



MEKEL
SOLUTIONS

Connecting Technical Services



HIGH PERFORMANCE MACHINE TAPS

- Manufactured from High Grade HSSE & HSSE PM Steel
- Consistent and tight thread tolerance
- High operating parameters suitable for CNC / SPM Machines
- Material specific tool geometry for optimal performance
- Surface treatment to suit application material for greater wear & heat resistance

SA – SPIRAL POINTED TAPS

- Material specific angular geometry ensures chips are pushed downwards
- Axial through coolant taps

SERIES

SA: General steel, SG Iron
SAF: Forged steel
SAH: Alloy and Hardened Steel
SAS: Stainless Steel
SAI: Super Alloys



SB – SPIRAL FLUTED TAPS

- Specific flute design for excellent chip evacuation
- Helix angle as per material category
- Radial through coolant taps

SERIES

SB: General steel, SG Iron, Aluminium
SBF: Forged steel
SBS: Stainless steel
SBI: Super alloys



SC – STRAIGHT FLUTED TAPS

- Cutting edge geometry production short chips
- Special process for stress relieving on cutting edge
- Radial and axial through coolant taps

SERIES

SC: Cast iron, SG Iron, Aluminium Casting
SCC: Ductile Cast Iron
SCF: Forged steel
SCH: Hardened steel



SD – FORMING TAPS

- Optimized lobe form reduces friction
- Chamfer geometry for uniform load distribution
- Radial and axial through coolant taps

SERIES

SD: Aluminium and aluminium alloys
SDF: Steel and Forged steel



Standards	DIN, ISO, JIS, ANSI
Thread form	METRIC, UNC, UNF, BSP
Range	3mm - 25mm

SA	SPIRAL POINT	SC	STRAIGHT FLUTE
SB	SPIRAL FLUTE	SD	ROLL TAP OR FORMING TAP

COATING

1	BF	Bright Finish	5	TICN	Titanium Carbo Nitride Coating
3	TiN	Titanium Nitride Coating	6	TiAlN + WC/C	Hardlube
4	TiAlN	Titanium Aluminium Nitride Coating	7	AlCrN	HELICA

High Performance Guiting Tools

[illegible]

TAP SELECTION CHART

[illegible]

TAP SELECTION CHART



SCF1	SDF1	SAS3	SAS5	SAS6	SBS5	SBS6	SBS5	SAB	SAB	SC1	SC4	SC4TC	SC4	SC4TC	SD1
Straight Flute	Forming	Spiral Point	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Forming
HSSE	HSSE	HSSE	HSSE	HSSE	HSSE	HSSE	HSSE-PM	HSSE-PM	HSSE-PM	HSSE	HSSE	HSSE	HSSE-PM	HSSE-PM	HSSE
-	-	-	-	-	45	45	45	-	-	-	-	-	-	-	-
TiCN	TiCN	TiN	TiCN	TiN + W/C	TiCN	TiN + W/C	TiCN	TiN + W/C	TiN + W/C	TiN	TiN	TiN	TiN	TiN	BiGt
E/1-1.5P	C/2-3P	B/4-4.5P	B/4-4.5P	B/4-4.5P	C/2-3P	C/2-3P	C/2-3P	B/4-4.5P	C/2-3P	E/1-1.5P	E/1-1.5P	E/1-1.5P	E/1-1.5P	E/1-1.5P	C/2-3P
Through/ Blind	Through/ Blind	Through	Through	Through	Blind/ Through	Blind/ Through	Blind/ Through	Through	Blind/ Through	Through/ Blind	Through/ Blind	Blind	Through/ Blind	Blind	Through/ Blind
No	No	No	No	No	No	No		No	No	No	No	Yes	No	Yes	No
-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
	15-20														
10-14	12-16														
8-12															
		5-10	5-10	8-14	5-8	10-12	10-12								
			4-8	8-10	4-8	8-10	8-10								
				4-8		6-8	6-8								
										25-30	30-40	30-40	40-50	40-50	
										15-20	20-25	20-25	30-40	30-40	
											12-15	15-20	25-30	25-30	
															20-25
										25-30					20-25
										20-25					
								10-15	6-10						
								6-12	5-8						
								8-12	6-8						
								4-6	3-5						

NIB TAPS

High performance Nut taps for Mild Steels, High Tensile Steel and Stainless Steel

- Manufactured from High Grade HSSE Steel
- Tight thread tolerance for better consistency
- Special treatment for stress relieving

MATERIAL

HSSE

RANGE

Metric – M3 – M24

BSW/UNC/UNF – 3/16" – 1"

SURFACE TREATMENT

TiN/TiCN



HOLLOW TAPS (CROWN TAPS)

- Special crown-shaped front portion of this tool provides excellent accuracy even in the first stage of the cutting process
- More cutting teeth than conventional tap ensure perfect load distribution. Extra clean and accurate threads can be cut in this way
- The special hollow face crown-shape allows chips to accumulate within the tap & can be tapped upto 2xD in blind holes without having to empty the chips.
- Maximum self-control achieved due to the unfluted guiding-part, results in a high process reliability

FEATURES

- Tapping up to 2D in blind hole
- More cutting teeth ensures perfect chip distribution
- Maximum self control due to non fluted guide portion

WORKPIECE MATERIAL

- Free Cutting Steel
- Structural Steel
- Carbon Steel
- Alloy Steel < 850 M/mm²
- Free Machining Stainless Steel
- Spheroidal Graphite
- Malleable Cast Iron



CARBIDE TAPS

- Manufactured from premium grade micro-grain solid carbide for longer tool life
- Ideal for mass production with cutting speeds higher compared to HSS-E taps
- Fewer tool changes due to high wear resistance, resulting in optimum machine output
- Internal coolant option with axial coolant outlet for improved swarf management

RANGE

Metric - M3 – M16 (Coarse & Fine Pitch)



HSS HAND AND SHORT / LONG MACHINE TAPS

- Manufactured in state of art CNC machines
- HSS- M2 steel – Straight Flute, Spiral Pointed taps and Long Shank Taps

RANGE

Metric (Coarse and Fine Pitch) M10- M180
Imperial 1/16" - 6"

PIPE THREADS

1/16" - 4"

THREAD FORM

Metric, BSW, BSF, BSCY, BA, BSB, ME,
BSOON, UNC, UN, UNS, BSP, BSPT, NPT,
NPTF, NPSI, NPSF



HAND TAPS (SERIAL FORM)

Super Alloys, Hardened Steel and Stainless Steel

- Material – HSS M42 and HSSE/HSS M42 Steel
- Set of 3 (OR) Set of 4 TIN coated
- Inconel, Titanium, Nickel based Alloy, Tool Steel, Maraging Steel, Die Steel, Stainless Steel
- Distribution of cutting load- Thread accuracy
- Thread accuracy and long life

RANGE

M2.5 – M120



CARBON STEEL TAPS

All taps manufactured from first grade High Carbon Steel

- Heat treated in atmospheric controlled furnace with modern timers and temperature controllers
- Every tap passes through stringent inspection tests

STANDARDS

Metric & British standard tap – BS949:1951

American standard taps – ANSI 94.9- 1951

RANGE

Metric – M2 – M52 (Coarse & Fine pitch)

Imperial – 1/16" – 2"

Pipe threads- 1/8" – 2"

THREAD FORMS

Metric (Coarse & Fine)/BSW, BSF, BA, BSB, BSCY, ME, BSCON/
UNC, UNF, UN, UNS, BSP, BSPT, NPT, NPS

LH taps can be supplied against requirement



THREADING DIES & DIE NUTS (HSS & CARBON STEEL)

- HSS Dies manufactured of HSS M2 Steel
- Carbon Steel Dies manufactured of High Carbon Steel
- High Carbon Steel Split Round Dies (BS 1127:1976)
- HSS Ground Dies (DIN 223)
- High Carbon Steel Hexagonal Die Nuts
- HSS Hexagonal Die Nuts

RANGE

OD – 13/16" – 4"

SPLIT DIES

Metric – M2- M60 (Fine and Coarse pitch)

Imperial – 1/8" – 1"

Pipe thread – 1/8" – 2"

SOLID ROUND DIES

Metric M2- M24

Imperial 5/32" – 3/4"

HEXAGONAL DIE NUTS

A/F – 0.710" – 3.890"

Metric- M3- M56

Imperial – 1/8" – 2 1/4"

Pipe thread – BSP- 1/8" – 2"

THREAD FORM

Metric (Coarse & Fine) / BSW, BSF, BSB, BSCY,
ME, BA, WF, BSP, BSPT/ UNC, UNF, NPT



END MILLS FOR HARDENED STEELS 45-70 HRC

PROTON HD

FEATURES

- Superior nano grain structure raw material
- Multilayer coating for Hardened moulds
- Ideal Chip flow geometry
- Close tolerance end mills for finishing for higher accuracy

FUNCTIONS & BENEFITS

- No EDM required as milling is a much faster operation
- Operates at high cutting speeds on hardened materials

- Polishing for hardened dies can be minimized
- No need of multiple setups, Job can be finished with single clamping and it is much easy to achieve high accuracy
- Higher Tool Life and consistency
- High Productivity

RANGE

- Standard 0.1mm- 25mm available in stub/ standard/long/extra long/ long reach
- Specials 0.1mm- 32mm available in stub/ standard/long/extra long/ long reach



END MILLS FOR STAINLESS STEEL, SUPER ALLOYS & EXOTIC MATERIALS

PROTON HD

FEATURES

- Variable pitch and Variable helix
- Stable core geometry
- Optimized centre cutting geometry
- New generation coating

FUNCTIONS & BENEFITS

- Higher productivity
- Ability to work at high Parameters due to the reinforced core.

- Superior Tool Life.
- Excellent Surface Finish.

RANGE

- Standard Roughing 3mm- 20mm / Standard Finishing 0.4mm-12mm
- Special- 0.4mm-25mm



END MILLS FOR TROCHOIDAL MILLING

PROTON HD

FEATURES

- Robust Core Design
- Multi-flutes for High Productivity
- Available with alternate coating

FUNCTIONS & BENEFITS

- Operates at high cutting speeds
- Geometry programmed to suit adequate material removal at various engagement angles
- Highest dynamic speed rates

- Highest material removal rate
- Least cutting forces
- Prolonged tool life due to reduced shock
- High savings in cycle time when compared to the conventional milling strategy

RANGE

- Standard Roughing 3mm- 20mm
- Special- 3mm-25mm



END MILLS FOR GRAPHITE MILLING

PROTON HD

FEATURES

- Superior nano grain structure raw material
- Multilayer coating for Hardened moulds and Diamond Coating for graphite milling
- Wear resistant grade
- Ideal Chip flow geometry
- Close tolerance end mills for finishing for higher accuracy
- Special Roughing Pitch for graphite roughers

FUNCTIONS & BENEFITS

- No EDM required as milling is a much faster operation
- Operates at high cutting speeds on hardened materials

- Polishing for hardened dies can be minimized
- No need of multiple setups, Job can be finished with single clamping and it is much easy to achieve high accuracy
- Higher Tool Life and consistency
- High Productivity
- Superior Surface finish in graphite moulds

RANGE

- Standard 0.1mm- 25mm available in stub/standard/long/extra long/ long reach
- Specials 0.1mm- 32mm available in stub/standard/long/extra long/ long reach



END MILLS FOR HIGH TEMPERATURE ALLOYS (TURBO - TR)

F177TR / F178TR / F175TR

FEATURES

- Variable pitch and Variable helix
- Stable core geometry
- Optimized centre cutting geometry
- New generation coating
- Available in 4 Flutes, 5 Flutes, 6 Flutes and 7 Flutes
- Available with Neck options

FUNCTIONS & BENEFITS

- Higher productivity
- Reinforced core gives the ability to work at higher parameters.

- Superior Tool Life.
- Excellent Surface Finish.
- High MRR

RANGE

- Standard 6mm - 20mm
- Specials 1.5mm - 25.4mm



ROUGHERS AND FINISHERS (CHIP BREAKER)

F192CB / F193CB / F194CB

FEATURES

- 3-4 Flutes
- Center Cutting
- Sinosoidal Pitch
- Superior Coating

FUNCTIONS & BENEFITS

- High MRR
- Stable cutting at high cutting speeds
- Superior Tool Life

RANGE

- Standard 8mm - 20mm available in standard
- Specials 6mm - 25.4mm available in standard



RAZOR CUT SERIES FOR ALUMINIUM

FEATURES

- 3 Flutes
- Center Cutting
- Coarse Pitch
- Roughing for Aluminium
- Uncoated

FUNCTIONS & BENEFITS

- High MRR
- Excellent for roughing and finishing of Aluminium
- Superior Tool Life

RANGE

- Standard 6mm - 25mm available in regular/long reach
- Specials 4mm - 25mm available in regular/long reach



CBC SERIES
coarse pitch
roughing for Aluminium



CBCH SERIES
chamfered pitch
roughing for Aluminium



3FWF SERIES
wiper design
finishing for Aluminium



3FWFXL SERIES
wiper design
finishing for Aluminium



3FWFCR SERIES
wiper design
finishing for Aluminium



2FWF SERIES
wiper design
finishing for Aluminium

GENERAL PURPOSE END MILL

FEATURES

- Excellent choice for application on variety of material
- Special nano grain carbide raw material with an optimum balance of hardness and toughness
- Special geometry better feed rates and longer tool life
- High performance TiAlN coating for superior wear resistance

FUNCTIONS & BENEFITS

- Best value for money
- Best Suitable for Steel, Stainless Steel, Cast iron, Aluminium

RANGE

- Standard 1mm to 25mm available in stub/standard/long/extra long/ long reach
- Specials 0.3mm to 32mm available in stub/standard/long/extra long/ long reach



A thread mill can be thought of as an end mill with the profile of the thread on the side. To perform a Thread Milling operation, a helical interpolation movement is required. Helical interpolation is a CNC function producing tool movement along a helical path. This helical motion combines circular movement in one plane (x,y coordinate) with a simultaneous linear motion in a plane perpendicular to the first (z coordinate).

- Totem has introduced Threadmill in the market with multiple thread forms. These thread mills are available in the below thread forms as standard (M, MF, UNC, UNF, UNEF, MJ, UNJ, NPT, NPTF, BSP, BSPT)
- They are available in two design, Regular and Multi-Tooth.
- The Regular is available in Helical flute(RH) and Straight flute (RS), Through Coolant and Non Through Coolant, For Internal and External Threading (RHS/ RHTS/ RHC/ RHTC/ RSS/ RSTS)
- The Multi Tooth is available with 2D (MT2D) 3D (MT3D)/4D (MT4D) cutting options and also for Hard Part Threading (MTH2D & MTH3D)
- Taper preparation end Mills (TP) for the NPT and NPTF Threads which are to be used prior to the Threading options
- Chamfer Tools (CT) available in Short (A90S) and Long (A90L)

CT	CHAMFER TOOL
TP	TAPER PREPERATION
TM	THREAD MILL
ST P60	SINGLE TOOTH PARTIAL PROFILE
MT2D	MULTI TOOTH 2D
MT3D	MULTI TOOTH 3D
MT4D	MULTI TOOTH 4D
MTH2D	MULTI TOOTH 2D FOR HARD PART
MTH3D	MULTI TOOTH 3D FOR HARD PART

RHS	REGULAR HELICAL FLUTE SOLID
RHTS	REGULAR HELICAL FLUTE TAPER SOLID
RHC	REGULAR HELICAL FLUTE COOLANT
RHTC	REGULAR HELICAL FLUTE TAPER COOLANT
RSS	REGULAR STRAIGHT FLUTE SOLID
RSTS	REGULAR STRAIGHT FLUTE TAPER SOLID
A90S	ANGLE 90 SHORT TOOL
A90L	ANGLE 90 LONG TOOL

ADVANTAGES OF THREAD MILLING

- **Thread milling is a secure machining operation with less chances of part damage and breakage of the tool**
- **Threading in difficult to machine materials and hard materials is easy**
- **Higher thread quality**
The cutting conditions are extremely good when you are thread milling. The result of the thread is a higher quality of surface finish, tolerance, angle, etc. Compared with other threading methods.
- **Flexible tool**
Same cutter can be used for right hand and left hand thread. Threads with different diameters can be made with the same tool as long as the pitch is the same. The same thread mill can be used for blind holes and through holes.
- **Threading in blind holes**
When thread milling you will get a complete thread profile to the bottom of the hole. When tapping its necessary to drill much deeper as its not until the third thread the tap will make a complete thread profile.
- **Less wear on the machine spindle**
Thread milling will give you longer life to the machine spindle compared with tapping as the rotation on the spindle doesn't need to be stopped and reversed for every thread.
- **Energy-saving production**
Law energy consumption as the machine spindle doesn't need to be stopped and started after each thread.
- **Thread Milling in a lathe with live tools**
Reduced machining time compared with thread turning. Excellent chip control.





HIGH PERFORMANCE TD DRILLS

FEATURES

- Reinforced core geometry for higher feed rates
- Special flute form for effective chip evacuation
- Special nano grain carbide raw material with an optimum balance of hardness and toughness
- High performance coating for superior wear resistance at higher cutting speeds

FUNCTIONS & BENEFITS

- Universal geometry which can be used for Cast Iron and Steel
- Higher productivity

- High feed rate
- Stable core contributing to lower breakages and rejection rates.

RANGE

- Standard 1mm- 20mm in L/D 3 -5 Solid Drills
- Standard 3mm - 20mm in L/D 3 -5-7 Through Coolant Drills
- Specials 1mm - 32mm



DHD DEEP HOLE DRILLING

FEATURES

- Reinforced Core Design
- Superior Surface Treatment
- 4 Margins to Guide
- High Performance Coating
- Optimized Flute Design

FUNCTIONS & BENEFITS

- Stable cutting edge
- Better Chip Evacuation

- Better Hole Straightness
- Superior Tool Life
- Eliminate Breakages

RANGE

3mm to 16mm
Available in 12X, 15X, 20X



TMRT CARBIDE REAMERS

ABOUT TMRT - TOTEM MULTIFLUTE REAMING TOOLS

- These reamers are designed for the highest metal removal rates from diameter 1.5mm to 12mm as a std
- All standard reamers are ground to an ISO H7 tolerance class hole to address most common applications.
- Special coatings and lead chamfer configurations enable high-speed machining of steel, stainless steel, cast iron, and non-ferrous materials at high speeds.

FEATURES & BENEFITS

- Higher Productivity and Profitability
- Longer tool life with increased hole and surface quality
- Highest metal removal rate at higher speeds and feeds due to reaming-specific low cobalt grades and substrates.
- Intermediate diameters from 1.5mm to 20mm can be offered as per various lead chamfer configuration as a custom solution.
- All TMRT reamers are also offered with internal coolant supply.



GENERAL PURPOSE SOLID CARBIDE DRILLS

F226 SOLID CARBIDE DRILLS 3X STUB LENGTH DRILLS

RANGE
1mm to 20mm

F224 SOLID CARBIDE DRILLS 5X JOBBER LENGTH DRILLS

RANGE
1mm to 20mm



CARBIDE CENTER DRILLS IN DIN333

**CENTER DRILL AVAILABLE
IN DIN 333 STANDARD IN
LH/RH WITH BOTH
FORM A & FORM B**

RANGE
1mm to 8mm



SPOTTING DRILLS WITH TIN COATING

60 DEGREE SPOTTING DRILLS,
Right-hand helix, standard length Cut / Shank Dia. = h6 tolerance range; point angle tolerance $+0^\circ/-1^\circ$

RANGE: 2mm to 16mm

90 DEGREE SPOTTING DRILLS,
Right-hand helix, standard length Cut / Shank Dia. = h6 tolerance range; point angle tolerance $+0^\circ/-1^\circ$

RANGE: 2mm to 16mm

120 DEGREE SPOTTING DRILLS,
Right-hand helix, standard length Cut / Shank Dia. = h6 tolerance range; point angle tolerance $+0^\circ/-1^\circ$

RANGE: 2mm to 16mm



CHAMFER TOOLS WITH TIN COATING

**60 DEGREE COUNTERSINK TOOLS
WITH 4 FLUTES**

RANGE
3mm to 16mm

**90 DEGREE COUNTERSINK TOOLS
WITH 4 FLUTES**

RANGE
3mm to 16mm



TUNGSTEN CARBIDE ROTARY BURRS

Workpiece Material	Workpiece Material groups		Cut Type				
			Standard (Single)	Supreme (Double)	Deluxe (Diamond)	Aluma	Chip Breaker
Steel (P)	Non Hardened, non heat treated steel upto 1200 N/mm ² (<35 HRc)	Constructional Steels, Carbon Steel, Tool Steels, Non Alloyed Steels, Case Hardened Steels, Steel Casting	✓	✓	✓		
	Hardened, Heat treated steels exceeding 1200 N/mm ² (>35 HRc)	Tool Steels, Tempering Steels, Alloyed Steels, Steel Casting	✓	✓			
Stainless Steel (M)		Austenitic and Ferritic High Grade Steels			✓		✓
Non-Ferrous Metals (N)	Soft Non-Ferrous Metals	Aluminium Alloys, Brass, Copper, Zinc				✓	
						✓	
	Hard Non-Ferrous Metals	Bronze, Titanium/Titanium Alloys, Very Hard Aluminium Alloys (High Si content)	✓	✓	✓		
	Heat Resistant Alloys	Nickel based Alloys, NiCo Alloys (Aircraft engine and turbine construction)	✓	✓	✓		
Cast Iron (K)		Grey Cast Iron, Spheroidal Graphite Cast Iron	✓	✓	✓		
Plastic /Other Materials						✓	
		Fiber Reinforced Plastic, Thermoplastics Hard Rubber				✓	



Series	Shape Description	Totem Reference
SA/ZYA	Cylindrical without end cut	C
SB/ZYAS	Cylindrical with end cut	CE
SC/WRC	Cylindrical with radius end	B
SD/KUD	Ball Shape	S
SE/TRE	Oval shape burr	O
SF/RBF	Tree shape with radius end	TB
SG/SPG	Tree shape with point end	T
SH	Flame shape	F
SL/KEL	Cone with radius burr	K
SM/SKM	Cone shaped burr	A
SN	Inverted cone shape burrs	N
RIM	Rim shape burrs	R

- Ask your local representative about our long shank program –Available in 4", 5", 6", 7", 8", 9", 10", 11" & 12"
- All sizes available as a special in left hand cut
- Coarse cut burrs available on request
- Full carbide burrs available on request

BURR SETS

We also offer burr case sets in 6 mm and 3 mm shank

- BS1 - C8, B6, S4, TB3, T3, F4, K2, A3
- BS2 - C4, B3, S3, TB2, T2, F3, K6, A11
- MINI BS1 - MC1, MC5, MBO, MB1, MSO, M01, MTB2, MT5, MF1, MK3, MA5, MA3



JOBBER, TAPER & REDUCED SHANK DRILLS

FEATURES

- Made from Premium Grade HSS Steel
- Manufactured in State of Art CNC machine setup

FUNCTIONS & BENEFITS

- An excellent general purpose drill with conventional 118° point angle
- Stable Cutting edge
- Better chip evacuation
- Better hole straightness
- Superior Tool life

SERIES	STANDARD	RANGE
HSS Parallel Shank Twist Drills – Jobber Series	IS 5101 : 2002, DIN 338 : 1984	1mm to 20mm & 3/64" to 13/16"
HSS Taper Shank Twist Drill – Fully Ground Taper Shank Drills	IS 5103 : 2002, DIN345 : 1986	8mm to 75mm & 3/8" to 2"
HSS Reduced Shank Drills	-	13.5mm to 30mm



M35 SERIES – BLACK & GOLD DRILLS

FEATURES

- Made from premium grade High Speed Steel (5% Cobalt)
- Special Black & Gold surface treatment to increase lubricity & reduce friction
- The strong web construction provides greater strength & rigidity to the drill
- Precision ground 135° Split Point angle is Self Centring & reduces Thrust during application

FUNCTIONS & BENEFITS

- High performance drills suitable for Production applications & also for tough Maintenance applications
- Well suited for drilling on Stainless Steel & challenging Alloy Steel materials
- Operating at higher feeds

SERIES	STANDARD	RANGE
HSS Parallel Shank Twist Drill – Black & Gold (M35 Series)	IS 5101 : 2002, DIN 338	1mm to 13mm & 3/64" to 1/2"



HSS STUB DRILLS

FEATURES

- An excellent general purpose drill with conventional 118° point angle
- Shorter flute & overall length increases the rigidity

FUNCTIONS & BENEFITS

- Less drill deflection, better hole accuracy & longer tool life
- Operating at higher feeds
- Ideal to use in manual hand held drilling application

SERIES	STANDARD	RANGE
HSS Parallel Shank Twist Drill – Stub Series	IS 5100 : 2002, DIN 1897 : 1984	1mm to 20mm & 3/64" to 9/16"



HSS LONG DRILLS

FEATURES

- Stable cutting edge
- Better chip evacuation
- Better hole straightness

FUNCTIONS & BENEFITS

- Well suited for deep holes
- Superior tool life

SERIES	STANDARD	RANGE
Long Shank HSS Drill	IS 5102 : 2002 , DIN 340 : 1978, ISO 494 : 1975, BS 328	1mm to 13mm, 3/64" to 1/2"



HSS DRILL CASE SETS



SERIES	DESCRIPTION	QTY PER CASE SET
HSS M2 DRILL SET	1mm to 13mm x 0.5mm	25 pcs
HSS M2 DRILL SET	2mm to 8mm x 0.5mm	13 pcs
HSS DRILLS CASE SET	1/16" to 1/4"	13 pcs
HSS DRILLS CASE SET	1/16" to 1/2"	29 pcs

CENTRE DRILLS

FEATURES

- Made from Premium Grade HSS Steel in M2 Grade & M35 Grade
- Available in BS Standard, Type - A & Type -B
- Also available with TIN coating

FUNCTIONS & BENEFITS

- Excellent choice for centring application
- Stable cutting edge
- Superior tool life

STANDARD	TYPE	PILOT DIA
AS PER BS 328 : PART II - 1990	BS SERIES	3/64 to 3/16
AS PER IS 6708-2002	TYPE A	1mm to 10mm
AS PER IS 6709-2002: ISO 2540-1972	TYPE B	1.6mm to 10mm



HSS / HSS-E ANNULAR CUTTERS

FEATURES

- Made from premium grade High Speed Steel
- Multi – cut geometry for ply – cutting & lower friction to reach better performance of endurance & removal of chips
- Available in One Touch Shank (Universal shank Dia 3/4" or 19.05mm)

FUNCTIONS & BENEFITS

- Applicable to hole cutting & process of annular groove on various magnetic drills
- Meets requirements of hole cutting on various materials

RANGE	CUTTING DEPTH
12mm to 50mm	25mm & 50mm



TCT ANNULAR CUTTERS

FEATURES

- Premium quality Tungsten Carbide tips for ply – cutting & lower friction
- Multi – Cut geometry for increases chip removal

FUNCTIONS & BENEFITS

- Applicable to hole cutting & process of annular groove
- Suitable on various materials
- Universal shank 3/4" (19.05mm) for various magnetic drill machines

RANGE	CUTTING DEPTH
11mm to 40mm	40mm & 55mm



CONSTRUCTION DRILLS

FEATURES

- High quality Tungsten Carbide Tip
- Automatic Brazing process
- Produced with Chrome Vanadium hardened & tempered shank

FUNCTIONS & BENEFITS

- Guaranteed Tool life
- Extensive usage in Concrete, Natural Stone & Masonry etc.

SERIES	STANDARD	RANGE
HAMMER DRILL SDS PLUS	DIN 8035	Dia 5mm to 25mm
MASONRY GRANITE DRILL	DIN 8039, ISO 5468	Dia 4mm to 12.0mm
MASONRY CONCRETE DRILL	DIN 8039	Dia 3mm to 12mm, Dia 3/16" to 15/32"



TOOLING SYSTEMS

Forbes launches premium quality tool holder products which has been engineered to perfection and benchmarked with the best in class. The portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility. Designed for both manual and automatic tool changing, These tool interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates. These tool holders can be used on all types of machine tools and in applications ranging from low-speed, heavy-milling jobs to high-speed operations greater than 25,000 RPMs.

TAPERS (BACK-END)

- SK40/SK50 (DIN69871)
- HSK50/HSK63/HSK100 (DIN69893)
- BT30/BT40/BT50 (JIS B6339)

FEATURES

- Comprehensive range of 450 SKUs
- BT (JIS B 6339 / MAS 403), SK (DIN 69871), HSK (DIN 69893) tapers
- All tool holders have taper angle accuracy as per AT3 class
- TIR of front end with respect to taper controlled within 3 microns
- All holders are dynamically balanced and also fine balanced to 2.5G @ 25000 RPM & BT30 balanced at 6.3G @ 18000 RPM
- Form AD/B standard for all holders Data chip hole as standard for all HSK & SK taper holders Bore tolerance H5 as standard for all side lock holders

PRODUCTS OFFERINGS

- EM Chucks
- ER Collet Chucks
- Side Lock Adaptors
- Face Mill Holders
- Combi Shell Mill Holders
- Flange Mounted Holders
- Shrink Fits
- MTA Holders
- Drill Chucks
- Boring Bar Blanks
- Hydraulic Chucks

FORMS

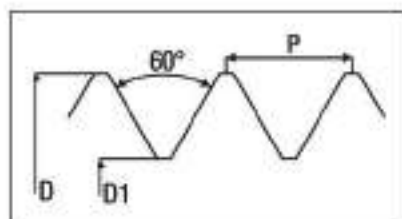
Form A : No inner coolant supply

Form AD: central coolant supply through retention knob.
A retention knob with centralized bore is required.

Form AD/B: The clamping devices are equipped with bores for form AD as well as for form B.



ISO METRIC THREADS



ISO METRIC COARSE THREADS

Metric Coarse (M)		
Nominal Diameter	Pitch	Drill Size
ØD		
2	0.4	1.6
2.2	0.45	1.75
2.3	0.4	1.9
2.5	0.45	2.05
2.6	0.45	2.1
3	0.5	2.5
3.5	0.6	2.9
4	0.7	3.3
4.5	0.75	3.7
5	0.8	4.2
6	1	5
7	1	6
8	1.25	6.8
9	1.25	7.8
10	1.5	8.5
11	1.5	9.5
12	1.75	10.2
14	2	12
16	2	14
18	2.5	15.5
20	2.5	17.5
22	2.5	19.5
24	3	21
27	3	24
30	3.5	26.5
33	3.5	29.5
36	4	32
39	4	35
42	4.5	37.5
45	4.5	40.5
48	5	43
52	5	47
56	5.5	50.5
60	5.5	54.5
64	6	58
68	6	62

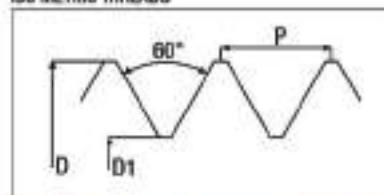
ISO METRIC FINE THREADS

Metric Fine (MF)		
Nominal Diameter	Pitch	Drill Size
ØD		
2.5	0.35	2.15
3	0.35	2.65
3.5	0.35	3.15
4	0.5	3.5
4.5	0.5	4
5	0.5	4.5
6	0.75	5.2
7	0.75	6.2
8	0.75	7.2
8	1	7
9	1	8
10	0.75	9.2
10	1	9
10	1.25	8.8
11	1	10
12	1	11
12	1.25	10.8
12	1.5	10.5
14	1	13
14	1.25	12.8
14	1.5	12.5
15	1	14
15	1.5	13.5
16	1	15
16	1.5	14.5
17	1	16
17	1.5	15.5
18	1.5	16.5
18	2	16
20	1	19
20	1.5	18.5
20	2	18
22	1	21
22	1.5	20.5
22	2	20
24	1	23
24	1.5	22.5
24	2	22
24	1	23
25	1.5	23.5

Metric Fine (MF)		
Nominal Diameter	Pitch	Drill Size
ØD		
26	1.5	24.5
27	1	26
27	1.5	25.5
27	2	25
28	1.5	26.5
28	2	26
30	1	29
30	1.5	28.5
30	2	28
32	1.5	30.5
32	2	30
33	1.5	31.5
33	2	31
33	3	30
35	1.5	33.5
36	1.5	34.5
36	2	34
36	3	33
38	1.5	36.5
39	1.5	37.5
39	2	37
39	3	36
40	1.5	38.5
40	2	38
40	3	37
42	1.5	40.5
42	2	40
42	3	39
45	1.5	43.5
45	2	43
45	3	42
48	1.5	46.5
48	2	46
48	3	45
50	1.5	48.5
50	2	48
50	3	47
52	1.5	50.5
52	2	50
52	3	49

FORMING/ROLL TAP PRE - TAPPING DRILL HOLE

ISO METRIC THREADS



COARSE PITCH		
TAP SIZE	Pitch	Drill Size
M 2	0.4	1.8
M 2.5	0.45	2.3
M 3	0.5	2.8
M 3.5	0.6	3.25
M 4	0.7	3.7
M 4.5	0.75	4.15
M 5	0.8	4.6
M 6	1	5.55
M 7	1	6.55
M 8	1.25	7.5
M 10	1.5	9.3
M 11	1.5	10.3
M 12	1.75	11.2
M 14	2	13.1
M 16	2	15.1
M 18	2.5	16.9
M 20	2.5	18.9

FINE PITCH		
TAP SIZE	Pitch	Drill Size
M 3	0.35	2.85
M 4	0.5	3.8
M 5	0.5	4.8
M 6	0.75	5.65
M 8	1	7.55
M 10	1	9.55
M 10	1.25	9.45
M 12	1	11.55
M 12	1.25	11.45
M 12	1.5	11.3
M 14	1.25	13.45
M 14	1.5	13.3
M 16	1.5	15.3
M 18	1.5	17.3
M 20	1.5	19.3
M 18	2.5	16.9
M 20	2.5	18.9

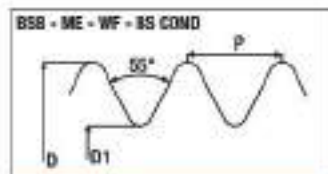
UNC TAPS		
TAP SIZE	Pitch	Drill Size
NO. 1	64	1.7
NO. 2	56	2
NO. 3	48	2.3
NO. 4	40	2.6
NO. 5	40	2.9
NO. 6	32	3.2
NO. 8	32	3.8
NO. 10	24	4.4
NO. 12	24	5
1/4"	20	5.8
5/16"	18	7.3
3/8"	16	8.8
7/16"	14	10.3
1/2"	13	11.9

UNF TAPS		
TAP SIZE	Pitch	Drill Size
NO. 1	72	1.7
NO. 2	64	2
NO. 3	56	2.3
NO. 4	48	2.6
NO. 5	44	2.9
NO. 6	40	3.2
NO. 8	36	3.9
NO. 10	32	4.5
NO. 12	28	5.1
1/4"	28	6
5/16"	24	7.5
3/8"	24	9.1
7/16"	20	10.6
1/2"	20	12.1

WHITWORTH PPE THREADS		
TAP SIZE	Pitch	Drill Size
G 1/8"	28	9.25
G 1/4"	19	12.5
G 3/8"	19	16
G 1/2"	14	20
G 3/4"	14	25.5
G 1"	11	32

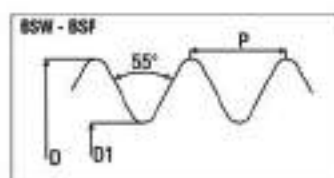
BRITISH STANDARD THREADS

Nominal Diameter ØD	TPI	Drill Size in mm
1/4"	20	5.3
5/16"	20	6.90
3/8"	20	8.40
7/16"	20	10.00
1/2"	20	11.50
9/16"	20	13.1
5/8"	20	14.70
11/16"	20	16.50
3/4"	20	17.80
7/8"	20	21.00
1"	20	24.20
1 1/8"	20	27.50
1 1/4"	20	30.50
1 3/8"	20	33.70
1 1/2"	20	36.90
2"	20	48.60



Nominal Diameter ØD	TPI	Drill Size in mm
1/2"	18	11.50
5/8"	18	14.20
3/4"	16	17.50
7/8"	16	20.60
1"	16	23.80
1 1/4"	16	30.10
1 1/2"	14	36.10
2"	14	48.60

Nominal Diameter ØD	TPI	Drill Size in mm
1/8"	40	2.35
5/32"	40	3.30
3/16"	40	4.00
7/32"	40	4.80
1/4"	40	5.30
9/32"	32	6.10
5/16"	32	7.00
3/8"	32	8.80
7/16"	26	10.50
1/2"	26	12.10



British Standard Whitworth Threads

Nominal Diameter ØD	TPI	Drill Size in mm
1/16"	60	1.2
3/32"	48	1.9
1/8"	40	2.55
5/32"	32	3.2
3/16"	24	3.7
7/32"	24	4.5
1/4"	20	5.1
9/32"	20	5.8
5/16"	18	6.5
3/8"	16	7.9
7/16"	14	9.3
1/2"	12	10.5
9/16"	12	12.1
5/8"	11	13.5
11/16"	11	15.1
3/4"	10	16.3
7/8"	9	19.3
15/16"	9	20.8
1"	8	22.0
1 1/8"	7	24.75
1 1/4"	7	28.0
1 3/8"	6	30.5
1 1/2"	6	33.5
1 5/8"	5	36.0
1 3/4"	5	39.0
1 7/8"	4 1/2	41.3
2"	4 1/2	44.5

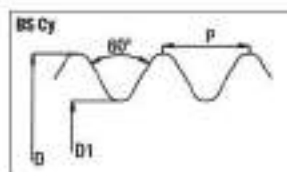
British Standard Fine Threads

Nominal Diameter ØD	TPI	Drill Size in mm
3/16"	32	4
7/32"	28	4.6
1/4"	26	5.30
9/32"	26	6.00
5/16"	22	6.80
3/8"	20	8.30
7/16"	18	9.70
1/2"	16	11.10
9/16"	16	12.70
5/8"	14	14.00
11/16"	14	15.50
3/4"	12	16.75
7/8"	11	19.75
15/16"	11	21.50
1"	10	22.75
1 1/8"	9	25.50
1 1/4"	9	28.50
1 3/8"	8	31.50
1 1/2"	8	34.50
1 5/8"	8	37.70
1 3/4"	7	41.00
1 7/8"	7	43.70
2"	7	47.00

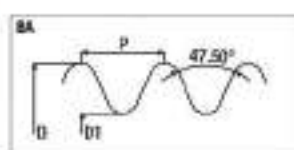
Nominal Diameter ØD	TPI	Drill Size in mm
1/4"	24/28/32	5.3, 5.4, 5.5
5/16"	24/40	6.75, 7.3
3/8"	24/40	8.4, 8.9
7/16"	20/24/40	9.8/10, 10.5
1/2"	20/24/40	11.5, 11.9, 12
9/16"	20	13.1

Nominal Diameter ØD	TPI	Drill Size in mm
5/8"	20	14.5
11/16"	20	16.2
3/4"	14/20	17.1, 17.8
7/8"	14/16/20	20.2, 20.6, 21.0
1"	12/20	23.0, 24.0

Size	Diameter	TPI	Drill Size in mm
0	0.2362	25.4	5.10
1	0.2087	28.2	4.50
2	0.1850	31.4	4.00
3	0.1614	34.8	3.40
4	0.1417	38.5	3.00
5	0.1260	43	2.65
6	0.1102	47.9	2.30
7	0.0984	52.9	2.05
8	0.0866	59.1	1.80
9	0.0748	65.1	1.55
10	0.0669	72.6	1.40
11	0.0591	81.9	1.20
12	0.0512	90.9	1.05



Size	TPI	Drill Size in mm
1/8"	40	2.65
5/32"	32	3.30
3/16"	32	4.10
7/32"	26	4.80
1/4"	26	5.80
5/16"	26	7.20
3/8"	26	8.70
7/16"	26	10.30
1/2"	26	11.90
9/16"	26	13.50
5/8"	26	15.00
3/4"	26	16.20
1"	24	24.50

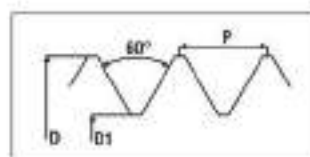


UNIFIED COARSE THREADS

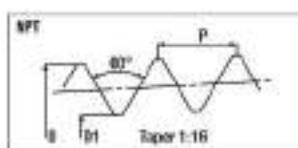
Nominal Diameter ØD	Pitch	Drill Size
#1	64	1.55
#2	56	1.8
#3	48	2.1
#4	40	2.3
#5	40	2.6
#6	32	2.9
#8	32	3.5
#10	24	3.9
#12	24	4.5
1/4"	20	5.2
5/16"	18	6.6
3/8"	16	8
7/16"	14	9.4

Nominal Diameter ØD	Pitch	Drill Size
#0	80	1.25
#1	72	1.55
#2	64	1.85
#3	56	2.1
#4	48	2.4
#5	44	2.7
#6	40	2.9
#8	36	3.5
#10	32	4.1
#12	28	4.6
1/4"	28	5.5
5/16"	24	6.9
3/8"	24	8.5

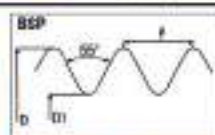
AMERICAN STANDARD THREADS



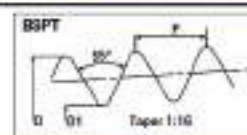
STRAIGHT AND TAPER PIPE THREADS



Nominal Diameter	TPI	Tapping With Reamer	Tapping Without Reamer
1/16"	27	5.94	6.15
1/8"	27	8.33	8.43
1/4"	18	10.72	11.13
3/8"	18	14.27	14.68
1/2"	14	17.48	17.86
3/4"	14	22.63	23.01
1"	11.5	28.58	28.98
1 1/4"	11.5	37.31	37.89
1 1/2"	11.5	43.26	43.66
2"	11.5	55.17	55.56
2 1/2"	8	65.48	66.27



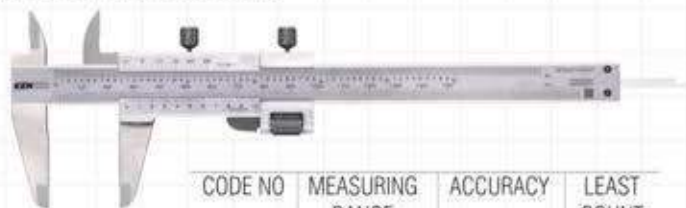
Nominal Diameter ØD	TPI	Drill Size in mm
1/8"	28	4.8
1/4"	19	11.8
3/8"	19	15.3
1/2"	14	19
5/8"	14	21
3/4"	14	24.5
7/8"	14	28.3
1"	11	30.8
1 1/4"	11	39.5
1 1/2"	11	45
1 3/4"	11	51
2"	11	57



Nominal Diameter ØD	TPI	Tapping With Reamer	Tapping Without Reamer
1/16"	28	6.1	6.2
1/8"	28	8.1	8.2
1/4"	19	10.7	11
3/8"	19	14.2	14.5
1/2"	14	17.6	18
3/4"	14	23	23.5
1"	11	29	29.5
1 1/4"	11	37.5	38
1 1/2"	11	43.5	44
2"	11	54.9	55.5

A detailed collage of various KENCY measuring instruments. The collection includes several digital depth gauges with LCD screens showing readings like 282, 2095, 2365, 56.1, and 0.82. There are also analog dial indicators with circular scales, some featuring green or yellow frames. Micrometers are shown in different sizes and colors (blue, silver). A large blue protractor is visible on the left. Other tools include a surface plate, a bridge gauge, a thread gauge, and various end mills and drill bits. The KENCY logo is prominently displayed in the top right corner on a green background.

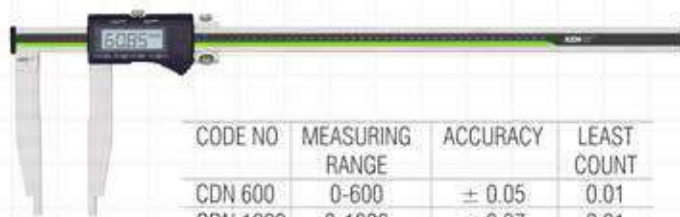
VERNIER CALIPER WITH FINE ADJUSTMENT



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CV 150	0-150	± 0.03	0.02
CV 200	0-200	± 0.03	0.02
CV 300	0-300	± 0.03	0.02

DIGITAL CALIPER

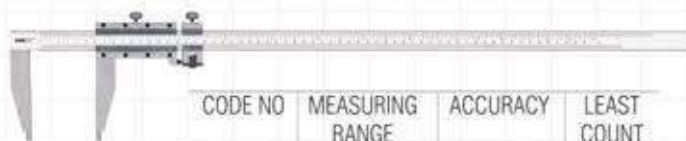
ABSOLUTE (ABS) MODEL - NIB STYLE JAWS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDN 600	0-600	± 0.05	0.01
CDN 1000	0-1000	± 0.07	0.01
CDN 1500	0-1500	± 0.11	0.01
CDN 2000	0-2000	± 0.17	0.01

VERNIER CALIPER

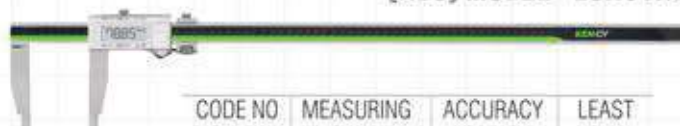
NIB STYLE JAW WITH FINE ADJUSTMENT



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CVN 600	0-600	± 0.05	0.02
CVN 1000	0-1000	± 0.07	0.02
CVN 1500	0-1500	± 0.10	0.02
CVN 2000	0-2000	± 0.12	0.02
CVN 3000	0-3000	± 0.20	0.02
CVN 4000	0-4000	± 0.30	0.02
CVN 5000	0-5000	± 0.40	0.02

DIGITAL CALIPER ABSOLUTE

(ABS) MODEL - LONG JAWS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDL 300	0-300	± 0.04	0.01
CDL 600	0-600	± 0.05	0.01
CDL 1000	0-1000	± 0.10	0.01

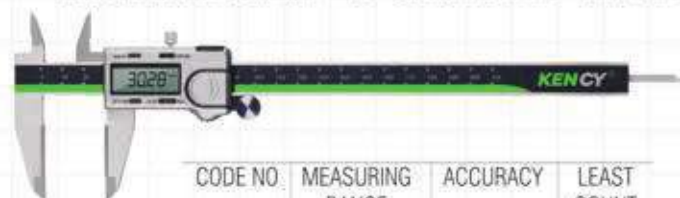
DIGITAL CALIPER

ECO MODEL



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDE 150	0-150	± 0.03	0.01
CDE 200	0-200	± 0.03	0.01
CDE 300	0-300	± 0.04	0.01

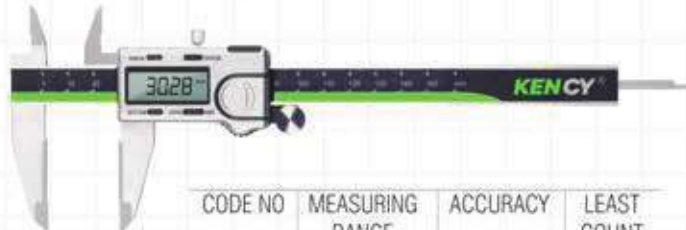
DIGITAL CALIPER CARBIDE TIPPED



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDC 150	0-150	± 0.03	0.01
CDC 200	0-200	± 0.03	0.01
CDC 300	0-300	± 0.04	0.01

DIGITAL CALIPER

ABSOLUTE (ABS) MODEL



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDA 150	0-150	± 0.03	0.01
CDA 200	0-200	± 0.03	0.01
CDA 300	0-300	± 0.04	0.01

DIGITAL CALIPER HIGH ACCURACY



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CDM 150	0-150	± 0.02	0.005
CDM 200	0-200	± 0.02	0.005
CDM 300	0-300	± 0.02	0.005

DIAL CALIPER



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CY 1502	0-150	± 0.03	0.02
CY 2002	0-200	± 0.03	0.02
CY 3003	0-300	± 0.04	0.02
CY 1501	0-150	± 0.03	0.01
CY 2001	0-200	± 0.03	0.01

DIGITAL DEPTH GAUGE



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DD 150	0-150	± 0.03	0.01
DD 200	0-200	± 0.03	0.01
DD 300	0-300	± 0.04	0.01
DD 600	0-600	± 0.05	0.01
DD 1000	0-1000	± 0.07	0.01

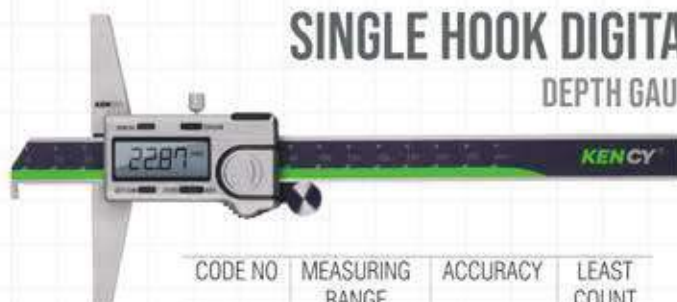
DIAL CALIPER

NIB STYLE JAWS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CYN 600	0-600	± 0.05	0.02
CYN 1000	0-1000	± 0.07	0.02

SINGLE HOOK DIGITAL DEPTH GAUGE



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DDS 150	0-150	± 0.03	0.01
DDS 200	0-200	± 0.03	0.01
DDS 300	0-300	± 0.04	0.01
DDS 600	0-600	± 0.05	0.01
DDS 1000	0-1000	± 0.07	0.01

VERNIER DEPTH GAUGE



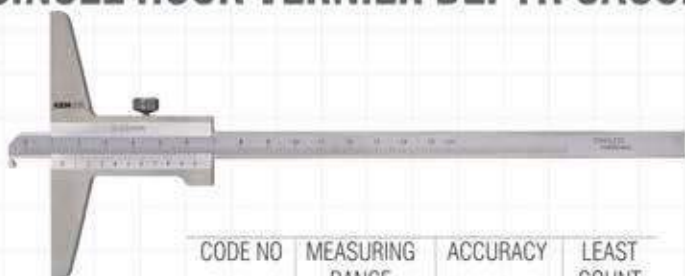
CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
CV 150	0-150	± 0.03	0.02
CV 200	0-200	± 0.03	0.02
CV 300	0-300	± 0.03	0.02

DOUBLE HOOK DIGITAL DEPTH GAUGE



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DDD 150	0-150	± 0.03	0.01
DDD 200	0-200	± 0.03	0.01
DDD 300	0-300	± 0.04	0.01
DDD 600	0-600	± 0.05	0.01
DDD 1000	0-1000	± 0.07	0.01

SINGLE HOOK VERNIER DEPTH GAUGE



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DVS 150	0-150	± 0.03	0.02
DVS 200	0-200	± 0.03	0.02
DVS 300	0-300	± 0.04	0.02
DVS 500	0-500	± 0.05	0.02

DIGITAL TIRE DEPTH GAUGE (METAL)



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DDTM 25	0-25	± 0.02	0.01

DIGITAL TIRE DEPTH GAUGE (PLASTIC)



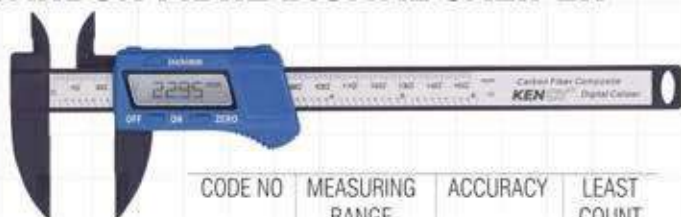
CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
DDPM	0-25	± 0.02	0.01

INSIDE GROOVE DIGITAL CALIPER ROUND MEASURING POINTS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDIR 150	24-150	± 0.05	0.01
SDIR 200	25-200	± 0.05	0.01
SDIR 300	30-300	± 0.05	0.01

CARBON FIBRE DIGITAL CALIPER



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDC 150	0-150	± 0.2	0.01

INSIDE GROOVE DIGITAL CALIPER KNIFE-EDGED MEASURING POINTS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDIK 150	14-150	± 0.05	0.01
SDIK 200	15-200	± 0.05	0.01
SDIK 300	17-300	± 0.07	0.01

DIGITAL BRAKE DRUM CALIPER



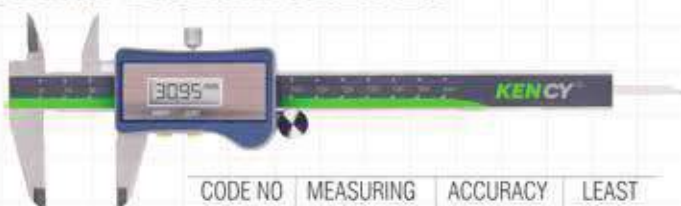
CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDB 300	0-300	± 0.05	0.01
SDB 500	0-500	± 0.07	0.01

DOUBLE INSIDE GROOVE DIGITAL CALIPER - KNIFE-EDGED MEASURING POINTS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDDK 150	0-150	± 0.05	0.01
SDDK 200	0-200	± 0.06	0.01
SDDK 300	0-300	± 0.06	0.01

SOLAR DIGITAL CALIPER



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDS 150	0-150	± 0.03	0.01

INSIDE GROOVE DIGITAL CALIPER FLAT MEASURING POINTS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDIF 150	22-150	± 0.05	0.01
SDIF 200	25-200	± 0.05	0.01
SDIF 300	30-300	± 0.07	0.01

OUTSIDE GROOVE DIGITAL CALIPER FLAT MEASURING POINTS



CODE NO	MEASURING RANGE	ACCURACY	LEAST COUNT
SDOF 150	0-150	± 0.05	0.01
SDOF 200	0-200	± 0.05	0.01
SDOF 300	0-300	± 0.06	0.01

OIL SKIMMERS - ROS SERIES

ROS1



ROS3



ROS5



ROS2 & ROS4



Oil-Coolant Separator Bin
(Suitable for all models)

1/3 Phase Disk Skimmer

Single Phase Belt Skimmer

3 Phase Belt Skimmer

CONSTRUCTION

Support Assembly	Powder Coated
Belt	PU
Wiper	Teflon
Driver Pulley	SS410
Driven Pulley	Nylon

OPTIONS

Support Assembly	SS316/304
Belt	SS316
Driven Pulley	SS316/304
Oil Collection	SS316/304
Separation Tray	

APPLICATION

Types of Fluids	- Oil
	- Coolant Emulsion
	- Mild Chemicals
Liquid Temperature	- 0-50°C for PU Belt
	- 100°C for SS Belt

STANDARD ACCESSORIES

Timer - For ROS1 & ROS2

OPTIONAL

VFD for 3Phase Skimmers
(1Ph input / 3Ph output) for speed control

USED ON

All CNC machines, conventional machines, washing machines, electro plating, grinding machines etc. where floating oil is to be extracted for better life of coolant and finish of components.

Separator bin available for all models in MS Powder coated or SS316, Size: 250 x 150 x 125 ht

DIMENSIONAL DETAILS

PU / SS FLAT BELT TYPE OIL SKIMMERS

Model	Immerssion Depth	Belt Width	Motor Power Supply #	Weight in Kg.s
ROS1-40-225	225	40	1 Phase	3.7
ROS1-40-300	300	40	1 Phase	4.0
ROS1-40-500	500	40	1 Phase	4.2
ROS3-40-225	225	40	3 Phase	5.7
ROS3-40-300	300	40	3 Phase	6.0
ROS3-40-500	500	40	3 Phase	6.3

HINGED S.S BELT TYPE OIL SKIMMERS

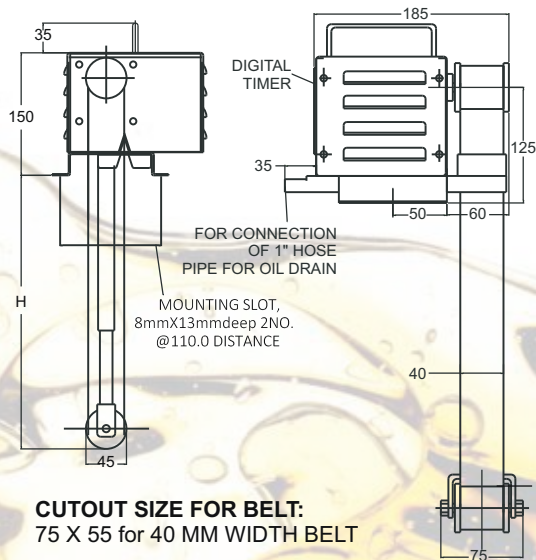
Model	Immerssion Depth	Belt Width	Motor Power Supply #	Weight in Kg.s
ROS5-50-300	300	50	3Phase / 1Phase	6.2
ROS5-50-500	500	50	3Phase / 1Phase	6.6
ROS5-50-1000	1000	50	3Phase / 1Phase	7.2

For All Oil Skimmer Models:

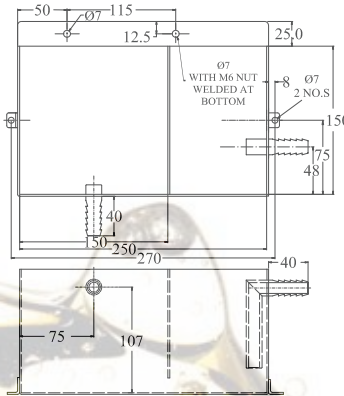
Oil Removal rate: 3 LPH Power : 0.04 kW.

#- 3 Phase means 415V/50 Hz. 1 Phase means 230V/50 Hz.

ROS1 - 40 : 1 Phase, Belt Skimmer



Separator Bin

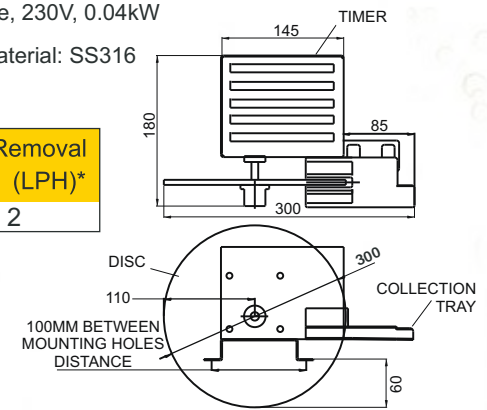


ROS2 Disc Oil Skimmer

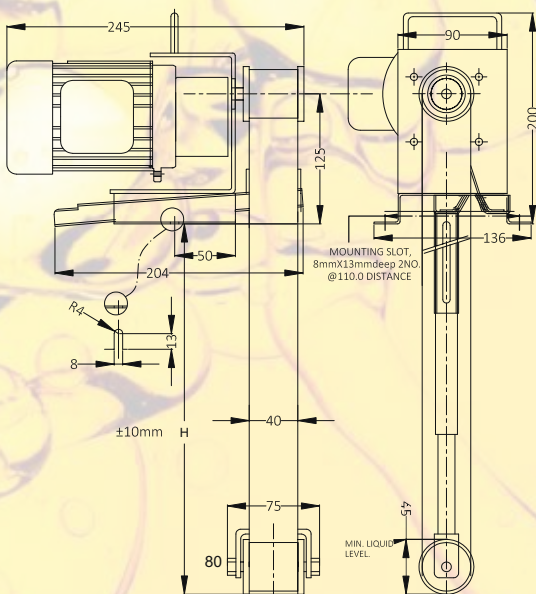
Specification :
1 Phase, 230V, 0.04kW

Disc Material: SS316

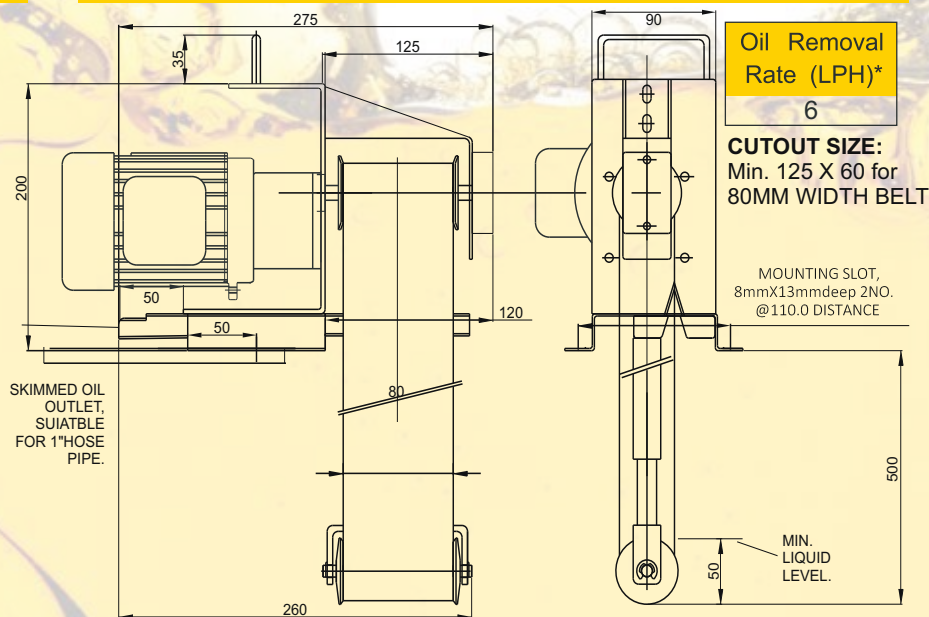
Oil Removal Rate (LPH)*
2



ROS3 - 40 : 3 Phase, Belt Skimmer



ROS 3 - 80 - 500, 3 Phase, 40w Belt Skimmer



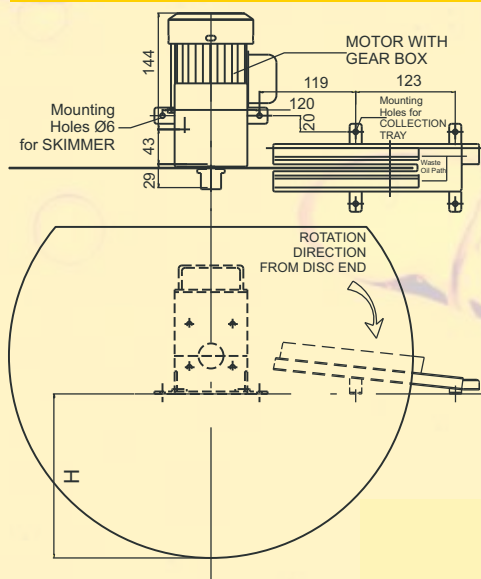
ROS4 Disc Oil Skimmer

Specification :
3 Phase, 415V, 0.04kW

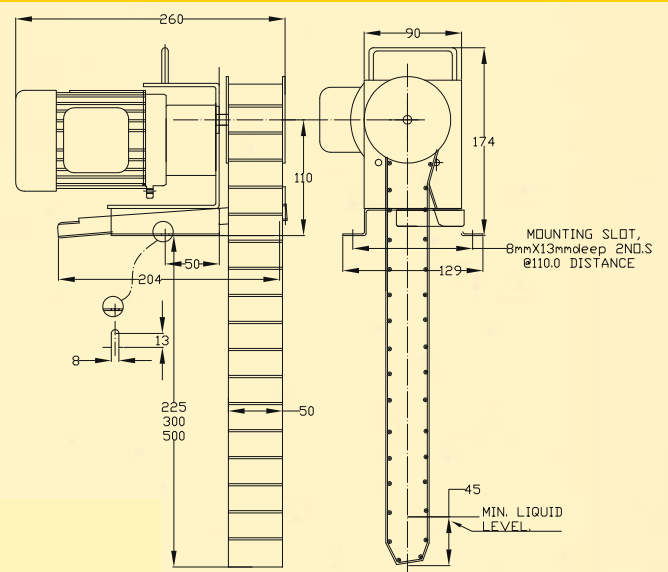
Disc Material: SS316

DIA	HEIGHT H
Ø400	153
Ø500	203

Oil Removal Rate (LPH)*
5



ROS5 - 50 : 3 Phase, Belt Skimmer





MEKEL
SOLUTIONS

Connecting Technical Services

Mekel Solutions General Trading LLC

P.O. Box: 237770, Dubai, United Arab Emirates

Ph: +971 52 6290629 | Email: info@mekelsolutions.ae | www.mekelsolutions.ae