

Construction Diamond Tools



Saws



Drills



Chainsaws



TOOLGAL'S CONSTRUCTION DIAMOND TOOLS

In the construction industry, concrete and concrete-like materials are often required to be processed, cut or demolished. Toolgal is a leading provider of diamond cutting and drilling tools for a wide variety of applications in the construction industry.

Typical applications of Toolgal tools include:

Concrete cutting and drilling, Asphalt and green concrete cutting, Pre-stressed concrete cutting, Concrete brick cutting and grinding

Toolgal's metallurgical know-how and ongoing commitment to R&D ensures our offerings provide state-of-the-art technical solutions using the highest quality diamond cutting tools.

Toolgal's advanced technologies and professional tools will help enhance and improve all of your organization construction processes.

Typical Tools

Floor Saws, Diamond Wall Saw Blades, Ring Saws, Diamond Core Drills, Diamond Dry Cutting Blades, Chain Saws, Pre-stressed Concrete Saws, Table Saws

[Index]

Quality Control	4
Saws	5
▪ Floor Saws	6
Cured Concrete Saws	6
Wide Slot Saws	6-7
Narrow Slot Saws	8-9
▪ Loop Cutting	10
▪ Green Concrete Saws	11
▪ Asphalt & Asphalt Over Concrete (AOC) Saws	12-13
▪ Wall Saws	15
Standard	16
Thin Wall	17
Step Cutting Wall Saws	17
▪ Ring Saws	18
▪ Undercutting Solutions	19
▪ Pre Stressed Concrete Saws	20
Drills	21
▪ Ring Drills	22-23
▪ Concrete Segmented Drills	24
Chain Saws	25
▪ SawShark Chain Series	26
▪ Diamond Chain	27
▪ Bulk Concept	28
▪ Chain Assembly Kit	29
▪ SawShark - 15	30
▪ SawShark - MINI	31
▪ Hydraulic Saws	32
▪ Hydraulic Chain	33
▪ Guide Bars - Tips	34
▪ Gas Chain Comparison Chart	35
▪ Gas Chain Machines	36-37
▪ Cutting Depth & Applications	38
General Terms of Sales	39-40
OSA	41



TOOLGAL'S Quality Control

- Quality System in Toolgal assures the same quality level of products and processes by permanent control and reducing dependence from human, equipment and materials Variance Factors.
- Each station in Toolgal performs In-process Self-inspection under supervise of Quality Engineer according to Control Plan
- The Control Plan is defined according to customer, engineers and legal requirements and is attached by drawings and specifications
- All Quality Data is reported, investigated (per each work order) and reviewed periodically in the Quality meetings.



[Saws]



Wide Slot Floor Saws-NS

Cost effective - Toolgal's wide slot saw provides the fastest floor sawing solution, in addition to improving cooling and slurry evacuation.

Diameter: From 300 – 900 mm

Floor saw blades come in the following machine categories:

Electrical machines (usually low HP)

Petrol, up to 20 HP

Petrol, 20 - 35 HP

Large Diesel Machines (usually above 50 HP)

Basically floor types can be divided as follows: Concrete, Asphalt and Asphalt over Concrete (green or fresh concrete is cut with saws similar to Asphalt and Asphalt-Over-Concrete saw types).

Floor Wide Slot Saw Table

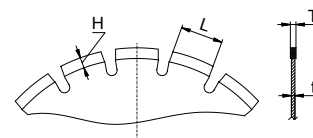
A variety of U/C protection solutions are available for abrasive materials, as per the recommendations in the table below.

Toolgal's Floor Saws are recognized industry-wide for their fast and reliable cutting properties.

Wide Slot NS Saws

- Wide slot blades for extra cutting speed to be used on low powered machines
- Good solution for all types of concrete
- NS Blades with under cutting (U/C) protection for abrasive and porous materials

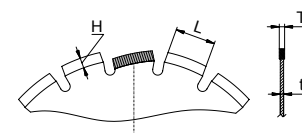
Floor NS Saws					
Core: NS		Segments			
Serial Number	Diameter	Length	Thickness	Height	No. of Segments
FS-NS-30	300	40	2.8	8/10	18
FS-NS-35	350	40	3.1	8/10	21
FS-NS-40	400	40	3.1	8/10	24
FS-NS-45	450	40	4	8/10	26
FS-NS-50	500	40	4	8/10	30
FS-NS-60	600	40	4.6	8/10	36
FS-NS-65	650	40	4.6	8/10	38
FS-NS-70	700	40	5.5	8/10	40
FS-NS-75	750	40	6	8/10	42
FS-NS-80	800	40	6	8/10	46
FS-NS-90	900	40	6.5	8/10	52



Wide Slot NS Saws With U/C Protection

- Premium - first choice, large variety of applications
- High - high power machines and special long life requirement

Floor NS Saws with U/C Protection						
Core: NS + U/C			Segments			
Serial Number	Diameter	U/C	Length	Thickness	Height	No. of Segments
CS-NS-30-10	300	3C	40	2.8	10	18
CS-NS-35-10	350	3C	40	3.1	10	21
CS-NS-40-10	400	4C	40	3.1	10	24
CS-NS-45-10	450	4C	40	4	10	26
CS-NS-50-10	500	5C	40	4	10	30
CS-NS-60-10	600	6C	40	4.6	10	36
CS-NS-70-10	700	6V	40	5.5	10	40
CS-NS-75-10	750	6V	40	6	10	42
CS-NS-90-10	900	6V	40	6.5	10	52



U/C - recommended solutions see table on page 19.

Narrow Slot Floor Saws-SS

Toolgal's Narrow Slot Floor Saw core configuration provides the advantages of fast cutting with a long product life - the preferred solution for any floor saw application. The use of narrow slot saws for concrete floor sawing is applicable for powerful machines, where the output from a wide slot blade is insufficient. It is uncommon to use narrow slot saws above 900 mm due to problems with slurry removal.

Narrow Slot Floor Saw Table

A variety of U/C protection solutions are available for abrasive materials, as per the recommendations in the table below.

The key factors that can influence the quality of the cutting result include:

The Material

- Reinforcement ratio (number and diameter of bars)
- Aggregate type and size
- Percentage of sand and cement
- Concrete hardness (density)

The Machine

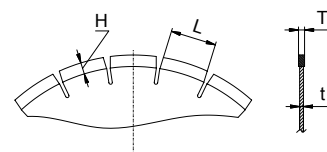
- Machine drive power type (electric, hydraulic, diesel or petrol)
- Machine power
- Cutting speed and depth
- Water supply or air cooling

TOOLGAL offers the right tools for every material and machine type

- Operation Recommendations
- Water cooling is always preferred to ensure sufficient cooling.
- Optimum peripheral speeds of 40-45 m/s for soft aggregates with a low reinforcement ratio.
- Optimum peripheral speeds of 35-40 m/s for hard aggregates with a heavy reinforcement ratio.
- Operators should employ the optimum machine working parameters, such as the correct RPM, accessories and maintenance.

Narrow Slot SS Saws

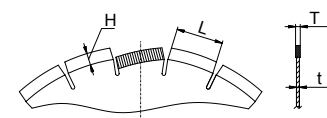
Floor SS Saws					
Core: SS		Segments			
Item code	Diameter	Length	Thickness	Height	No. of Segments
FS-SS-30	300	40	2.8	8/10	21
FS-SS-35	350	40	3.1	8/10	25
FS-SS-40	400	40	3.1	8/10	28
FS-SS-45	450	40	4	8/10	32
FS-SS-50	500	40	4	8/10	36
FS-SS-60	600	40	4.6	8/10	42
FS-SS-65	650	40	4.6	8/10	46
FS-SS-70	700	40	5.5	8/10	50
FS-SS-75	750	40	6	8/10	52
FS-SS-80	800	40	6	8/10	54
FS-SS-90	900	40	6.5	8/10	64



Narrow Slot SS Saws With U/C Protection

- SS Saw blades for fast cutting while maintaining high output
- Mainly used on powerful machines and for highly reinforced concrete
- SS Blades with under cutting (U/C) protection for abrasive and porous materials
- **Fast** - for light (low HP) machines and high cutting speed
- **Premium** - first choice for a large variety of applications
- **High performance** - high power machines and high output requirement

Floor SS Saws with U/C protection						
Core: SSL U/C			Segments			
Item code	Diameter	U/C	Length	Thickness	Height	No. of Segments
CS-SS-30-10	300	3C	40	2.8	10	21
CS-SS-35-10	350	5C	40	3.1	10	25
CS-SS-40-10	400	4C	40	3.1	10	28
CS-SS-45-10	450	4C	40	4	10	32
CS-SS-50-10	500	6C	40	4	10	36
CS-SS-60-10	600	6C	40	4.6	10	42
CS-SS-70-10	700	5V	40	5.5	10	50
CS-SS-80-10	800	6V	40	6	10	54
CS-SS-90-10	900	6V	40	6.5	10	64

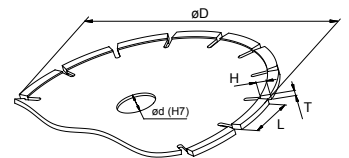


Loop Cutting Saws

- Blades for concrete and Asphalt grooving
- A wide variety of thicknesses as standard options
- Expert solutions for 350 mm and 450 mm diameters
- Standard arbor holes are: $\varnothing 1''$ with an additional pin hole (1+1) or 50 mm
- **Fast** - for light (low HP) machines
- **High performance** - high power machines and high output

Loop Cutting

Loop Cutting					
Item code	Diameter	Thickness (T*)	Length	Height	No. of Segments
LC-NS-30-5.5/T	300	6/8/10/12	40	5.5	18
LC-NS-35-5.5/T	350	6/8/10/12	40	5.5	21
LC-NS-40-5.5/T	400	6/8/10/12	40	5.5	24
LC-NS-45-5.5/T	450	6/8/10/12	40	5.5	26

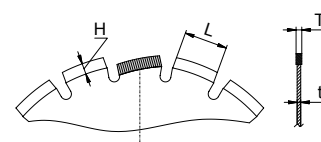


Green Concrete Saws

- **Fast** - for light (low HP) machines and high cutting speed
- **Premium** - first choice for large variety of applications
- **High Performance** - high power machines and special high output requirement

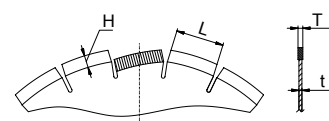
Green Concrete - Wide Slot

Green Concrete						
Core: NS			Segments			
Item code	Diameter	U/C	Length	Thickness	Height	No. of Segments
GC-NS-30	300	3C	40	2.8	8/10	18
GC-NS-35	350	3C	40	3.1	8/10	21
GC-NS-40	400	4C	40	3.1	8/10	24
GC-NS-45	450	4C	40	4	8/10	26
GC-NS-50	500	5C	40	4	8/10	30
GC-NS-60	600	6C	40	4.6	8/10	36
GC-NS-65	650	6C	40	4.6	8/10	38



Green Concrete - Narrow Slot

Green Concrete						
Core: SS			Segments			
Item code	Diameter	U/C	Length	Thickness	Height	No. of Segments
GC-SS-30-10	300	3C	40	2.8	8/10	21
GC-SS-35-10	350	3C	40	3.1	8/10	25
GC-SS-40-10	400	4C	40	3.1	8/10	28
GC-SS-45-10	450	4C	40	4	8/10	32
GC-SS-50-10	500	6C	40	4	8/10	36
GC-SS-60-10	600	6C	40	4.6	8/10	42



Recommended solutions see table on page 19.

NS cores will be used for fast cutting and low power machines.
SS cores will be used for high output and high power machines.

Asphalt and AOC Saws

Asphalt Saw

New construction, construction extensions and the demolition of asphalt surfaces require precise separation and cutting-off tasks. The demands required from these blades are unique, with different features from standard floor saw blades.

All asphalt saw blades are equipped with under cutting protection segments to reduce premature wear of the saw blade (i.e. the undercutting effect).

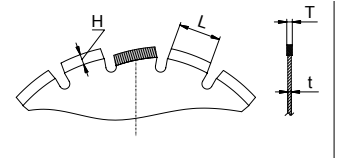
Toolgal offers a wide range of 300 – 900 mm cutting blades for wet and dry abrasive applications with the right U/C protection solution for the application and the machine.

Laser-welded blades guarantee safe working, and are available upon request for diameters above 600 mm. Smaller blades are always laser-welded.

- High output, achieved by using unique bonds and grits
- Large variety of under cutting solutions , using C, R, T and V configurations
- **Fast** - for light (low HP) machines and high cutting speed
- **Premium** - first choice for large variety of applications
- **High Performance** - high power machines and special high output requirement

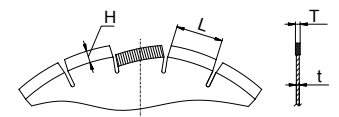
Asphalt And AOC Saws - Wide Slot

Asphalt and AOC Saws in NS cores						
Core: NS			Segments			
Item code	Diameter	U/C	Length	Thickness	Height	No. of Segments
AS-NS-30	300	3C	40	2.8	8/10	18
AS-NS-35	350	3C	40	3.1	8/10	21
AS-NS-40	400	4C	40	3.1	8/10	24
AS-NS-45	450	4C	40	4	8/10	26
AS-NS-50	500	5C	40	4	8/10	30
AS-NS-65	600	6C	40	4.6	8/10	36
AS-NS-60	650	6C	40	4.6	8/10	38
AS-NS-70	700	6V	40	5.5	8/10	40
AS-NS-75	750	6V	40	6	8/10	42
AS-NS-80	800	6V	40	6	8/10	46
AS-NS-90	900	6V	40	6.5	8/10	52



Asphalt And AOC Saws - Narrow Slot

Asphalt and AOC in SS cores						
Core: SS			Segments			
Item code	Diameter	U/C	Length	Thickness	Height	No. of Segments
AS-SS-30	300	3C	40	2.8	10	21
AS-SS-35	350	5C	40	3.1	10	25
AS-SS-40	400	4C	40	3.1	10	28
AS-SS-45	450	4C	40	4	10	32
AS-SS-50	500	6C	40	4	10	36
AS-SS-65	600	6C	40	4.8	10	42
AS-SS-60	650	6C	40	4.8	10	46
AS-SS-70	700	6V	40	5.5	10	50
AS-SS-75	750	6V	40	6	10	52
AS-SS-80	800	6V	40	6	10	54
AS-SS-90	900	6V	40	6.5	10	62



Recommended solutions see table on page 19.



Wall Saws

TOOLGAL WALL SAW

Toolgal Wall Saws are available in large diameters variety and can be adapted to all machine and concrete types. Wall Saws are available with flush cut patterns and other arbor configurations, as per the machine.

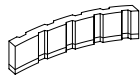
Many diamond blades require extra holes to be bored into the steel core in addition to the central bore.

Toolgal offers three basic segments and core configurations with special fast cutting qualities.

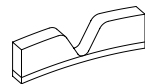
- Standard step cutting blades
- Thin wall saws for extra cutting speed and low power machines
- Three segments configurations for different applications



- Regular.



- T – Turbo.



- S – Split (V shape).

Our optimal wall saw solution uses 4.6 mm thick segments on a 3.5 mm core thickness with wide slots, to enable better cooling and slurry evacuation.

Blades can be laser-welded up to 900 mm, if required.

Toolgal offers special thin wall saws for low HP machines or quick turnaround cutting projects. Segments are 3.7 to 4 mm thick on a 2.8 – 3 mm core thickness.

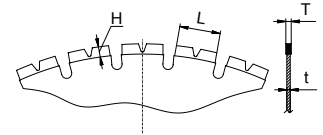
Toolgal offers Step Cutting Wall saws in a 5.5 mm segment thickness, wherever required.

As a market leader in Wall Saws Toolgal can customize solutions to meet customer needs.

Wall Saws - Standard

Wall Saw						
DIMENSIONS						
Item code	Diameter	Core	Length	Thickness	Height	No. of Segments
WS-NS-60-10	600	3.5	40	4.6	10	36
WS-NS-70-10	700	3.5	40	4.6	10	40
WS-NS-75-10	750	3.5	40	4.6	10	42
WS-NS-80-10	800	3.5	40	4.6	10	46
WS-NS-90-10	900	3.5	40	4.6	10	52
WS-NS-100-10	1000	3.5	40	4.6	10	58
WS-NS-120-10	1200	3.5	40	4.6	10	70

Standard arbor holes are: $\varnothing 1"$ with an additional pin hole (1+1) or $\varnothing 60$ mm with pin holes.

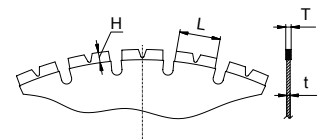


Wall Saws - Thin

- Fast - for light (low HP) machines
- High performance - high power machines and high output requirement

Wall Saw - thin						
DIMENSIONS						
Item code	Diameter	Core	Length	Thickness	Height	No. of Segments
WSt-NS-60-10	600	2.8	40	3.7	10	36
WSt-NS-70-10	700	2.8	40	3.7	10	40
WSt-NS-75-10	750	2.8	40	3.7/4	10	42
WSt-NS-80-10	800	3	40	4	10	46
WSt-NS-90-10	900	3	40	4	10	52

Standard arbor holes are: $\varnothing 1"$ with an additional pin hole (1+1) or $\varnothing 60$ mm with pins per machine.



Wall Saws - Step Cutting

Wall Saw - step cutting						
DIMENSIONS						
Item code	Diameter	Core	Length	Thickness	Height	No. of Segments
WSs-NS-60-10	600	3.5	40	5.5	10	36
WSs-NS-70-10	700	3.5	40	5.5	10	40
WSs-NS-75-10	750	3.5	40	5.5	10	42
WSs-NS-80-10	800	3.5	40	5.5	10	46

Standard arbor holes are: $\varnothing 1"$ with an additional pin hole (1+1) or $\varnothing 60$ mm with pins per machine.

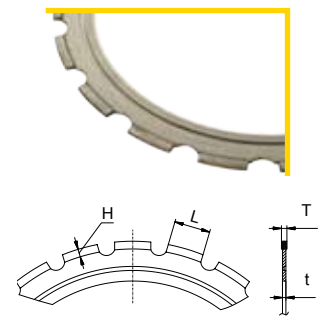
Ring Saws

Toolgal offers the following three high quality solutions for the 365 mm ring saw: a standard solution for common applications; a soft version for special fast cutting; and a hard version for abrasive materials. Toolgal also supplies ring saws with three different segment thicknesses to enable step cutting.

The standard thickness is 4.3 mm and 5.5 mm thickness available.

Ring Saw

Ring Saw						
DIMENSIONS						
Item code	Diameter	Core	Length	Thickness	Height	No. of Segments
RS-365-4.3-5.5	365	3	35	4.3	5.5	22
RS-365-5.5-5.5	365	3	35	5.5	5.5	22



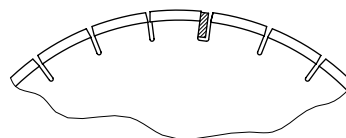
Under Cutting Protection

Toolgal offers four different kinds of U/C protection configurations, as shown in the table below.

Configuration **C** provides the fastest cutting solution, while the standard vertical segment **V** configuration or the special **R** and **T** configurations enable the usage of U/C protection segments with “full segment usage.”

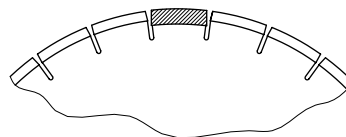
Abrasive slurry and loose grits (such as aggregate underlay on roads or asphalt) will circulate with the cutting motion and attack the steel core. This can wear the steel away before the segment wears down. To break up the flow of this material, undercutting protection segments are used to protect the steel core. This technique is generally reserved for asphalt, sandstone, fresh concrete and some large diameter road saws applications. Several configurations of undercutting segment are used by Toolgal:

V – Small diamond segment inserts brazed into the slots of the core.



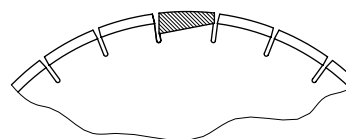
V = Hammer Segment

T – Extra height segment. Used on laser welded blades. Full cutting power and full undercut protection.



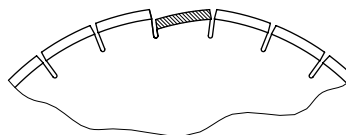
T = High Segment

R – Trapezoid segment. Used on laser welded blades. Similar in principle to T segments with refined geometry.



R = Trapeziod

C – a regular segment set on a slant. Used mainly on regular concrete and asphalt saws. Part of the slanted segment is dedicated for undercutting protection.



C = Inclined

U/C coding is composed of one digit and a letter.

The digit represents the number of U/C segments on the saw blade.

The letter defines the u/c segment configuration (per above groups).

Pre-Stressed Concrete Saws

Large saws are used in pre-stressed beam factories and railway beds.

Toolgal offers a wide variety of high performance saws that can be adapted to all customer applications.

Toolgal possesses extensive expertise providing solutions for all kinds of pre-stressed concrete production materials that comprise different wires, aggregates and curing times. Toolgal provides a range of segment qualities and sizes according to customer requirements, in addition to the following standard sizes.

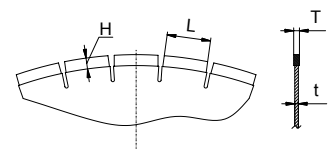
- High performance (speed and output) large blades for pre-stressed concrete
- Suited for cutting all aggregate types and wires
- Premium - for general use
- High performance - for special high output requirement

To ensure that the right blade is used for the task at hand, the following information is required:

Material

- Aggregate quality (limestone, granite, quartz, etc.) and size
- Curing time (in hours)
- Tensioning wires and structure (thickness and number)
- Drive power in kW and maximum limitations

Pre-Stressed Concrete Saw					
DIMENSIONS					
Item code	Diameter	Length	Thickness	Height	No. of Segments
PS-SS-65-10	650	40	6	10	46
PS-SS-70-10	700	40	6	10	50
PS-SS-80-10	800	40	6.5	10	54
PS-SS-85-10	850	40	6.5	10	58
PS-SS-90-10	900	40	7.5	10	64
PS-SS-100-10	1000	40	8	10	70
PS-SS-110-10	1100	40	8	10	74
PS-SS-120-10	1200	40	8	10	80
PS-SS-130-10	1300	40 </td <td>9</td> <td>10</td> <td>84</td>	9	10	84
PS-SS-140-10	1400	40	9	10	92



[Drills]



Ring Core Drills

Toolgal offers a wide range of rings and segment configurations, sizes and qualities to match customer requirements.

Ring Drills, small diameter drills up to 42 mm in diameter, are usually made from a continuous ring rather than from segments.

Toolgal's ring drills for concrete have the following configurations:

- a. The standard 6 mm to 8 mm high ring with a lathed base to enable the positioning of the ring centrally during brazing and cut water slots to aid cooling.
 - b. The 4T configuration of 7 mm high ring has a fast cutting action and improved water cooling through its special geometry. These drills do not have the lathed pad and are available in a limited variety of sizes.
- * All rings drills have water cooling slots.

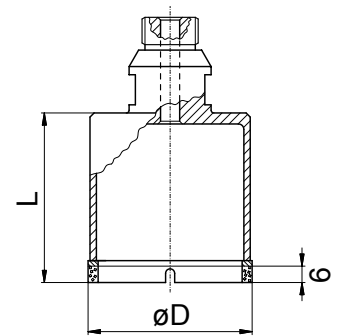
The rings are available as rings or mounted on tubes with a standard 1/2" BSP male connection, which can be ordered in usable lengths of 150 to 400 mm.

Other dimensions by request.

- **Premium** - for general use and light machines
- **High Performance** - for long life and powerfull machines

Ring Core Drills

Adaptor 1/2"				
DIMENSIONS				
Item code	Diameter	Thickness	Height	Length
RD-10	10	2.5	6	300/400/450
RD-12	12	2.5	6	300/400/450
RD-13	13	2.5	6	300/400/450
RD-14	14	2.5	6	300/400/450
RD-15	15	2.5	6	300/400/450
RD-16	16	2.5	6	300/400/450
RD-18	18	2.5	6	300/400/450
RD-20	20	2.5	6	300/400/450
RD-22	22	2.5	6	300/400/450
RD-24	24	2.5	6	300/400/450
RD-25	25	2.5	6	300/400/450
RD-26	26	2.5	6	300/400/450
RD-28	28	2.5	6	300/400/450
RD-30	30	2.5	6	300/400/450
RD-31	31	2.5	6	300/400/450
RD-32	32	2.5	6	300/400/450
RD-34	34	2.5	6	300/400/450
RD-35	35	2.5	6	300/400/450
RD-36	36	2.5	6	300/400/450
RD-38	38	3	6	300/400/450
RD-40	40	3	6	300/400/450



Concrete Segmented Drills

For drills larger than 45 mm in diameter, Toolgal offers segmented core drills.

The segments have three different optional configurations: Flat, V-Shaped and Turbo Shaped, as shown below.

Segments are mostly brazed with or without notches on the core, as per customer requirements.

Toolgal's three main qualities include:

Standard, Fast and Long Life in heights of 7.5, 10 and 15 mm.

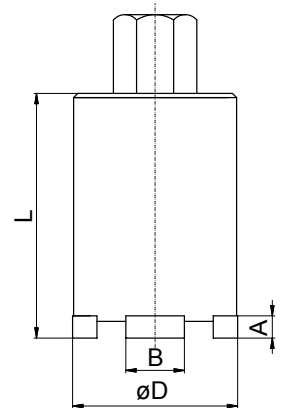
Standard sizes are listed in the table below.

- Fast drilling of all types of concrete
- Very fast initial drill penetration
- Variety of segment shapes
- **Premium** - for general use and light machines
- **High Performance** - for long life and powerful machines

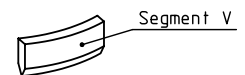
Concrete Segmented Drills						
Core			Segments			
Item code	Diameter	Thickness	Length	Thickness	Height	No. of Segments
WD-52-450	52	2	24	3.5	10	5
WD-57-450	57	2	24	3.5	10	5
WD-62-450	62	2	24	3.5	10	6
WD-67-450	67	2	24	3.5	10	6
WD-75-450	75	2	24	3.5	10	7
WD-82-450	82	2	24	3.5	10	7
WD-87-450	87	2	24	3.5	10	8
WD-92-450	92	2	24	4	10	8
WD-102-450	102	2	24	4	10	8
WD-112-450	112	2	24	4	10	9
WD-117-450	117	2	24	4	10	10
WD-127-450	127	2	24	4	10	11
WD-132-450	132	2	24	4	10	12
WD-152-450	152	2	24	4	10	13
WD-162-450	162	2	24	4	10	14
WD-177-450	177	2	24	4	10	14
WD-187-450	187	2.5	24	4.5	10	16
WD-202-450	202	2.5	24	4.5	10	16
WD-212-450	212	2.5	24	4.5	10	17
WD-227-450	227	2.5	24	4.5	10	18
WD-252-450	252	3	24	5	10	20
WD-277-450	277	3	24	5	10	22
WD-302-450	302	3	24	5	10	24

All item codes refer to a usage length of 450 mm with a 1 1/4" connector.

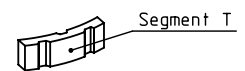
Other connectors types, diameters, lengths and number of segments are available on request.



- Drill with flat segment



- Drill with V segment



- Drill with T segment

[Chainsaws]



The **SAWSHARK** Chain Series



TOOLGAL SAWSHARK Chain is made of engineered diamond for absolute best performance in a variety of cutting applications.

- Longer life.
- More torque can be placed on chain and bar due to less spacing.
- Gives greater life - up to 30% more surface area.
- Chain stretching is reduced because of pressure on each segment is lower.
- Cuts significantly faster when cutting through heavy reinforced concrete. More diamonds in contact with the material.

Smoother Cutting & Less Vibration to the operator

- Unique sandwich segment design maintains segment profile throughout chain life
- The sandwich design has harder outer shell that keeps the segment's profile throughout its life. The use of a soft bond in the center enables fast cutting, especially in heavy steel.
- Allowed the segment work all the way.
- Only top quality diamonds are used in the bond which increases speed and life. Special Grinding

OPEN SEGMENTS- Toolgal chain is surface ground during the production, so the operator can start cutting immediately out of the box. (In competitor's chain it can take more than 20 minutes to open the segment, even in abrasive material).

Chain Structure

- The basic concept is using a hardened internal bushing between the links and the drive link.
- The link is very stable and slows down the elongation of the chain. The special hardening process prevents excessive guide bar wear.
- The assembly and disassembly is very easy using Toolgal chain assembly kit. An operator can easily remove a broken link and replace it within minutes.
- A special hole on the bottom of the drive link enable better cooling when water supply is reduced.

TOOLGAL DIAMOND CHAIN

Chain Segments per Machine

Hydraulic Saws		
Chain Size	Segments	Machine
11" / 22 cm	56	823 / 853 / 880
12" / 30 cm	62	CC 20/20
13" / 33 cm	50	Mini SawShark / MiniSaw / LCC30 / DS06 / 813 / 814
15" / 38 cm	55	Mini SawShark / MiniSaw / LCC30 / DS06
15" / 38 cm	64	LCC31 / DS11
15" / 38 cm	66	853 / 823 / 880
15" / 38 cm	78	SawShark SS15 / C150
16" / 40 cm	74	CC 20/20
18" / 45 cm	74	LCC31 / DS11
19" / 48 cm	78	853 / 823 / 880
20" / 50 cm	86	CC 20/20
20" / 50 cm	88	SawShark SS15 / C150
24" / 60 cm	94	853 / 823 / 880
24" / 60 cm	98	CC 20/20
30" / 75 cm	110	SawShark SS15 / C150 / 853 / 823 / 880



Gas Saws		
Chain Size	Segments	Machine
9" / 22 cm	48	FZ60 / 603
10" / 25 cm	50	FZ60 / 603
12" / 30 cm	54	FZ60 / 603
12" / 30 cm	58	613 / 680 / 633
14" / 35 cm	64	K950 / K960 / 613 / 680 / 633
16" / 40 cm	70	633

Bulk Concept

'Cut to Size' Concept

The "Cut to Size" idea gives the customer the option to create his own chain, per needs, by using the Toolgal assembly kit. Creating such a new chain will take a couple of minutes only and reduce the chains stock.

With the BULK chain and assembly kit you can create a chain for a variety of job applications.

- Always guaranteed to have the right size in stock.
- Reduces the need for a large inventory.
- Can be assembled on site.
- Quick & easy to assemble.

THE BULK: 25' - 425 LINKS

BLUE SHARK – For the most demanding applications.

Very hard aggregate. Heavy reinforced steel.

TIGER SHARK – Classic abrasive chain.

Excellent speed and life in all abrasive material.

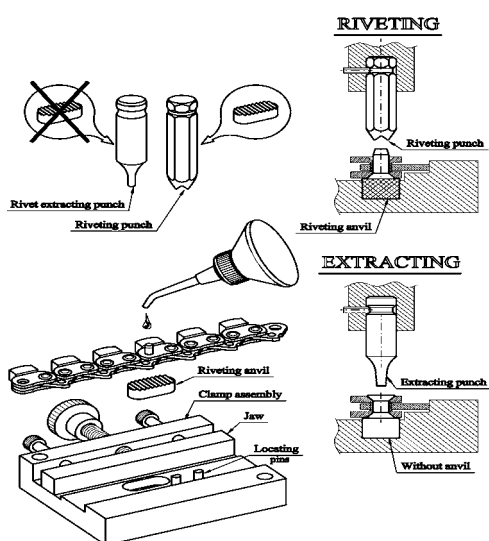


Chain Assembly Kit - Operating Instructions

Important: Fasten the kit (with proper bolts) to a sturdy table before use.

Operating the kit:

1. Remove the clamp assembly from the kit.
2. Insert the proper punch: riveting or extracting.
3. For extracting, remove the anvil (the toothed part) from the clamp assembly.
4. When riveting, the rivet is placed with its head resting on the anvil (on the underside of the chain).
5. Place the chain in the clamp, so that the suitable pin is inserted into the hole in the drive link. The chain's location is according to the particular rivet being treated.
6. Close the clamping jaw with the middle (larger) screw to straighten the chain and hold it in place; close with moderate force only.
7. Put the clamp assembly, with the chain, in its place in the kit.
8. When riveting, lubricate the rivet with a drop of oil for better results.
9. Lower the punch down to the rivet with the handlebar (twin levers). Apply pressure to the rivet with a 1/4 turn of the handlebar. Then turn the center handle one or two turns. Repeat the former actions until the riveting is completed. Attention: take care not to apply excessive pressure.
10. Release the chain when the riveting is completed; make sure that the drive link turns freely around the rivet.



SawShark - 15

SawShark Cutter - SawShark 15™

Choice of two diamond chains:

1. Blue Shark – Chain for cutting hard / very hard aggregate with heavy steel reinforcement
2. Tiger Shark – Chain for cutting green concrete, brick and concrete block without steel reinforcing

Size	Part Number
BAR	
15" / 38 cm	CA641017
20" / 50 cm	CA641019
30" / 75 cm	CA641021
CHAIN	
15" (38 cm) with 76 segments	Blue Shark - ACT11076 Tiger Shark - ACR00076
20" (50 cm) with 88 segments	Blue Shark - ACT11088 Tiger Shark - ACR00088
30" (75 cm) with 110 segments	Blue Shark - ACT11011 Tiger Shark - ACR00110
SPROCKET	
	SHRN18-00



SawShark MINI

The MINI Chainsaw is DCI's newest addition to the finest line of hydraulic concrete cutting saws. Available with 13" or 15" cutting depths and manufactured with an aluminum frame. The MINI Saw can be powered by a DCI HydraPak or by any other compatible power source.

Features & Benefits

- Makes clean plunge, bottom, notch, trim, and corner cuts without overcutting.
- Equipped with a powerful hydraulic motor (requires 8 gpm @ 2000 - 2250 psi).
- The trigger lockout safety feature is standard.
- Dual function trigger starts and stops tool and water simultaneously. Water flow system delivers maximum lubrication, cooling, and abrasive flushing through eight internal bar channels.
- Lightweight aluminum frame is ergonomically designed to enhance cutting precision while reducing operator fatigue.
- 13" bar provides a full 13" cutting depth.
- 15" bar provides a full 15" cutting depth.
- Choose from two types of diamond chains:

BLUE SHARK – For the most demanding applications. Very hard aggregate. Heavy reinforced steel.

TIGER SHARK – Classic abrasive chain. Excellent speed and life in all abrasive material.

Size	Part Number
BAR	
13" / 33 cm	CA641020
15" / 38 cm	CA641012
CHAIN	
13" (33 cm) with 50 segments	Blue Shark - ACT11050 Tiger Shark - ACR00050
15" (38 cm) with 55 segments	Blue Shark - ACT11055 Tiger Shark - ACR00055
SPROCKET	
	SHSN07-00



823-853 / 813-814 Hydraulic Saws

823 - 853 Large frame hydraulic saw

Size	Part Number
BAR	
11" / 28 cm	CA641007
15" / 38 cm	CA641009
19" / 48 cm	CA641010
24" / 60 cm	CA641011
30" / 75 cm	CA641013
CHAIN	
11" (28 cm) with 56 segments	Blue Shark - ACT11056 Tiger Shark - ACR00056
15" (38 cm) with 66 segments	Blue Shark - AC000110 Tiger Shark - ACR00066
19" (48 cm) with 78 segments	Blue Shark - ACT 11078 Tiger Shark - ACR00078
24" (60 cm) with 94 segments	Blue Shark - ACT11094 Tiger Shark - ACR00094
30" (75 cm) with 110 segments	Blue Shark - ACT11011 Tiger Shark - ACR00110
SPROCKET	
	SHIN14-00
SHARK LOCK - Conversion	
853 No motor upgrade	STID14-00
853 motor upgrade & F4	STID16-01

813 - 814 Small frame hydraulic saw

Size	Part Number
BAR	
13" / 33 cm	CA641008
CHAIN	
13" (33 cm) with 50 Segments	Blue Shark - ACT11050 Tiger Shark - ACR00050
SPROCKET	
	SHIN13-00

DO YOU KNOW HOW EASY IT IS TO CONVERT BACK?

Just take our sprocket and guide Bar.

If you have 853 w/Motor Upgrade or 880F4 you need STID16-01 Shark Lock

If you have 853 No Motor Upgrade you need: STID14-00 Shark Lock

Hydraulic chain

LCC30 / DS06

Size	Part Number
BAR	
13" / 33 cm	CA641020
15" / 38 cm	CA641012
CHAIN	
13" (33 cm) with 50 segments	Blue Shark - ACT11050 Tiger Shark - ACR00050
15" (38 cm) with 55 segments	Blue Shark - ACT10055 Tiger Shark - ACR00055
SPROCKET	
	SHSN07-00

LCC31 / DS11

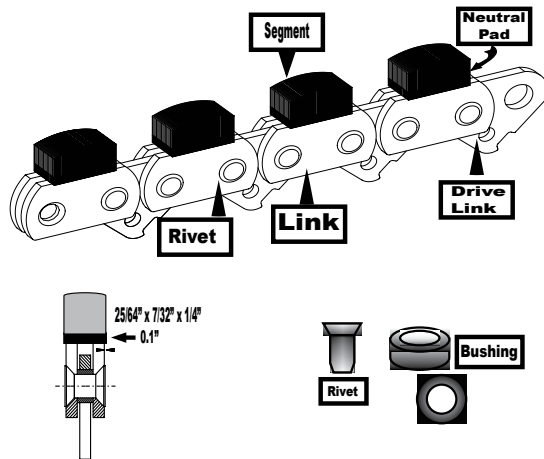
Size	Part Number
BAR	
15" / 38 cm	BHSN1564
18" / 45 cm	BHSN1874
CHAIN	
15" (38 cm) with 64 segments	Blue Shark - ACT11064 Tiger Shark - ACR00064
18" (45 cm) with 74 segments	Blue Shark - AC5H0074 Tiger Shark - ACR00074
SPROCKET	
	SHSN14-00

CC20 / CSH 40

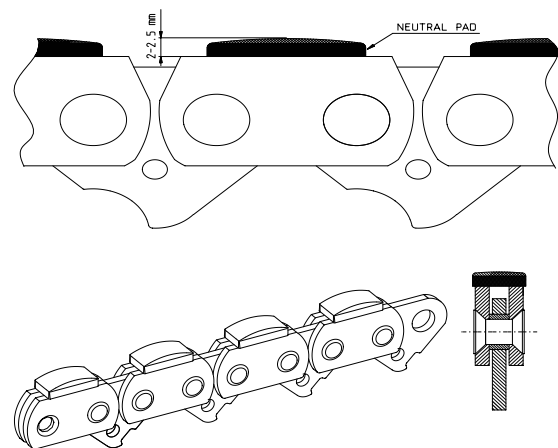
Size	Part Number
BAR	
20" / 50 cm	BHDN2086
CHAIN	
12" (30 cm) with 62 segments	Blue Shark - ACT11062 Tiger Shark - ACR00062
16" (40 cm) with 74 segments	Blue Shark - ACT11074 Tiger Shark - ACR00074
20" (50 cm) with 86 segments	Blue Shark - ACT11086 Tiger Shark - ACR00086
24" (60 cm) with 98 segments	Blue Shark - ACT11098 Tiger Shark - ACR00098
SPROCKET	
	SHDN14-00

Guide Bars - Tips

New Chain



Normal Diamond Segment Wear

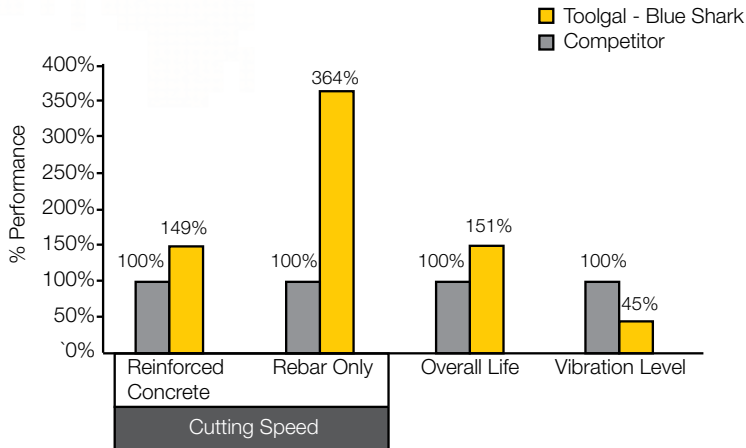


Bar Tips

- A Guide Bar is a wearable part of the diamond chain process, Guide Bars should wear at a rate of 2-3 chains per bar. Harder materials can reduce the life.
- There are things you can do to help extend the life of a Guide Bar.
 - Make sure the water pressure is good – Reduces overheating.
 - Correct tensioning of the chain will prevent the Bar Nose from opening or splitting.
 - The Bar Nose should not be continuously used for plunge cuts.
 - If you are experiencing excessive wear – Try applying less pressure (Let the chain do the work).
 - Do Not Use a longer Guide Bar than necessary, if you are cutting up to 15" use 15" bar. Do not use a 24" bar for 12" of cutting.
 - When you fit a new chain be sure to rotate the Bar (Turn it Upside down). The guide Bar works both ways and this helps to spread the wear on both sides of the bar.
 - Never run a new chain on a damaged Guide Bar, not only is it dangerous but it will cause excessive wear to the chain.

Gas Chain Comparison Chart

Gas Chain Saw Comparison



Gas Saw Advantages

- Up to 49% Improvement in Cutting Speed*
- Up to 51% Improvement in Life of Chain*
- Up to 55% Reduction in Vibration Levels*

Compared to Competitor

Estimated Chain Life

Gas machines			in-ft	200	300	400	500	600	700	800
Bar Length (CM)	Bar Length (inch)	Chain Length (links)	m	1.6	2.3	3.1	3.9	4.7	5.4	6.2
23 cm(RZ)	9" (RZ)	48								
25 cm	10"	50								
30 cm	12"	58								
35 cm	14"	64								
40 cm	16"	70								

The estimate range of chain life for each chain is highlighted in red

Material Selection Chart

	Soft Abrasive/ Brick	Natural stone	Medium Concrete / Light Reinforcement	Hard Concrete / Heavy Reinforcement
Blue shark	+	+	++	++
Tiger shark	++			

Gas Chain Machines

603GC - 64CC

Size	Part Number
BAR	
9" / 22 cm	CA642012
10" / 25 cm	BGZN1050
12" / 30 cm	CA642013
CHAIN	
9" (22 cm) with 48 segments	Blue Shark - ACT11048 Tiger Shark - ACRG0048
10" (25 cm) with 50 segments	Blue Shark - ACT11050 Tiger Shark - ACRG0050
12" (30 cm) with 54 segments	Blue Shark - ACT11054 Tiger Shark - ACRG0054
SPROCKET	
	SGIN08-00

613GC / 680 - 80CC

Size	Part Number
BAR	
12" / 30 cm	CA642005
14" / 35 cm	CA642006
CHAIN	
12" (30 cm) with 58 segments	Blue Shark - ACT11058 Tiger Shark - ACRG0058
14" (35 cm) with 64 segments	Blue Shark - ACT11064 Tiger Shark - ACRG0064
SPROCKET	
	SGIN08-00

Gas Chain Machines

633GC - 101CC

Size	Part Number
BAR	
12" / 30 cm	CA642014
14" / 35 cm	CA642006
16" / 40 cm	CA642007
CHAIN	
12" (30 cm) with 58 segments	Blue Shark - ACT11058 Tiger Shark - ACRG0058
14" (35 cm) with 64 segments	Blue Shark - ACT11064 Tiger Shark - ACRG0064
16" (40 cm) with 70 segments	Blue Shark - ACT11070 Tiger Shark - ACRG0070
SPROCKET	
	SGIN08-00

K950 - K960

Size	Part Number
BAR	
12" / 30 cm	CA642014
14" / 35 cm	CA642006
CHAIN	
12" (30 cm) with 58 segments	Blue Shark - ACT11058 Tiger Shark - ACRG0058
14" (35 cm) with 64 segments	Blue Shark - ACT11064 Tiger Shark - ACRG0064
SPROCKET	
	SGIN09-00

Cutting Depth & Applications

Cutting Depth

Diamond Chain vs. Blades

Chart Shows Bar Size required to cut same depth as a Diamond Blade

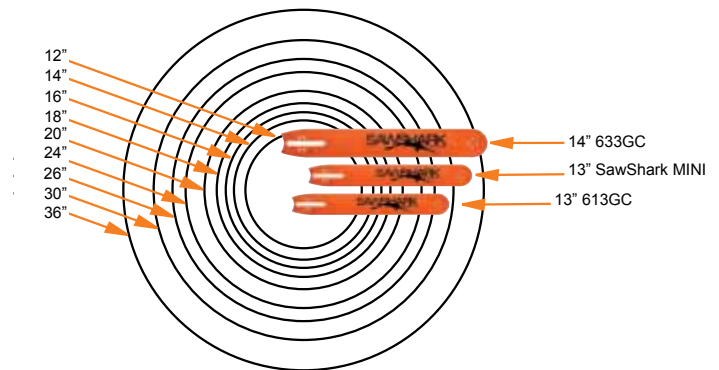
Applications

LANDSCAPE CONSTRUCTION

- Miter, angle and arc cuts
- Natural stone - water features and fountains
- Notch stones to create water channels
- Create clean, tight fitting stone and rock walls
- Hardscapes and faux rocks
- Labor savings on dry stack walls and features

MASONRY CONSTRUCTION

- Windows
- Door openings
- Expansion joints
- Masonry repair
- Crawl space access
- Beam pockets
- Remodel brick walls

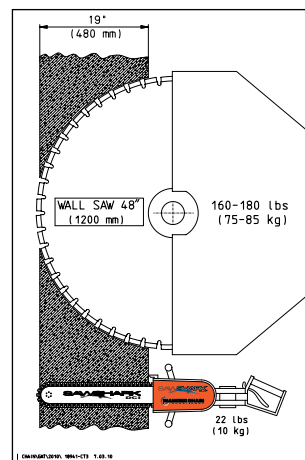


GENERAL CONSTRUCTION

- Foundations
- Concrete pipe
- Electrical box openings
- Ventilation openings
- Expansion joints
- Vents
- Curb cut-outs

UTILITY CONSTRUCTION

- Pipe taps
- Trim manholes to grade
- Utility Vaults
- Small openings
- Concrete removal



GENERAL TERMS OF SALES

The following terms and conditions shall apply to all sales completed by Toolgal Degania Industrial Tools Limited.

No variation of these terms and conditions shall be binding on the company unless authorized in writing.

Price

Price offers are valid for 90 days. Price lists are subject to occasional variation by prior notification to the purchaser.

Export prices relate to minimum order weights or 50Kg.

Export prices are generally quoted CIF air freight local Airport. Purchasers may request delivery by other means in which case the difference will be borne by the purchaser.

Publication

All information contained in any of Toolgal's publications is given in good faith but without warranty or condition and no liability is accepted for any damage or loss arising from the same.

Delivery Dates

Toolgal will endeavor to deliver all orders to port by the date specified on the order acknowledgment issued by the export department. No liability is accepted for loss due to failure to deliver or a delay in delivery howsoever arising.

Quotations

All quotations are subject to modification or withdrawal and no binding contract shall be deemed as existing until Toolgal accepts a firm order by way of acknowledgment.

Returns

All returns must be done with prior written agreement of Toolgal and executed according to Toolgal's instructions. All goods sent without such agreement may be returned to sender at his/her cost.

Warranty

Toolgal warrants that goods are free from defects in material and workmanship.

Toolgal will replace or credit any such items as reported providing written notice is received within 3 months of delivery. Toolgal has the right to ask for such goods, a sample thereof to be sent for examination prior to compensation, as described.

Safety

Purchasers are responsible for the dissemination of appropriate safety standards to end users and compliance with local national regulations. Purchasers should maintain a product liability policy where necessary, especially where segments are brazed by purchaser.

Governing Law

All contracts shall be governed and construed according to the laws of the state of Israel and any dispute arising out of or in connection with the same shall be submitted to the exclusive jurisdiction of the Israeli courts.

OSA Certification



Membership Certificate

The Organization for the Safety of Abrasives (oSa®)

herewith grants to the company

TOOLGAL DEGANIA INDUSTRIAL DIAMONDS LIMITED

as of 15 December 2010

based on the Application Form, oSa®-Constitution and Conditions of Use for the oSa®
Trademark the right until withdrawn to use the oSa® mark in the described colours
for the abrasives notified.



This right applies to the designation of the registered tools as well as their
packaging or labelling.

Bonn, 15 December 2010 _____ Executive Board

Organization for the Safety of Abrasives (oSa®) - Oxfordstraße 8 - D-53111 Bonn - Germany



Toolgal Industrial Diamonds Ltd, Degania 'A' 15120 Israel
Tel: +972-(0)-4-6608445/6 Fax: +972-(0)-4-6752620 E-mail: toolgal@toolgal.com