# TIP GUIDE

## ULTRASONIC SCALER

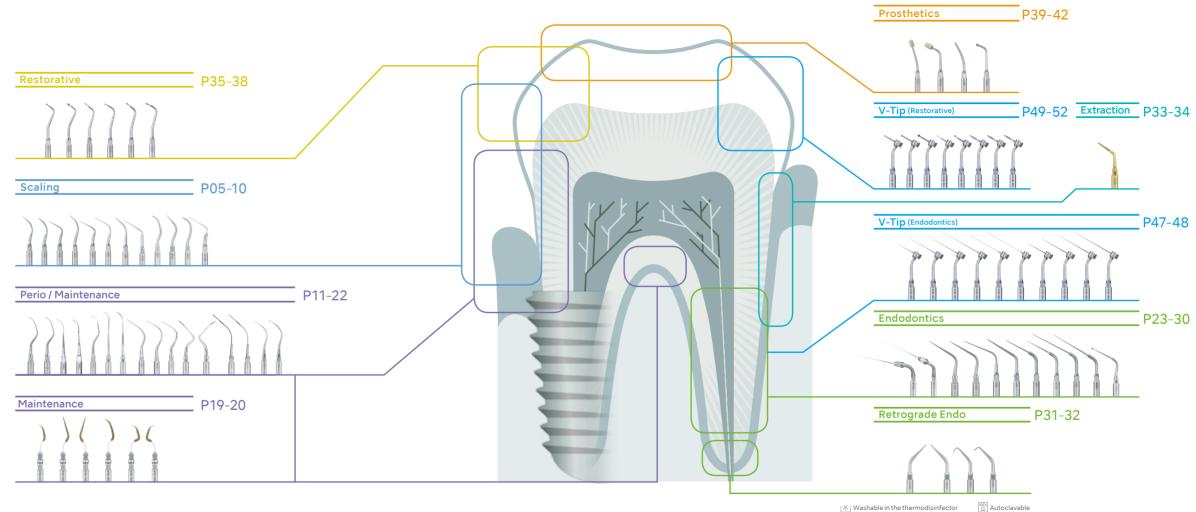
## Create it 🖌

www.nsk-dental.com IPR-D1118ENv2 2022-07-06.GLB



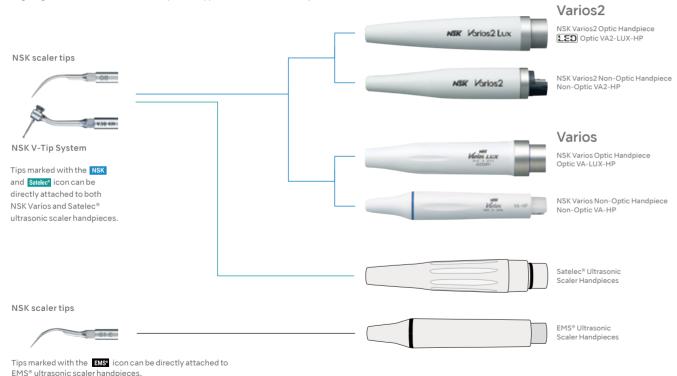
## **NSK Offers**

A Wide Range of VARIOS Ultrasonic Scaler Tips For Clinical Applications.



# Varios2 / Varios tips

NSK tips fit Varios and Varios2 ultrasonic scaler handpieces as well as Satelec<sup>®</sup> ultrasonic scaler handpieces. NSK make a number of tips which will fit on EMS<sup>®</sup> ultrasonic scaler handpieces. The following is a guide to illustrate all NSK Varios tips, their applications and connectivity.



## The key points for correct usage of the ultrasonic scaler

Calculus is removed efficiently by ultrasonic vibrations and the cavitation effect of the NSK ultrasonic scaler, in addition to the elimination and destruction of bacterial biofilms. Here are the "four points" for maximizing the effects:

## Correct application of the tip to a tooth

NSK ultrasonic scaler series is Piezo type, with a tip that has a linear, reciprocating motion. The tip generates varying amounts of power according to the part of the tip that is applied to the tooth. The impact on the tooth surface and the results will vary depending on which part of the tip is applied to the tooth. Typically, applying the side of the tip 2~3 mm from the end can be most effective.

## **2** The angle of the tip

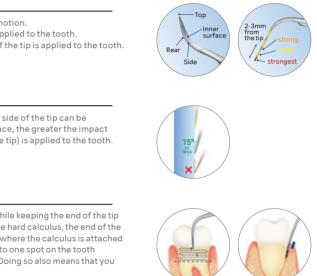
By positioning the tip at an angle of 15 degrees or less against the tooth surface, the side of the tip can be applied 2~3 mm from the end. The greater the angle of the tip against the tooth surface, the greater the impact on the tooth becomes since the end of the tip (which is the most powerful part of the tip) is applied to the tooth. This could result in sensitivity on the tooth and brings dicomfort for the patient.

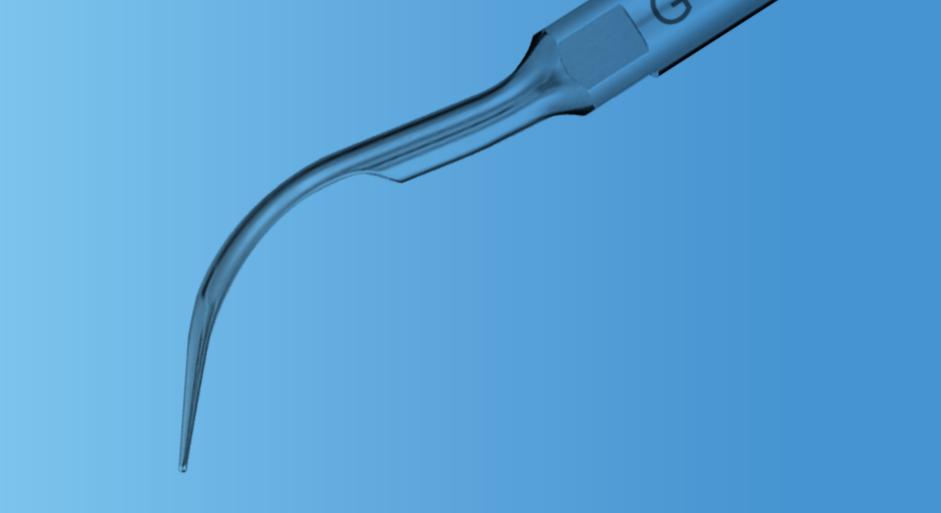
## រ្និ**3** Application and the motion of the tip

The force applied by the tip to the tooth should be feather-light. Using fine motions while keeping the end of the tip on the tooth surface makes the most of the ultrasonic vibrations. When removing large hard calculus, the end of the tip should be applied as this has sufficient power to "crack the calculus" by attacking where the calculus is attached to the tooth surface. "Applying more force than is necessary" or "Applying force only to one spot on the tooth surface " may scratch the tooth surface, and subsequently cause pain to the patient. Doing so also means that you are not taking full advantage of the ultrasonic vibration.

## ਊ**4** Power setting

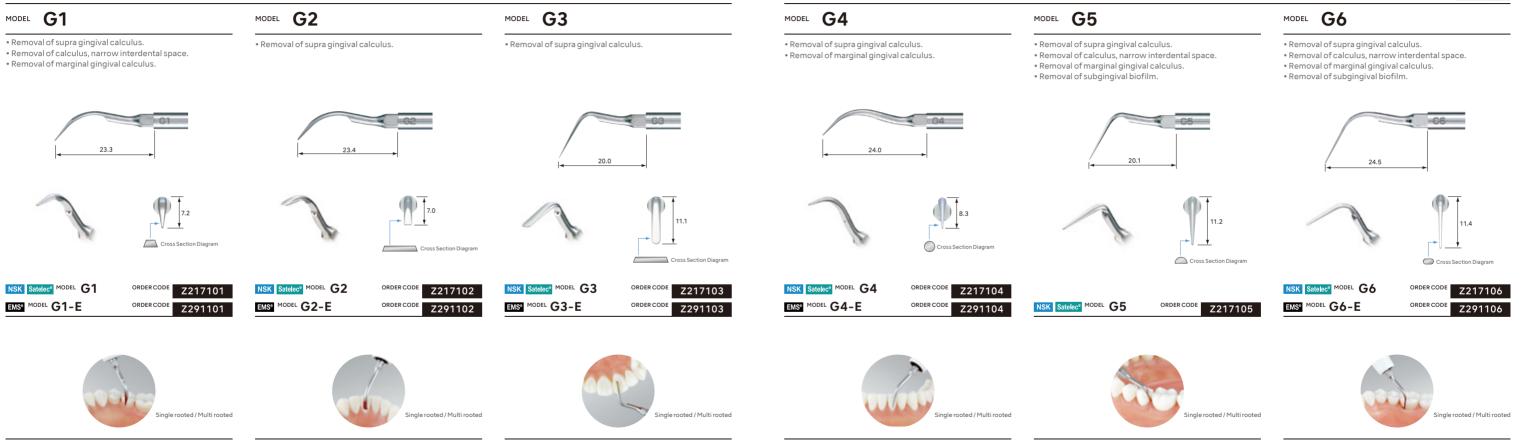
Power Setting adjustment is dependant on the condition of the oral cavity. We recommend restricting power use at the start of the procedure, gradually increasing it from low to meet the situation in the oral cavity.





# SCALING

# SCALING



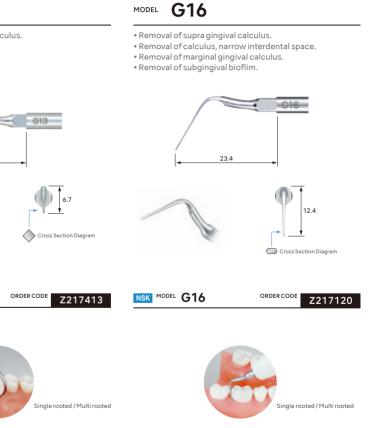
\* Cross section diagram is the image of a point 1 mm from the end. The illustrated tip diagram is four times bigger than the actual size.

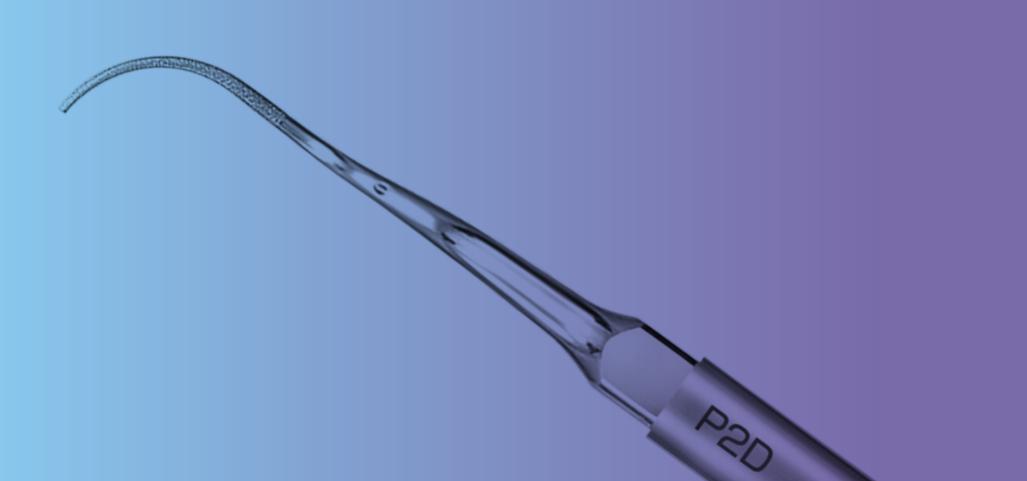


# SCALING

MODEL <b>G8</b>		MODEL <b>G9</b>	MODEL G11	MODEL G12	MODEL G13
Removal of supra gingival calcul     Removal of calculus, narrow inte     Removal of marginal gingival cal	erdental space.	<ul> <li>Removal of supra gingival calculus.</li> <li>Removal of calculus, narrow interdental space.</li> <li>Removal of marginal gingival calculus.</li> <li>Removal of subgingival bioflim.</li> </ul>	• Removal of supra gingival calculus.	Removal of supra gingival calculus.	• Removal of supra gingival calculu
22.7	G8	21.8	23.1	22.9	22.2
· t	9.3 Cross Section Diagram	13.6 Cross Section Diagram	6.9 Cross Section Diagram	7.4 Cross Section Diagram	
NSK Satelec" MODEL G8	ORDER CODE Z217108	NSK Satelec* MODEL G9 ORDER CODE Z217109	NSK Satelec" MODEL G11 ORDER CODE Z217411	NSK Satelec* MODEL G12 ORDER CODE Z217412	NSK Satelect MODEL G13
	Single rooted / Multi rooted	Single rooted / Multi rooted	Single rooted / Multi rooted	Single rooted / Multi roo	ted



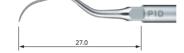




### MODEL P1

• Removal of calculus, narrow interdental space. • Removal of sub gingival bioflim.

## - Pl 27.0



• Removal of calculus, narrow interdental space.

• Removal of calculus in deep pockets.

• Removing biofilm from deep pockets.





ORDERCOD



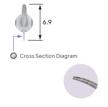
MODEL P1D





Diamond coated









Diamond coated

Right curved type



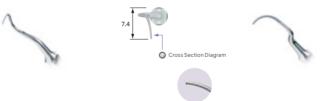
• Removal of calculus, narrow interdental space.

• Removal of calculus in deep pockets.

MODEL P2D

• Removing biofilm from deep pockets.





NSK Satelec<sup>®</sup> MODEL P2D ORDER CODE Z217402



 Diamond coated Left curved type

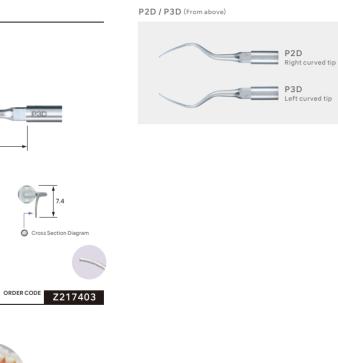




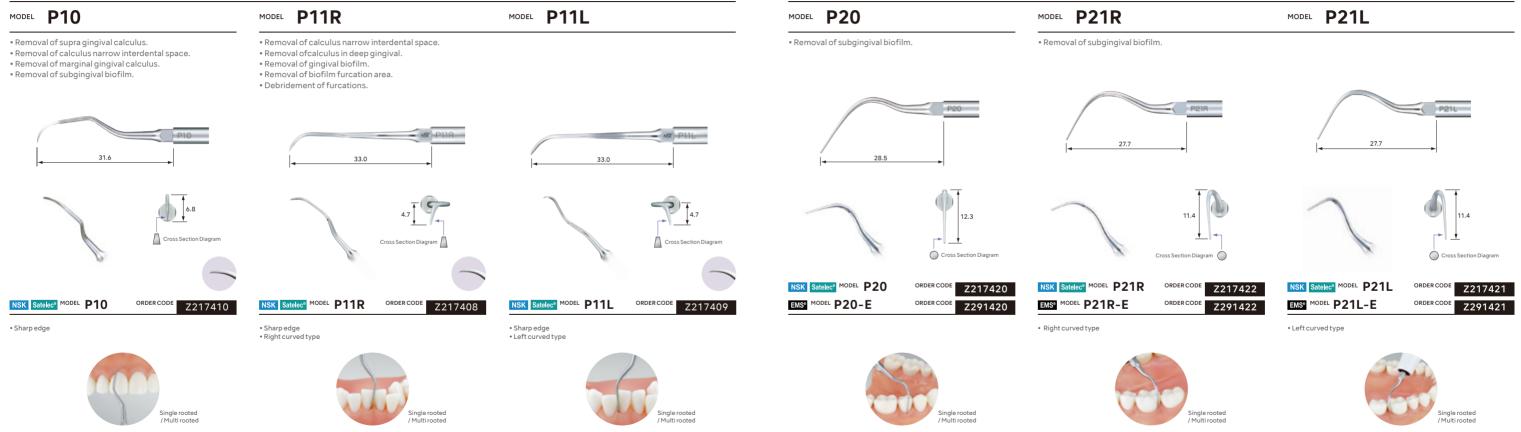
Refer to the power guide on pages 53-54.

\* Cross section diagram is the image of a point 1 mm from the end. The illustrated tip diagram is four times bigger than the actual size.

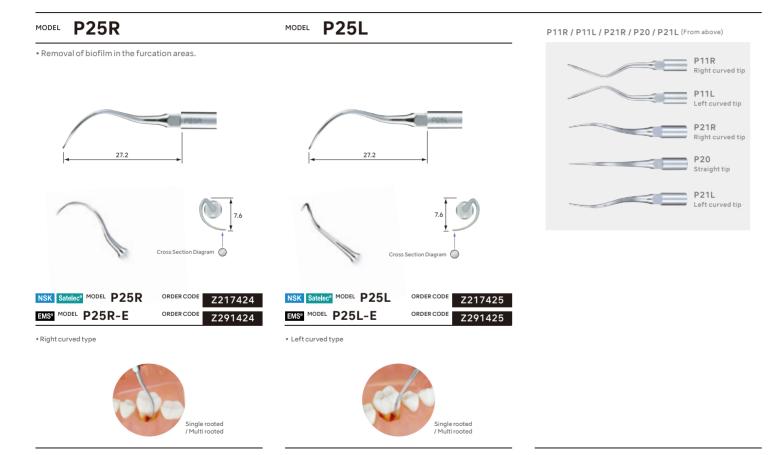




Single rooted / Multi rooted







### MODEL P26R

Sharp edge
Right curved type

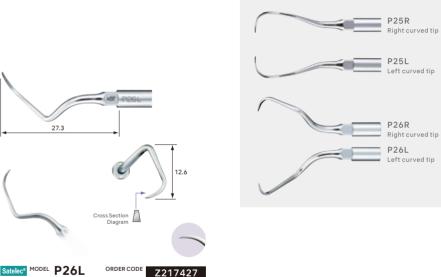
Refer to the power guide on pages 53-54.

### MODEL P26L

• Removal of calculus narrow interdental space.

Removal of calculus in deep gingival.
Removal of subgingival biofilm in the furcation areas.







Sharp edge
 Left curved type





\* Cross section diagram is the image of a point 1 mm from the end. The illustrated tip diagram is four times bigger than the actual size.



P25R

P26L

### P25R / P25L / P26R / P26L (From above)

## **PERIO** (Maintenance Tip)

MODEL V10	MODEL V-P10	MODEL V-P11R	MODEL V-P11L	MODEL V-P12	MODEL V-P26R MO
VTIP	For the maintenance of prostheses, implant-supported prostheses. These tips are made from a special material which will not damage prostheses and restorative materials.	reach areas and to avoid interference	t tips. This tip is extra long to easily access difficult to with adjacent teeth or contours. Its shape was designed es, making this a versatile tip for a wide range of uses	V-P12 is a longer version of the popular V- tip. It serves a wide range of applications, including the maintenance of implants an other prosthetic devices. Its shape offers easy access to all treatment areas.	with V-P11R/L tips or other conventional instrument d the distal surfaces of molars and corner areas as, the
10.8	14.6	20.8	20.8	18.1	14.1
	7.9 Cross Section Diagram	4.9 Cross Diag		Cross Section Diagram	9.6 9.6 Cross Section Diagram
NSK Satelec* MODEL V10 ORDER CODE Z2170	041 MODEL V-P10 ORDER CODE Y900184	MODEL V-P11R ORDER CODE Y100	2165 MODEL V-P11L ORDER CODE Y1002166	MODEL V-P12 ORDER CODE Y10021	67 MODEL V-P26R ORDER CODE Y1002168
Includes E-Tip replacement wrench Plastic Tip is not included	• Pack of 3 * V10 holder is not included	<ul> <li>Pack of 3</li> <li>Right curved type</li> <li>* V10 holder is not included</li> </ul>	• Pack of 3 • Left curved type * V10 holder is not included	Pack of 3     *V10 holder is not included	Pack of 3     Right curved type     * V10 holder is not included     * V1
	and the		ATTEN A		JU

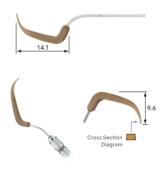
Refer to the power guide on pages 53-54.



## MODEL V-P26L

## Starter Kit

offer access to areas that cannot be reached nents. These tips are ideally suited to access , the end of the tip fits tooth morphology very







 Pack of 3 Left curved type \* V10 holder is not included



- V-P11R, V-P11L, V-P12, V-P26R, V-P26L: 1 pc. each
- Includes E-Tip replacement wrench

õ



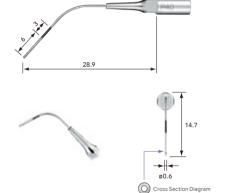
## **PERIO** (Irrigation and Cleaning)

For effective cleaning following debridement or scaling. \*No scaling effect.

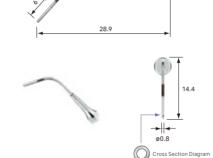
MODEL P40

MODEL P41

• Safe to use in all pocket conditions and has 3mm to 6mm markings as guidance.



ORDERCOD



14.4

ORDERCODE Z217555





Tip diameter Ø0.6 mm

• Tip diameter ø0.8 mm



## PERIO

MODEL	Perio Kit A	MODEL	Perio Kit B



NSK	Satelec®	
MODEL	Perio Kit A	ORDER CO



• P1D, P2D, P3D, P10 : 1 pc. each • Tip holder : 1 pc.

• P20, P25R, P25L: 1 pc. each • Tip holder : 1 pc.

• Irrigation from dual points on lateral areas of the apex. • Effective cleaning regardless of the insertion angle. • The rounded apex shape for safety in periodontium.







RIO









\* Cross section diagram is the image of a point 1 mm from the end. The illustrated tip diagram is four times bigger than the actual size.

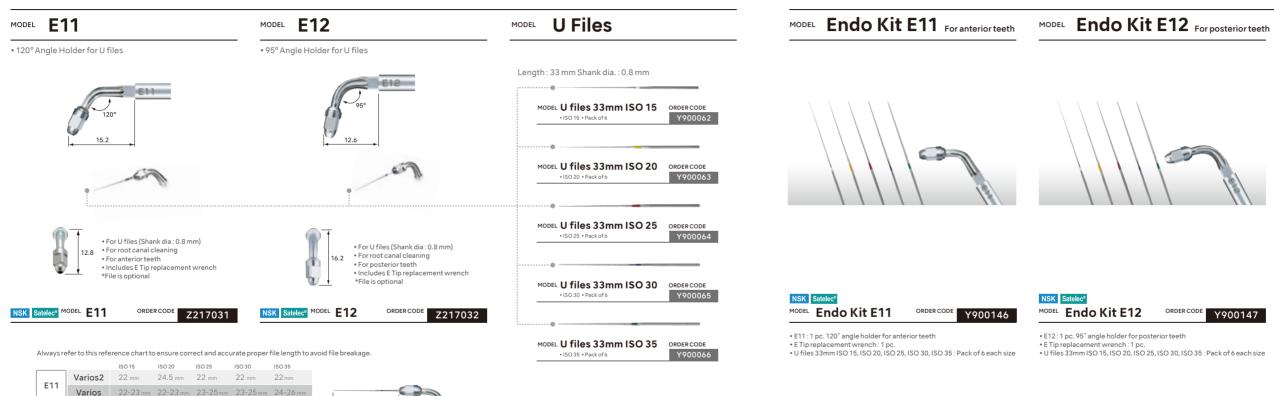




Varios2 22 mm 24.5 mm 24.5 mm 24.5 mm 22 mm

Varios 21-25 mm 21-25 mm 21-25 mm 21-25 mm 21-25 mm

Proper file length



E12



## **RETROGRADE ENDO**

The microscopic diamond coated tip allows effective removal of dentin at the apex. 2 types of angled tips (90°, 70°) are available for anterior teeth and another 2 types of curved tips (right and left) are available for molar teeth.

MORE BORD MORE BOLD • Diamond coated tip allows efficient cavity preparation. • Diamond co

Z217213

Cross Section Diagram

NSK Satelec<sup>®</sup> MODEL E30LD ORDER CODE



MODEL E32D





Diamond coated
For anterior teeth (90°)



Diamond coated

Z217212

NSK Satelec<sup>®</sup> MODEL E30RD ORDER COD

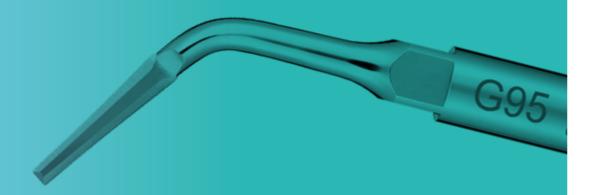
• Diamond coated • For posterior teeth (right angled)



## MODEL Retro Kit



• Tip holder : 1 pc.



# **EXTRACTION**

Periodontal membrane removal Tip.



• Tooth extraction is possible without excessively cutting the alveolar bone around the remaining root, retaining the morphology of the alveolar bone.





• TiN coating • 0.7 mm thick • A double edge, which is sharp in three directions

Root extraction (upper left No. 2 tooth removal)

Impacted tooth (lower left No. 8 tooth removal)

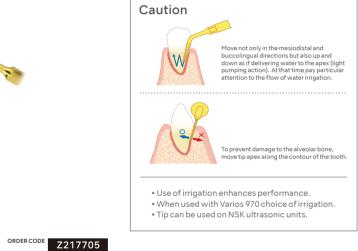




Refer to the power guide on pages 53-54.

# **EXTRACTION**





Be careful not to apply excessive force, as in cases of using elevators.



# RESTORATIVE











Satelec is a registered trademark of Satelec , a company of Acteon Group. 36

## **RESTORATIVE**

## MODEL G65D

• Interproximal caries removal. The hemispherical top of the tip does not allow cutting of sound tooth.

## MODEL G66D

• Interproximal caries removal of anterior teeth with safe cutting end.











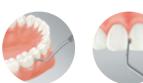




Diamond coated



Diamond coated











### MODEL G67D

MODEL G68D

• Molar teeth, interdental caries removal. The hemispherical top of the tip does not allow cutting on the adjacent tooth.

• Anterior interdental caries removal. Cutting only one side without damaging adjacent tooth surface.







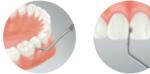






NSK Satelec<sup>®</sup> MODEL G68D

Diamond coated





















# PROSTHETICS

## PROSTHETICS

Condensation / Loosening / Plugging

## MODEL G21

 Assistance for Adhesive dentistry. • Cementing of small anterior indirect restorations, i.e. inlays, veneers.





• Assistance for Adhesive dentistry. • Cementing of small posterior indirect restorations, i.e. onlays, crowns.









MODEL Tip Cap



## MODEL G28

Post removal. (ø1.3 mm thickness)

Amalgam condensation.











 For anterior teeth Water not required

3 caps supplied





Z217010

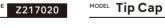
9.1



 For anterior teeth Water not required 3 caps supplied



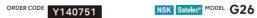




10.8

ORDER CODE

• For G21 / G22 Pack of 10









Water not required





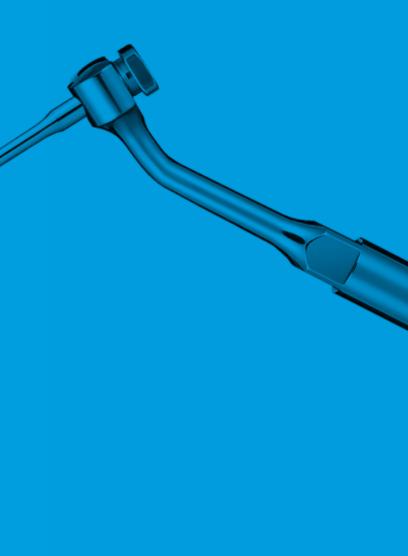








# V-TIP SYSTEM

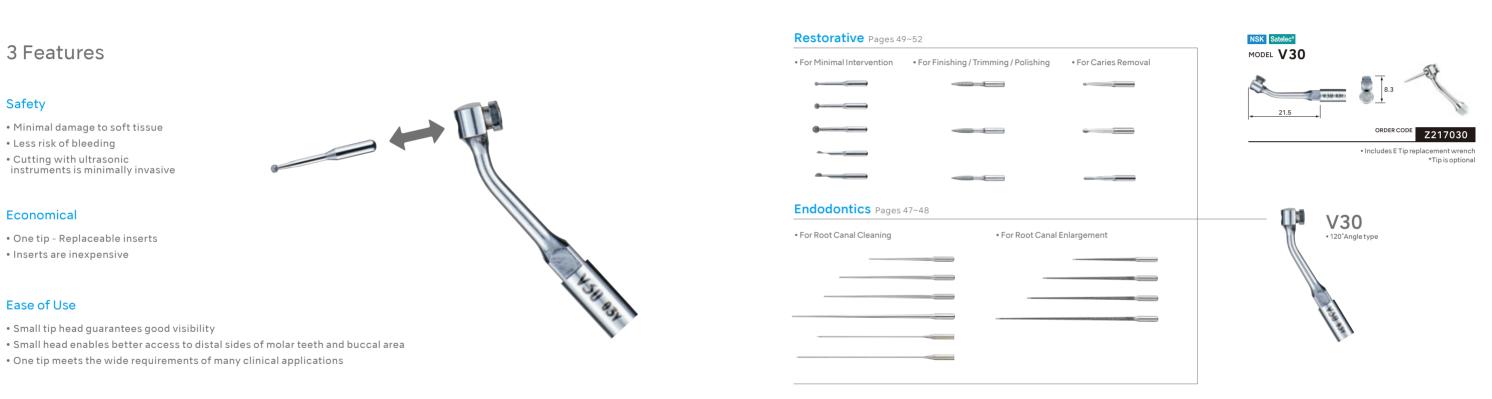


# **V-TIP SYSTEM**

NSK Varios V-Tip holder system is innovative, multi-functional and economical. The V-Tip holder is a separate component to the actual cutting tips and can be easily and inexpensively replaced. NSK V-Tip holder system offers the flexibility and expandability to meet the wide requirements for multi-purpose clinical applications.



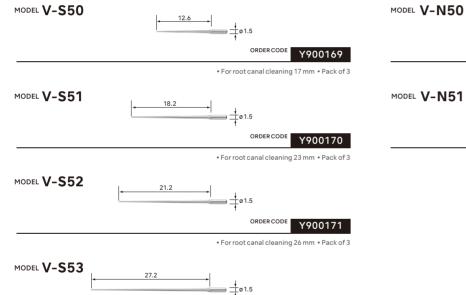
# V-TIP System Line Up



46

# V-TIP SYSTEM (Endodontics)

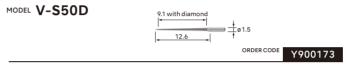
### For Root Canal Cleaning



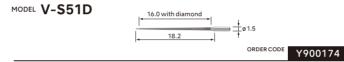


• For root canal cleaning 32 mm • Pack of 3

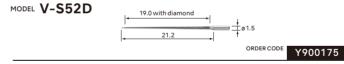
### For Root Canal Enlargement



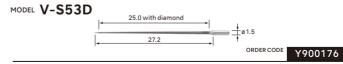
• Diamond coated • For root canal enlargement 17 mm • Pack of 3



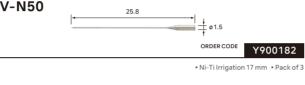
• Diamond coated • For root canal enlargement 23 mm • Pack of 3



• Diamond coated • For root canal enlargement 26 mm • Pack of 3



• Diamond coated • For root canal enlargement 32 mm • Pack of 3





• Ni-Ti Irrigation 21 mm • Pack of 3





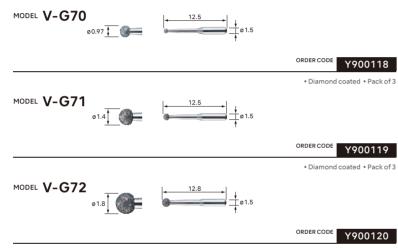


1.0 ★In order to reduce the incidence of ledge formation, there is no diamond coating on the end of the tip. (1mm)

# V-TIP SYSTEM(Restorative)

The advantage of ultrasonic cutting is that tip movement is minute allowing only decayed dentine to be removed, while sound dentine is preserved. Cervical decay can be treated with minimum bleeding enabling quicker recovery.

### For Minimal Intervention



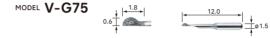


Cervical decay removal





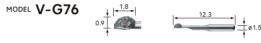
### For Minimal Intervention



### Y900121

• Diamond coated • Pack of 3

ORDER COD



### ORDERCOD Y900122

• Diamond coated • Pack of 3







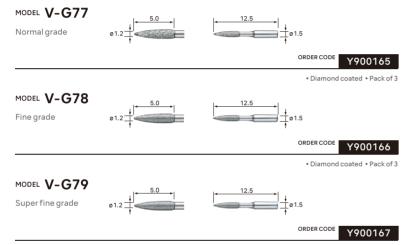


# V-TIP SYSTEM(Restorative)

The NSK Varios V-Tip System has been developed to carry out "Minimally Invasive" dental procedures. As an altenative to rotary cutting, the Varios V-Tip offers precise and effective ultrasonic technologycutting.



### For Finishing / Trimming / Polishing





### For Caries Removal



### ORDER COD Y900161

• Stainless tip • Pack of 3



### ORDER COD Y900162

Stainless tip • Pack of 3



### ORDER CO Y900163

Stainless tip • Pack of 3









## **POWER GUIDE**

TIP NO.	NS Varios2 970/370	SK Varios 750/560/350	Satelec® P-Max XS P5 XS	EMS® Piezon Master 600 (miniMaster)	TIP
		SCALING			Р
G1	<b>G</b> 7	<b>G</b> 3	15	P 6	P1
G2	<b>G</b> 7	<b>G</b> Max	15	P 6	P1
G3	<b>G</b> 7	<b>G</b> 3	15	P 3	P
G4	<b>G</b> 5	<b>G</b> 3	15	P 3	P2
G5	<b>G</b> 6	<b>G</b> 3	15	-	P2
G6	<b>G</b> 8	<b>G</b> 1	15	P 6	P2
G8	<b>G</b> 7	<b>G</b> 3	15	-	P2
G9	<b>G</b> 5	<b>G</b> 1	15	-	P2
G11	<b>G</b> 6	<b>G</b> 3	15	-	P2
G12	<b>G</b> 7	<b>G</b> 3	15	-	P
G13	<b>G</b> 6	<b>G</b> 3	15	-	P
G16	<b>G</b> 8	-	-	-	V-1
	PERIO	/MAINTEN	NANCE		V-P
P1	<b>P</b> 6	<b>P</b> 2	5	-	V-F
P1D	<b>P</b> 10	<b>P</b> 2	5	-	V-I
P2D	<b>P</b> 8	<b>P</b> 4	5	-	V-P
P3D	<b>P</b> 8	<b>P</b> 4	5	-	V-P

IP NO.	Varios2 970/370	SK Varios 750/560/350	Satelec® P-Max XS P5 XS	EMS® Piezon Master 600 (miniMaster)
P10	<b>P</b> 10	P Max	5	-
911R	<b>P</b> 10	P Max	5	-
911L	<b>P</b> 10	P Max	5	-
P20	8	<b>P</b> 4	5	P 6
21R	8	<b>P</b> 4	5	P 6
21L	•8	<b>P</b> 4	5	P 6
25R	<b>P</b> 10	<b>P</b> 4	5	P 6
25L	<b>P</b> 10	<b>P</b> 4	5	P 6
26R	<b>P</b> 6	<b>P</b> 3	5	-
26L	<b>P</b> 6	<b>P</b> 3	5	-
P40	<b>P</b> 3	<b>P</b> 1	5	-
P41	<b>P</b> 3	<b>P</b> 1	5	-
-P10	Pó	<b>P</b> 3	5	-
-P11R	<b>P</b> 6	<b>P</b> 3	5	-
-P11L	<b>P</b> 6	<b>P</b> 3	5	-
-P12	<b>P</b> 6	<b>P</b> 3	5	-
P26R	Pó	<b>P</b> 3	5	-
-P26L	Pó	<b>P</b> 3	5	-

TIP NO.	Varios2 970/370	SK Varios 750/560/350	Satelec® P-Max XS P5 XS	EMS® Piezon Master 600 (miniMaster)
	EN	DODONTI	CS	
E4	٥	<b>B</b> 3	5	-
E4D	<b>G</b> 7	<b>B</b> 3	5	-
E5	<b>()</b> 10	<b>B</b> 3	5	-
E6	<b>(</b> 10	<b>B</b> 4	5	-
E7	<b>B</b> 6	<b>B</b> Max	5	-
E7D	<b>B</b> 6	<b>B</b> Max	5	-
E8	<b>B</b> 2	<b>G</b> 4	5	-
E8D	<b>B</b> 2	<b>G</b> 4	5	-
E15D	<b>B</b> 6	<b>3</b>	5	-
E11	<b>G</b> 4	<b>B</b> 3	5	-
E12	<b>3</b>	<b>B</b> 3	5	-
E30RD	<b>B</b> 6	<b>B</b> 3	5	-
E30LD	<b>B</b> 6	<b>B</b> 3	5	-
E31D	<b>G</b> 6	<b>G</b> 3	5	-
E32D	<b>B</b> 6	<b>G</b> 3	5	-
	E	KTRACTIC	)N	
G95	<b>G</b> 10	-	-	-

TIP NO.	NSK Varios2 Varios 970/370 750/560/350		Satelec® P-Max XS P5 XS	EMS® Piezon Master 600 (miniMaster)	
RESTORATIVE					
G61D	<b>G</b> 2	<b>G</b> 2	15	-	
G62D	<b>G</b> 2	<b>G</b> 3	15	-	
G65D	<b>G</b> 2	<b>G</b> 2	15	-	
G66D	<b>G</b> 2	<b>G</b> 2	15	-	
G67D	<b>G</b> 2	<b>G</b> 3	15	-	
G68D	<b>G</b> 2	<b>G</b> 3	15	-	
PROSTHETICS					
G21	<b>G</b> 4	<b>G</b> 2	20	-	
G22	<b>G</b> 4	<b>G</b> 2	20	-	
G26	<b>G</b> 10	<b>G</b> Max	20	-	
G28	<b>G</b> 10	<b>G</b> 2	20	-	
	V-TIP	(ENDODO	NTICS)		
V-S50	<b>B</b> 5	<b>B</b> 3	10	-	
V-S50D	<b>B</b> 5	<b>B</b> 3	10	-	
V-S51	<b>B</b> 3	<b>B</b> 1	10	-	
V-S51D	<b>B</b> 3	<b>G</b> 1	10	-	
V-S52	<b>B</b> 5	<b>B</b> 2	10	-	

TIP NO.		SK
in no.	Varios2 970/370	Varios 750/560/350
V-S52D	<b>B</b> 5	<b>B</b> 2
V-S53	<b>B</b> 5	<b>B</b> 2
V-S53D	<b>B</b> 5	<b>B</b> 2
V-N50	<b>B</b> 3	<b>B</b> 3
V-N51	<b>B</b> 2	<b>B</b> 3
	V-TIF	(RESTO
V-G70	G٥	<b>G</b> 3
V-G71	Gó	<b>G</b> 3
V-G72	<b>G</b> 6	<b>G</b> 3
V-G75	<b>G</b> 6	<b>G</b> 1
V-G76	<b>G</b> 6	<b>G</b> 3
V-G77	<b>G</b> 6	<b>G</b> 3
V-G78	<b>G</b> 6	<b>G</b> 3
V-G79	G٥	<b>G</b> 3
V-S1	Gó	<b>B</b> 3
V-S3	<b>G</b> 4	<b>B</b> 3
V-\$33	Gó	<b>B</b> 3
	ower guide indica . Do not exceed the	
		por

Satelec® P-Max XS P5 XS	EMS® Piezon Master 600 (miniMaster)
15	-
15	-
15	-
-	-
-	-

15	-
15	-
15	-
15	-
15	-
15	-
15	-
15	-
15	-
15	-
15	-

riate power range and maximum power wer level to avoid possible tip breakage. Applicable power range for NSK Varios tips when used with NSK Varios and Varios2 ultrasonic scaler.

## Varios2

POWER RANGE iPiezo engine" Varios2										
Gò				0	0	e 0	Ġ		8 8	Ö
Εò		0 0	0 0 Ġ	608	0 <b>(</b> )					
Ρò	000	0ġ06	000							
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

### Varios



### <Caution>

- Always consult the operating manual and attached sheets before use.
- Always use with correct power mode and power range for each individual tip.
- Always use with sufficient irrigation to prevent excessive heat generation during treatment.
- Always start out with lower power setting and then adjust to higher setting if necessary.
- Always make sure that tips are securely tightened with the appropriate wrench and the power is set to and does not exceed the appropriate level before use.

\*Incorrect operation may cause tip breakage even if tip is used within the recommended power range. Consult the operating manual before use.



# **The Varios Tip Card** — Easy to use guide to assess tip wear

Ultrasonic scaler's tips wear through repeated use. Worn tips move differently to new tips and do not perform as effectively. To check the condition of the tip, use the Varios Tip Card.

## How to use the Varios Tip Card

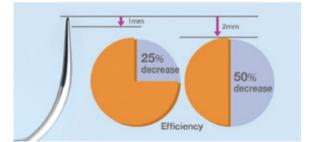
1. Place the neck of the tip in the cut out.

2. Check wear of the tip.

3. See the green, yellow and red line to check wear of the tip

\*See below what each color means.

At NSK we recommend to replace a tip when the tip meets the yellow line (wear of 1mm) to guarantee safe and effective use.



Green: No wear - Tip is OK	
Tip replacement is not necessary	
Yellow: Wear of 1mm - Tip is showing some wear	
Tip replacement is recommended	
Red: Wear of 2mm - Tip is badly worn	//, NG
Tip replacement is necessary	



### Tip Replacement Wrench with Torque Limiter

For tips G1- G68D, G95, P1- P41, E15D, E30RD, E30LD, E31D, E32D and V-tip replaceable insets. \*Please tighten the tip until it clicks.



### E Tip Replacement Wrench

For V10 (V-tip holder), tips E4, E4D, E5, E6, E7, E7D, E8, E8D, E11, E12 and the inserts of V30 (V-tip holder).



## The Varios Tip Videos

Please watch the videos about the Varios tip range at the below websites to experience the precision and quality that is synonymous with NSK.



Tip description

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