straight
5407-120-486	17cm Angled
5407-120-490	20cm Straight
5407-120-492	20cm Angled
Heavy Duty attachments	
5407-120-052	9cm Angled
5407-120-050	9cm Straight
5407-120-070	14cm Straight
5407-120-072	14cm Angled
MIS attachments	
5407-120-900	MIS Hub
5407-120-900A	MIS Angled Hub
5407-120-950	13cm Straight Nose Tube
5407-120-950A	13cm Angled Nose Tube
5407-120-950C	13cm Curved Nose Tube
5407-120-950F	13cm Modified Curve Nose Tube
5407-120-950H	13cm Straight Hooded Nose Tube
5407-120-970	16cm Straight Nose Tube
5407-120-970A	16cm Angled Nose Tube
5407-120-970C	16cm Curved Nose Tube
5407-120-970H	16cm Straight Hooded Nose Tube
Console	
5400-052-000	CORE 2 Console (software version 2.3 or higher)

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