stryker

# Enhanced.
# Expanded.
# Elevated.

## Signature 2 Portfolio

The most comprehensive and customizable high speed drill platform



**Signature 2 Portfolio**

# Bigger and **bolder than ever**

The most comprehensive and customizable neurosurgical high speed drill platform just grew stronger. With new mechanics, motors and attachments, Signature 2 Portfolio aims to provide the exact tool and touch you want with the speed, power and durability you need.

## Next-level performance

**8**
motors
(electric and pneumatic)

**40**
attachments

**700+**
cutting accessories

**One**
portfolio serves multiple specialties
universal console drives all instruments
system for you to learn

## Broad value

### Specialties include:

(but aren't limited to)

- Neuro
- Spine
- Orthopaedics
- Neuro otology/ENT
- Dental

### Functionality includes:

- Open, endoscopic/MIS and microscopic procedures
- Cutting, drilling, reaming, decorticating, shaping and smoothing of bone, bone cement and teeth
- Placing or cutting of screws, metals, wires, pins and other fixation devices



## Reimagined. Remarkable.[1, 4]

**4x higher bearing grease**
performance at 104°F (40°C)

**~2.5x higher bearing grease**
performance at 212°F (100°C)

**4 year**
(minimum 400 cycle) preservation of exterior housing and markings

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

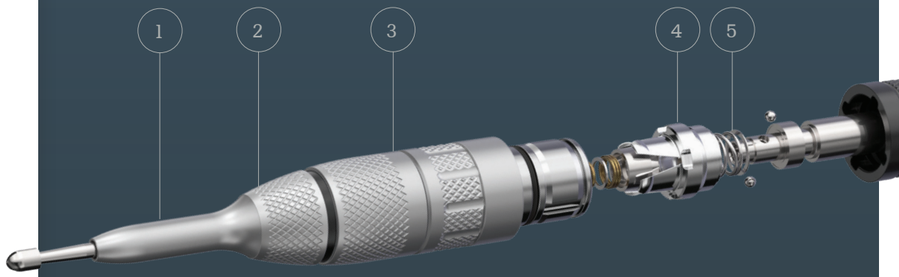
**Up to 36% reduction**
in cable friction (CoF)

**~50% reduction**
in sound energy

Up to **75K RPM** speed

# πdrive motor
# technology at its best

We strive to deliver superior solutions that give you every advantage possible. So through innovative design and mechanics, we've reimagined and refined πdrive motors from tip to tail to elevate their performance, ergonomics, durability and usability.




## Custom preferences[2]

**Dr. Schabel**
πdrive 2
Torque 100%
Speed 75K RPMs
Irrigation rate 50%
Brake 35%

## πdrive 2 for neuro/ENT otology[1]

**½" shorter motor length**
**21% lighter than πdrive+**
**6.5% better motor balance vs πdrive**
**16% better motor balance vs S2 drill**







1 Minimal vibration creates stable, high quality feel

2 Expanded area of exclusive KnurLock grip technology allows tripod and other grips

3 Alignment dots for easy and consistent assembly/disassembly

4 Reduced attachment pull out force

5 Non-footed slam latch and release collar simplify use

6 Bearing grease performance with higher operating temperature (98.6°F increase; 350.6°F vs 284°F) (37°C increase; 177°C vs 140°C)

7 Center of gravity shifted to distal end for better motor balance

8 Motors optimized inside and out for durability and supremely nuanced power and torque control

9 Motor highly tunable to define custom drill response and tactile feel

10 Matte anodizing and drill coating help reduce light reflection and glare off drill surface

11 πdrive 2 gives neuro/ENT otologists a maneuverable, shorter and lighter use option

12 Single piece, metal rotor simplifies repairs

13 Enhanced cable coating augments insulation, tactile feel and anti-friction

# Maestro Air
balancing power with finesse

Like πdrive motors, we've continually refined our pneumatic technology based on your input. Today's Maestro Air motor provides the power you need for the toughest procedures with the intuitive feel you appreciate in a pneumatic system.

## Powering performance[1]

**20% more torque** than previous model

**25% more power** in watts

Up to **150 psi** motor rating

Up to **75K RPM** speed

**4** foot pedal options







Optional motor extender for enhanced grip options and ergonomics (also compatible with πdrive motors)

## Custom preferences[2]

**Dr. Lin**
Maestro Air
Universal foot pedal
150 psi
Irrigation rate 25%

1 Compatible with the industry's most expansive array of attachments and cutting accessories

2 Refined attachment design for improved balance and maneuverability

3 Color coding on product and packaging instantly identifies matching attachments and cutting accessories

4 Alignment dots and Snap-Connect for easy and consistent assembly/disassembly

5 Available with or without our high-performance integrated handswitch

6 Improved swivel at hose, increasing handpiece freedom of movement

7 Lighter, more flexible hose with low-friction coating to reduce catching on surgical fabrics or collection of dust and debris

Fold out flap for accessories spread

**Accessories abound:**

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

Effective solutions deliver on all fronts, so we put as much effort and innovation into our accessories as we do our drills. Today's Signature 2 Portfolio offers the most comprehensive lineup of attachments, cutting tools and other accessories so you can tackle clinical challenges precisely the way you want.

## Optimized options[1]

**5 attachment families,** including new iBur angled integrated attachments

**Patented** 2Flute, RIM Glide, telescoping and other advantageous design features

**4 new additions** to the Elite and Non-Footed lineups

**All compatible** with πdrive and Maestro motors

**25% less chatter** with 2Flute head geometry

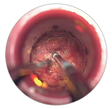
**30% less chatter** with carbide burs over tool steel

**700+** cutting accessories

Accessories

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

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



**100%**
of surgeons could see the head of the bur[3]



## Elite: A notch above

- 300+ cutting tools, including nine carbide ones
- Patented multi-notch telescoping enables convenient customization of exposure by user or application
- Adjustable up to five exposure levels (up to 10mm)

**New 440 and 442 knurled attachments help optimize system length and balance for neuro/ENT otologists**




## Footed: Power and protection

- Balances power with protection of delicate tissues
- Cutting accessories lock into motor to remain in place when changing attachments
- Tactile toe alignment indicator signals which way foot is pointing
- Matching part numbers on routers and footed attachments enable instant pairing in surgical field
- Color coding quickly identifies matching components

**New 8cm and 9cm non-footed attachments with slam latch and release collar permit easier release technique while augmenting safety**




## Traditional MIS attachments

- 50+ MIS accessories; largest selection on the market
- Market's only MIS cutting accessories with multi-notch (4-10mm) telescoping ability
- Head diameters up to 5mm; largest on market



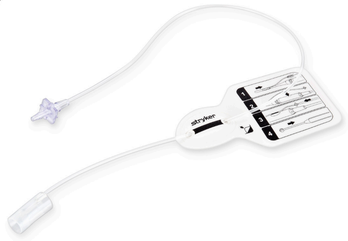
## Heavy Duty: Has you covered

- Ideal for tough jobs like cement and metal cutting
- Lock into place to reduce chatter



## Irrigation: Made easy

- Sleeves for Elite (7cm and 12-20cm) and MIS (13cm and 16cm) attachments provide seamless irrigation through CORE 2 Console
- iBur integrated irrigation; no sleeve required
- Customizable flow rates



# Unparalleled customization:

## Where Signature truly gets its name

Our underlying technology has one fundamental focus; giving you ultimate control and choice over how your system functions and feels. In this manner, you hold all the power to create a “Signature” portfolio and style that’s all your own.

### Vital signs[1]

**Market-leading** customization and choice

**30,000** CORE Console units trusted worldwide

**0-100% torque** range for low-to-high drill sensitivity

Virtually every element is **customizable**

**Unlimited user profiles;** 100+ can be stored and transferred

## Signature 2: Create your custom solution

Options for personal preferences are engineered into multiple features

| Your system. Your choice. | Signature Portfolio | Midas Rex | Anspach |
|---|---|---|---|
| Ability to create and store user profiles | • | | |
| Unlimited user profiles | • | | |
| I.D. Touch Software | • | | |
| Adjustable irrigation flow | • | • | • |
| Customizable foot pedal buttons | • | | |
| Adjustable brake settings | • | | |
| Adjustable acceleration settings | • | | |
| Telescoping cutting accessories; each offering up to 5 choices in reach and shaft exposure | • | | |
| Largest breadth of portfolio options | • | | |
| Detachable electric handswitch options | • | | • |
| 4 foot pedal options | • | | |
| 4 Pneumatic foot pedal options | • | | |

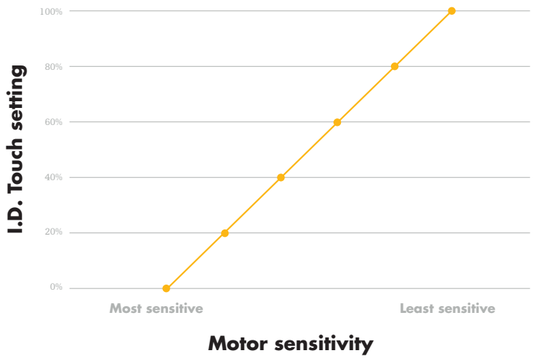
### CORE 2 Console

- Universal control center across Signature components
- Drives industry-exclusive I.D. Touch software
- Capable of running two drills simultaneously, irrigation and Bone Mill




### I.D. Touch software

- Industry-exclusive software adjusts torque 0-100% for tailored drill response and tactile feel
- Settings can be saved in user preferences
- Applies to electric motors




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

### πdrive 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



# Support you can count on

We're acutely aware you rely on our products to help get your patients safely over the finish line. So our team has given its all to help elevate your clinical capability and performance — all with an eye towards optimal safety and outcomes. 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**. Your rep can also inform you of our ProCare maintenance and repair services as well as Flex Financial purchase and payment options.

1. Stryker data on file
2. Surgeon names and preferences are for demonstration purposes only to help depict the range of performance and customizations possible
3. Stryker design validation completed for iBur devices, data on file.
4. Understanding the 3dB rule." Pulsar Instruments, 26 Oct. 2015, https://pulsarinstruments.com/en/post/understanding-3db-rule

| Part number | Product description |
|---|---|
| **Motor** | |
| 5407-150-000 | Pi Drive 2 Motor |
| 5407-350-000 | Pi Drive 2 Plus Motor |
| 5407-200-000 | Maestro Air |
| 5407-200-00H | Maestro Air with handswitch |
| **Console** | |
| 5400-052-000 | CORE 2 Console (software version 2.3 or higher) |
| **Irrigation sleeves** | |
| **Elite** | |
| 5407-120-450 | For use with 7cm (black) |
| 5407-120-452 | For use with 7cm (black) |
| 5407-120-470 | For use with 12-20cm (black) |
| 5407-120-472 | For use with 12-20cm (black) |
| 5407-120-480 | For use with 12-20cm (black) |
| 5407-120-482 | For use with 12-20cm (black) |
| 5407-120-484 | For use with 12-20cm (black) |
| 5407-120-485 | For use with 12-20cm (black) |
| 5407-120-486 | For use with 12-20cm (black) |
| 5407-120-490 | For use with 12-20cm (black) |
| 5407-120-492 | For use with 12-20cm (black) |
| **Cutting accessories** (partial list) | |
| **MIS** | |
| 5407-120-950 | For use with 13cm (lilac) |
| 5407-120-950C | For use with 13cm (lilac) |
| 5407-120-950A | For use with 13cm (lilac) |
| 5407-120-970 | For use with 16cm (brown) |
| 5407-120-970C | For use with 16cm (brown) |
| 5407-120-970A | For use with 16cm (brown) |

**Visit strykerdriven2perform.com for a complete list of our product offerings including all cutting accessories and attachments.**

## Neurosurgical

This document is intended solely for the use of healthcare professionals. A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. We do not dispense medical advice and recommend that surgeons be trained in the use of any particular product before using it in surgery.

The information presented is intended to demonstrate Stryker's products. A surgeon must always refer to the package insert, product label and/or instructions for use, including the instructions for cleaning and sterilization (if applicable), before using any of Stryker's products. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your representative if you have questions about the availability of Stryker's products in your area.

Stryker or its affiliated entities own, use, or have applied for the following trademarks or service marks: CORE, iBur, I.D. Touch, KnurLock, Maestro, Maestro Air, πdrive, πdrive+, πdrive 2, πdrive 2+, RIM Glide, TPS, S2 πdrive, and Stryker. All other trademarks are trademarks of their respective owners or holders.

D0000105275 Rev. AA
G55/PS
Copyright © 2021 Stryker
Printed in USA

Stryker
1941 Stryker Way
Portage, MI 49002 USA
t: 269 323 7700 f: 269 323 2742
toll free: 800 253 3210

neurosurgical.stryker.com