



INSTRUMENTS

Access Matters: Choosing the Instrument That Fits

By Liz Matthews

Introduction

Instrument choice can make a big difference to our working day. The types of instruments we use can help us to access tricky areas and remove deposits effectively, whilst minimising tissue damage. Inadequate cutting edges can lead to operator fatigue and reduced patient comfort. This has led to many manufacturers offering “stay sharp” ranges, which retain their edge, reducing clinical time spent sharpening.



There are handles and grips to suit all preferences with a specific focus on ergonomics, weight and tactile sensitivity. In recent years, advances in materials and manufacturing techniques have enabled the production of slimmer instruments with increased strength, aiding access while reducing the incidence of breakage. With a huge range of instruments available, looking for new instruments can feel a little overwhelming. This article highlights some of the hand instruments commonly used by hygienists and therapists in practice and offers a summary of some of the features associated with popular brands.

Gracey curettes (Site specific curettes)

Standard and mini, some companies also offer a micro range. Mini/micro Graceys allow for easier access into deep pockets and reduced tissue trauma due to their shorter toe.

This makes them popular with hygienists and therapists who practice minimally invasive techniques and frequently work in narrow pockets and delicate areas.

Standard Graceys have a longer toe, meaning they can cover more surface area with each stroke, although access into narrow pockets may be difficult and carries an increased risk of tissue damage.



LM Graceys

Known for their “chunkier” handle, these are a popular choice for clinicians who prefer a wider grip and an elastic handle material, providing a comfortable, slightly flexible grip.

They offer 3 types of handle:

Ergosense: newer, most popular, giving comfortable non-slip grip.



Ergomax : original chunky



Ergonorm- oldest



LM offer Sharp Diamond coated (available with certain ErgoSense Instruments)- a completely sharpen free coating to minimise time spent sharpening and retain instrument shape for its lifetime.

LM Gracey curettes come in a standard and mini range. The standard Gracey is broader and wider, providing more leverage for subgingival calculus removal. This allows coverage of more root surface area with fewer strokes.

Mini Gracey- Longer terminal shank, allowing for better access to deeper pockets. These feature a thinner blade, beneficial for accessing tight areas without distending tissues. Popular with those practicing minimally invasive techniques.

Rigid- wider shank (giving increased rigidity) to aid removal of very heavy calculus deposits.



LM Gracey curettes

PDT Graceys

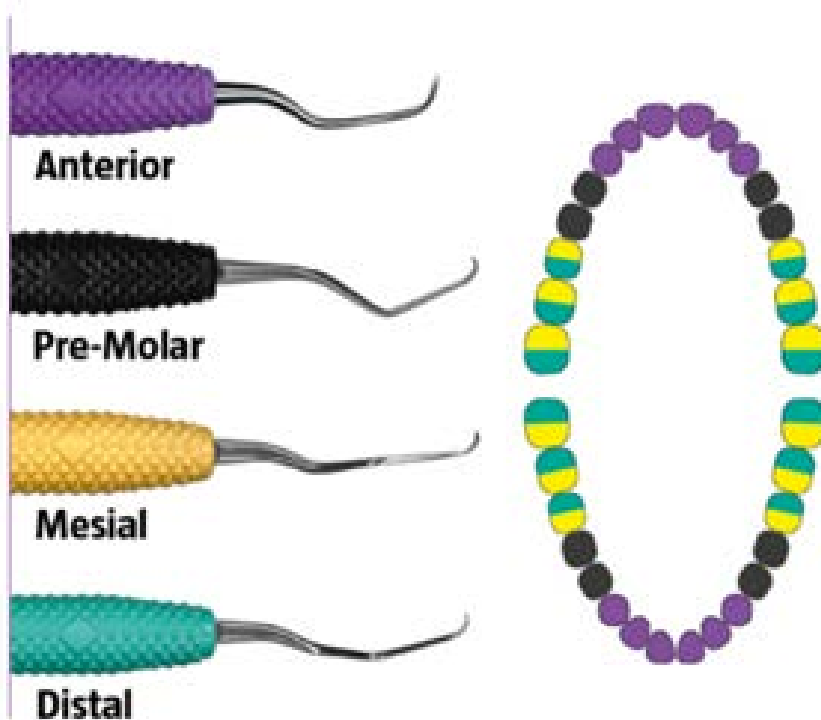


PDT instruments are amongst the lightest on the market. Instrument handles are made of lightweight, solid, durable resin.

The unique pattern on PDT instrument handles is known as knurling, a crisscross pattern with wider gaps between the grooves, allowing for thorough cleaning (particles and debris are easily dislodged during sterilisation).

The knurling extends to the tapered end of the handle where it meets the shank; this provides great tactile sensitivity. The changing pattern gives you better rotational control – even when wet.

- **A. Battrell™ Quadrant Graceys**, Designed for increased efficiency, allowing one instrument to be used for both mesial and distal surfaces.
- **Micro Mini Graceys (e.g. 11-12, 13-14)** Smaller, thinner versions of standard Graceys, ideal for deep, narrow pockets and furcation areas.
- **Amazing Graceys**, Blade design/angulation offers more contact with the tooth surface, meaning less strokes required. There are 7 different blade types offering variations in length/size of blade, length of shank and rigidity/flexibility.



Amazing Graceys PDT: all PDT instruments are colour coded for faster recognition/set up

American Eagle Instruments® Graceys



The extremely sharp working ends of the XP² Technology™ instruments

(59% sharper than the previous XP Technology) glide easily into periodontal pockets and narrow interdental spaces.

The stay sharp technology means less time spent sharpening and less risk of mis-shaping the instrument over time by repeated sharpening. Lightweight EagleLite™ plastic handles aim to optimise tactile sensitivity while reducing the pressure exerted to minimise hand and wrist fatigue. EagleLite stainless steel handles offer a slightly heavier option if preferred.



- **-Quick-Tip™**- Customise your own instruments by choosing tips that are screwed into the handle. Handle colour and instrument type are up to you. Also better for the environment (just replace the tip, not the entire handle/instrument). Available with most American Eagle Instruments® Graceys and curettes.



- **-XP Double Gracey-**Gracey curettes with 2 cutting edges, allowing for adjustment to mesial and distal as well as buccal and lingual surfaces, without changing or rotating the instrument. (also come in a mini version). Can cover the majority of areas with as few as 2 instruments.
- **Mini Double Graceys** allow for easier access into narrow pockets and furcations due to their smaller working end.



For tricky Areas

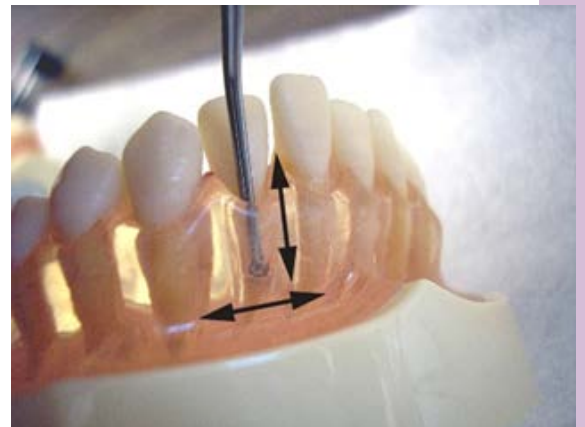


- **Montana Jack (R138)**, An ultra-thin, sharp universal sickle scaler offering excellent interproximal access in both anterior and posterior regions. This is also available in a pink version, and for **every one sold PDT donate towards the Cancer Research Institute**



PDT R138 Montana Jack Sickle Scaler

- **O’Hehir Debridement Curettes (e.g. 7-8, 9-10)**, Designed for subgingival calculus removal. The O’Hehir is a scoop with a 270 degree cutting perimeter. The blade is sharp against the tooth whilst the back of the instrument is smooth against gingival tissue. The 7-8 features a flat back for smooth insertion into narrow mesial and distal pockets. These are perfect for furcations and root grooves and reach areas that may be missed by traditional curette blades.



O’Hehir curette

- **Jack B. Nimble (R130)** A slim, contra-angled scaler ideal for crowded, rotated, or lingually positioned teeth, improving access to narrow interproximal spaces.

- **Queen of Hearts (R144)** A universal periodontal curette designed for deep pockets, root concavities, and furcations. Features a long terminal shank, fine closed-face blade, and smooth back to minimise tissue trauma.

For every Queen of Hearts™ purchased, PDT donates to the American Heart Association



PDT R144 Queen of Hearts

For tricky Areas



- **Pro Thin™**- sharpen free and 20% thinner than standard instruments. They are particularly recommended for deep pockets and narrow interproximal areas.
- **Gracey Deep Pocket**- 3mm longer terminal shank
- **Gracey Access**- 3mm longer shank and 50% shorter blade



-AE Standard Gracey



AE Gracey Deep Pocket



AE Gracey Access

- **Curette Barnhart 5-6**- Universal curette with two cutting edges. One instrument for all tooth surfaces.
- **204 SD**- Universal scaler with curvature for use in the anterior and posterior regions. Very fine and delicate working ends and thus improved access even in crowded cases and overlaps.
- **Scaler Blackjack**- Molar scaler, strongly curved and extended working end for improved access to interdental spaces. Very fine, delicate working ends allow scaling even in extremely crowded cases.



BlackJack Scaler

- **Scaler M23 Universal scaler**. One instrument for all tooth surfaces. Longer 1st shank and ideal angling for good access into all regions.



Scaler M23 XP Resin Blue

For tricky Areas

LM

feel the difference

- **-Furcator LS-** a delicate, angled excavator for furcations and root grooves.



LM Furcator

- **Mini Langers-** longer shanks and shorter working ends than standard Langers. Useful in tight interdental spaces. Better access into tight deep pockets and furcations.



LM Mini Langers

- **Crane- Kaplan** - Extremely strong, rigid, sharply angled blade for removal of heavy supragingival calculus.



LM Crane Kaplan

***FYI! Hoe and push scalers- LM supply posterior/anterior hoes and a push scaler for those who like to use them.**

Implants

As many of us now see patients with implants routinely, implant hand instruments are an essential for many clinicians. Particularly useful where implant threads have become exposed in the mouth due to recession/bone loss, Hader bars and any deposits that cannot be removed using erythritol or glycine powders.



PDT stock a range of titanium implant scalers and implant maintenance kits, including Micro and Mini Gracey options. These are designed specifically for safe and effective debridement around implant surfaces without causing damage and are commonly used in routine implant maintenance.



- **R661 Titanium Barnhart 5-6**, Designed for wide-based single posterior implants. Use short, horizontal strokes to dislodge calculus on implants, crowns, or bridges.
- **R680 Titanium Langer 3-4**, Ideal for narrow-based implants with a narrow platform. Particularly suited for lower incisors, congenitally missing laterals, and posterior areas with limited horizontal bone.
- **R693 Titanium NEB128-L5 Mini**, Designed for single implants, ball-locator implants, and bar-retained implants. The blunted blade and shorter radius tip allow effective debridement of screw indentations and exposed threads. Suitable for both anterior and posterior implants. This instrument is also effective for removing residual cement and dislodging calculus beneath a Hader bar.
- **T216 Easyview Probe**, A vibrant, lightweight periodontal probe made from flexible resin, allowing it to conform to the implant surface for improved comfort and accuracy.



Hard for biofilm and calculus, gentle on implant surfaces. Made from medical grade titanium with very thin instrument tips.



- **Implant scaler 204S- 204S bend for the posterior region.**
- **Implant curette Barnhard B5-6-** Universal curette with two cutting edges. Curvature optimized for posterior region.
- **Implant curette Langer L3-4- for the posterior region.** Universal curette with two cutting edges, special angulation for the upper jaw posterior region.
- **Implant scaler/curette N128-L5-** Super thin N128 scaler tip on one side, long 5 universal curette as the second tip – for simultaneous sub- and supragingival work in the anterior region.



- **Ergomix- ErgoMix™ handle for exchangeable LM™ titanium tips.** Designed for safe implant maintenance. Available with mini universal curette, Gracey1/2, 11/12 and 13/14.





Designed for superior ergonomics and comfort, ErgoPLUS is the range of hand instruments from Perfection Plus.

Offer great value for money and include a basic and uncomplicated range of scalers and curettes, as well as probes and mirror handles.

The lightweight handle helps to minimise user fatigue, and Scalers and Curettes are offered with 'Stay Sharp' tips, which are manufactured from higher grade AISI 440 stainless steel to ensure instruments are even stronger, more durable and long lasting, staying sharper for longer.

Their range is fairly small but provides all the everyday essentials, including UNC15 probes.



Choosing instruments really comes down to personal preference. Our preferences may be limited by budget or what practices are willing to provide but the right instruments are an investment.

Not only do they help us to carry out our clinical work to the highest possible standard but the instruments we use can influence patient comfort, operator fatigue and repetitive injury.

Careful decontamination procedures and the use of instrument cassettes when autoclaving helps ensure instruments remain in good condition.

***For more information on any of these products, please contact your CTS Territory/Account Manager**



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