

Sutton Tools is a focused team of 450 people who have enabled this globally competitive program of high value products.

As one of the worlds largest independent family owned cutting tool companies, Sutton Tools has a long standing commitment to our employees and partners. We continue to expand our business and produce ever higher levels of specifications that exceed market expectations.

Our aggressive investment policy compliments our product offer with globally integrated logistics, research and development and value added services at world best practice.

We invite our current and potential new partners to visit our facilities and let us demonstrate our value.





Sutton Tools Pty Ltd established 1917, is one of the oldest Australian family owned 4th generation operated businesses in Australia. With four manufacturing operations Sutton Tools is Australia's only production manufacturer specialist and supplier of globally competitive quality cutting tools. Over 17,000 line items including Drills, Taps, Endmills, Countersinks and Holesaws together with a wide range of power tool accessories to service Tool & Die, Aerospace, Automotive and General Engineering Industries.

Through continual aggressive reinvestment and Research and Development programs, Sutton Tools now provide product, surface coatings and regrinding specific to the many sophisticated and varied applications encountered by industry today. Sutton Tools comprehensive range of high performance, precision cutting tools now includes HSS, HSS-Co, HSSE-V, Powdered Metal HSS and Carbide ranges manufactured to ISO, DIN, ANSI, BS & JIS standards, which are complemented by the latest in surface coating technology, including Balzers Alcrona, Futura Nano, TiN, TiCN, CrN coatings & state of the art Vacuum Heat Treatment.

1912 William Henry Sutton arrived in Australia and began his career at Thompson's Foundry in Castlemaine Victoria Australia, as the first tool-room foreman.

1917 William Henry Sutton at the age of 54 established the Sutton Tool and Gauge Manufacturing Co. at Plant Street Westgarth, Victoria. This was the start to an iconic Australian family tradition, manufacturing cutting tools as a wholesale distribution operation. With a staff of Henry's two sons, Henry George and Leslie, and with rigid rules to produce tools of the highest quality, it soon became evident to manufacturers they could buy locally of equal or even better quality than those from overseas.



Business in Westgarth had quadrupled in size as more orders poured in, Sutton Tool & Gauge moved to a 13,000 square foot factory in Northcote, Melbourne Australia.

1936 Commenced the manufacture of Thread Tooling

1939 First Export was to New Zealand, consignment of reamers.

Both sons of William Henry, Henry George Sutton and Leslie Sutton became managing directors of the business whilst William Henry continued to take an active interest until his death.

William Henry Sutton, born 1863 - died 1950, profession leading tool engineer before the founding business owner of Sutton Tools. William was a pioneer of the Australian Engineering Industry.

1959 Purchased Industrial land at Thomastown to build a new factory.

Northcote: Sutton Tool & Gauge sent a team of engineers to investigate the best method of producing the finest drill in the world. The method chosen was "Ground-from-Solid" where every part of the drill is ground from a solid heat treated high speed steel blank, the only method to produce drills which would match the quality and accuracy of the other products manufactured by the company. Hence the drill was marketed under the name of the "Silver Bullet" and all their endmills, slot drills and taps up to ½" diameter are produced by this method.



1960 Sutton Tools purpose built a factory in Thomastown Melbourne Australia, purchased and installed specially equipped machinery for the manufacture of drills, and was considered to have state of the art machinery and one of the most modern facilities in the world.

1961 Thomastown Commenced Manufacturing Jobber Drills

1970 Acquired an adjoining factory in Thomastown which made it possible to transfer the remaining production units from Northcote. The Northcote building became surplus to the company's needs. Hence was auctioned

March 24th, 1970.

1980-1990 Restructured operations by exiting products: hobs and thread rolling dies.

1984 Purchased Gamma Design Holesaw Company

1992 Purchased Surface Technology Coatings

1993 Achieved ISO:9001 Accreditation QAS

1993 Strategic Expansion into Export Markets

1994 Purchased Patience & Nicholson New Zealand (Evacut)

2000 Opened Singapore office & warehouse

2000 Acquired Scott, Young & Masters a distribution and import agent

2001 Sutton Tools purchased Patience & Nicholson (Australia)

2001 Further investment of machinery in turn improved efficiencies.

and raised the bar in quality levels of drills.

2002 Opened Malaysian office

2006 We sold our 5 millionth drill bit to Germany

2008 Acquired Tapmatic exclusive agency in Australia for tap holders

2008 Purchased Cuttertec (regrinding facility)

2009 Opened Hong Kong office & warehouse

2009 Joined DMTC, established ASSF, including Innova Coating System, providing world class capabilities in PVD coatings

2010 Established Sutton Tools Europe office & warehouse

2010 Established Sutton Tools India

2011 Expansion of Asian Distribution hub in Singapore





made in Australia

Sutton Tools is a proud partner of the Australian Made campaign.

The Logo is Australian's most widely used and best-known product symbol, with 98% recognition domestically and rapid growth into international markets. Promoting Australian Made tools is about more than raising awareness of quality products at affordable prices – it's about encouraging growth in the Australian Manufacturing Industry.

Sutton Tools supports and promotes Australian made products, with the aim of creating more opportunities for all Australians. The Australian Made Campaign helps to promote job creation and industry in Australia. Buying Australian made helps our country. The Logo is highly reputable and recognised in the market and has proven effective in growth by its members.

With the alignment to the Australian Made logo, Sutton Tools moves from strength to strength, continuing to reinforce that Sutton Tools is the only Australian Manufacturer of world quality cutting tools. Coupled with that, Sutton Tools is associated with the Australian Made Logo which delivers a sense of patriotism.

When buying Sutton Tools products that carry the Australian Made logo (the most trusted and recognised symbol for products that are truly Australian) you can buy with confidence, knowing they are good quality, genuine and authentic.



exported to the world...



we offer a comprehensive service...



Sutton Tools Online Tool Shop

With the introduction of the 'Tool Shop' we will meet our partner's needs more efficiently. Sutton Tools e-Sales helps to increase service levels through real-time availability of information, product specifications and alternative products to customers. Tool Shop will extend our customer service by offering online access to our products 24 hours a day, 7 days a week. Tool shop gives you the ability to:

- View products in our online E-catalogue
- Check stock availability
- Place orders online
- Check pricing of our products
- Track the progress of your order
- Check your order History

The Tool Shop is designed to save time and provide you with easier access by direct ordering product from Sutton Tools. To apply for a Tool Shop account please contact toolshop@sutton.com.au



Distribution and Logistics

Our International Distribution Centre uses modern radio frequency scanning technology coupled with the latest carousel and stock replenishment systems which allows accurate stock control and efficient warehouse operation. We have over 17,000 SKU's and our stock availability consistently averages in the high 90%'s. From a customer perspective, this provides confidence in breadth and depth of stock cover and reliable delivery service



Special Tools & Tool Re servicing

For over 95 years Sutton Tools has been designing and manufacturing precision cutting tools in Australia and exporting to the world. Sutton Tools is a leading global provider of specialist cutting solutions', in Drilling Tools, Threading Tools, Reamers and Milling Cutters, we offer a one stop shop tool refurbishment including Re-Grinds & Re-Coating for special tools that can be supplied to suit your special requirements.

Specialist tools distribute to industries such as Automotive, Aerospace, Marine, Transport, Construction, Surgical equipment, Manufacturing, Toolmaking, and Agriculture to name a few.



Quality Management Systems

Sutton Tools company complies with and is currently certified to ISO Global 9001:2008, under the Quality Management Systems. This demonstrates Sutton Tools commitment to providing a service based on quality.





Sutton Tools Expert Tool Selector www.sutton.com.au/ETS/ExpertToolSelector

Sutton Tools Web assisted Expert Tool Selector, allows for finding the right tool for your specific machining task so easy. The Expert Tool Selector will recommend the right tool for the right application and everything from suitable coolant choices through to cutting calculations. Our Expert Tool Selector provides easy step-by-step detailed information that includes:

- Graph Selector: Hardness of Materials
- Material Type
- Material Classification
- Material Groups
- Tool Selector
- Recommend Tools
- Shows Stock Availability



Sales advice and service

Sutton Tools Sales consultants are fully experienced to assist with:

- Technical advice
- Products
- Core stock ranges
- Merchandising concepts, product ranges & installation
- Sales and Marketing Point of sale and promotional material



Technical Advice

Sutton Tools have specialised staff that are highly trained.

- Assist to select the right tool.
- Advise on the operating conditions of a tool.
- Specialist in optimising your process.
- Experienced metrology specialist
- Selected machining experts

a good corporate citizen to our environment...



At Sutton Tools we are environmentally conscious and sympathetic to issues that bring benefits to our environment.

We meet all legislative requirements of ISO 9001:2008 Global Accreditation which covers production controls, traceability, management, all of which are the start to the protection of our environment.

Manufacturing & Machinery Processes: Cleaner Technologies

Sutton Tools use modern vacuum heat treatment furnaces with electronic cycle control operations with a much cleaner technology. Modern CNC machines of which some are purpose built within the company give pick and place operation, robot handling functions, that not only give repeatable quality operations but a safer work place environment.

With well managed structured systems embracing all manufacturing from the floor - up and driven with a continuous improvement policy, our aim is to minimise our environmental impact. Sutton Tools are aware of the necessity to maintain the environment, by utilising processes necessary to meet our obligations and reduce carbon footprints.

Tool Regrinding

Bring back to life your high quality precision cutting tools, don't throw them out. Sutton Tools Regrinding and Resurfacing facilities return cutting tools to their original condition.

Recycle

Manufacturing bi-products at Sutton Tools is recycled on site. Oil is extracted from ground waste and reused back into the manufacturing process, and the separated swarf is removed to be recycled. Paper, cardboard, boxes etc are recycled, thereby reducing landfill and costly waste. Old recycled news papers and shredded documents are used in our packaging, and despatched tools are further protected whilst in freight to local and overseas destinations.

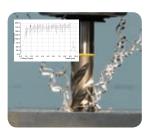
commitment to research & development....

Today's metal working industry faces the relentless challenge of producing product faster, better and cheaper than before. Such a challenge requires innovative technology to world standards. Sutton Tools meets this challenge, through its commitment to research and development.



Research

Sutton Tools R & D includes all aspects of manufacturing and development. Through formal cooperation with industry, leading Universities, research organisations and government, we continually seek technology advancements to better serve industry.



Testina

Sutton Tools state of the art Test Centre incorporates CNC machining centres for testing and developing of our tools, to simulate actual production conditions and benchmarking tool performance.



Development - Tools

Sutton Tools is a leader in grinding technology employing all current manufacturing methods. From CAD/CAM design through to micro geometry surface conditioning our development process ensures the highest accuracy and performance.



Development - Machinery

Sutton tools Engineering Department have state of the art technology and design equipment which has been critical in our continual new development of machine tools. Sutton tools build and design machinery for specific manufacturing applications.



Automation & Production

Sutton Tools invest heavily in automation to maintain world competitive production costs and minimise repetitiveness of manual operation.

special tools produced to your exact requirements...



Sutton Tools is a leading global provider of specialist cutting tool solutions.

The Special Tool manufacturing facility incorporates technologically advanced CNC grinding processes with CAD support, coating and heat treatment equipment and is backed by tradition in cutting tool design and manufacture since 1917.

Using technically advanced raw materials, including HSS Powdered Metallurgy and grades of Solid Carbide, complemented by the latest generation of thin film coatings.

Special Tooling

We offer the best possible delivery based on your needs. Express service on non-standard taps and other cutting tools.

Tool Re-servicing

One stop shop for tool refurbishment, including Re-Grinds & Re-Coating. All Sutton Tools special tooling can be supplied to suit your requirements.



Specialists In Surface Treatment

- Alcrona (AlCrN)
- Futura Nano (TiAIN)
- Titanium Carbonitride (TiCN)
- Titanium Nitride (TiN)
- Chromium Nitride (CrN)
- Blu (Steam Oxide)



Sutton Tools Re-Coating service



Sutton Tools has grown to be at the forefront of heat treatment and surface engineering technology.

We are the only commercial facility in Australia offering high pressure quench vacuum heat treatment, plasma nitriding and PVD hard thin film coatings under the one roof.

The world class reputation of Sutton Tools has been built on our ability to deliver high quality, reproducible and guaranteed product back to the customer every time. With access to the latest testing and analytical equipment, we can process test samples for certification of every process batch. ISO 9001:2008 Quality Assurance registration ensures full traceability of products throughout the entire process cycle. Sutton Tools carries out research and development with Australia's



Using world-leading technology, coatings are available to solve a wide range of problems relating to friction and wear, thereby improving tool performance and increasing tool life.

Regrinding servicing



Sutton Tools' regrinding facility is offered on site. HSS, carbide and PCD tooling can be reconditioned by our highly experienced personnel, with reproducible, high quality results, every time. We also manufacture carbide, HSS and PCD specials for general, automotive and aerospace applications.



Going forward, our plans will be to continue investing in state of the art equipment for measuring, surface preparation and surface finishing that will ensure quality is to the highest standards available.

Feature Product in detail...

DX Series Drills



THE ALL ROUNDER... DEEP X-TYPE WEB

The combination of curved cutting lips & X-type Web Thinning provides a unique point geometry that separates this drill from the conventional. When drilling materials that produce long stringy swarf, the problem faced with conventional twist drills is that the swarf wraps around the drill. This lends itself to poor productivity, as insufficient coolant penetrates into the cutting area & the evacuation of the swarf is inconsistent or erratic. The DX Series drill eliminates these issues, due to its generated curved cutting lips, the chips produced are short.

Benefits:

- Accurate positional & hole size
- Optimal point stability
- Produces short chips in long chipping materials
- Eliminates chips clogging or swarf nesting on drill
- Greater productivity in deeper drillings

DH Series Drills

DRILL DEEPER...

The 130° point with the rake corrected web thinning grind, combined with a 40° helix and parabolic flute shape produces an extremely strong wedge angle, providing increased stability enabling drilling of accurate straight holes with reduced pecking.

The above features combined, provides the optimal performance in a wide range of materials, particularly steels to a hardness of 1200 N/mm², allowing higher speeds and feeds to be achieved, resulting in higher productivity.

Benefits:

- Fast, efficient chip evacuation
- Improved heat dissipation
- Less pecking required over standard drills

The Bottom Line For You:

- Accurate, straight holes
- Lower thrust in drilling
- Easier breakthrough on through holesLonger tool life at faster speeds and feeds
- Significantly reduces cycle times





Black Magic Drills



DRILLING STAINLESS STEEL? ...LOOK NO FURTHER

Due to 300 and 400 series Stainless Steels possessing excellent resistance to corrosion, its use in various industries is very popular, especially in ship building, medical equipment, automotive and the food processing industries. Yet, for sometime the drilling of this material has been somewhat difficult due to its toughness and high work hardening properties.

The options for drilling Stainless Steels can be expensive ones; solid carbide drills in particular are not cost effective due to its less than ideal geometry & characteristics for drilling stainless steel. This is where the R40 VA drills have been specifically designed to meet the requirements & demands of this area of application.

Features

- Produces short chips in Stainless Steel & Copper alloys
- High Helix & Unique Flure Form
- Ultra Sharp Point Geometry
- Ideal pre-tapping drill



DIN335 90° Countersinks

SMOOTH CUTTING... PERFECT CHAMFERING

Features:

- Constant flute rake along entire cutting face
- Axial and radial adjusted relief
- Higher dimensional precision
- Improved and sharper cutting edge
- Cobalt grade high speed steel

Benefits:

- Chatter-free countersinking and de-burring
- Longer lasting
- Excellent chip flow

Feature Product in detail...





Synchro Taps

TAPPING JUST GOT FASTER...

The Synchro Tap Series is specifically designed for modern machines, where the spindle revolution (A-Axis) & feed movement (Z-Axis) are synchronously controlled.

Sutton Tools has optimised the design of the Synchro Tap Series to work in unison with the accurate pitch controlling capabilities of the modern machine tool. This will not only reduce cycle time but also extend tool life.

Significant increases in speed can be achieved, up to 100m/min!

Benefits:

- Production reliability & safety
- Shorter cycle times
- Increased speeds
- Increased tool life
- Optimal thread quality
- Precise threads depths
- Lower tooling costs

JIS Roll Taps

HIGH VOLUME THREADING...

- Polygon profile optimised for SPCC & SUS material grades
- Post-grind polishing of threads
- Metric, UNC & UNF standard thread forms available
- Also catering for special project applications





Carbide Drills

HIGH VOLUME PRODUCTION...

- Available from 3mm to 20mm
- Available in 3 and 5 x Diameter
- With & without internal coolant
- New generation AICrN coated
- Produced from Western European carbide



HARMONY Endmills

PERFORMANCE UNEOUALLED...

The Harmony range of endmills represents world's latest technologies to provide increases in both performance and tool life. The key to successful milling is to minimize or eliminate the harmonic vibration produced in the cutting action. The Harmony Endmill overcomes vibration, through the latest technologies in tool engineering:

- Premium Grade Carbide/SPM HSS
- AlCrN Coating
- 35/38° Variable Helix
- 45° Corner Chamfering
- Gash grind of the endteeth
- Post grind treatment of cutting edges

The Bottom Line For You:

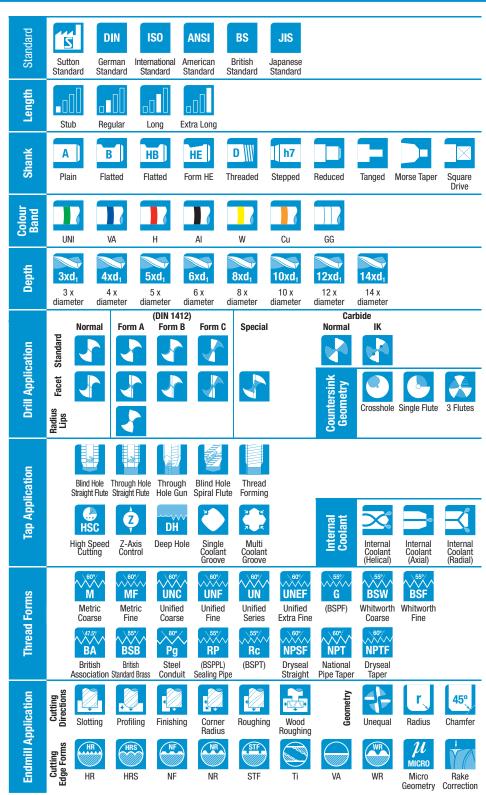
- Longer tool life
- Improved surface finish
- Increased productivity
- Reduced production costs



we've made it easier to find the right tool fast...

For easy tool reference, you will find an extensive application based index at the start of each section.

These icons below can be found on the product pages throughout the catalogue, and at a glance the characteristic features of the tool can be identified.









Countersinks & Counterbores



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Endmills Carbide



Endmills



Reamers

Information Technical

For easy tool reference, you will find an extensive application based index...

Locate the tool by the image or description displayed and refer to the page number for full range details. The material chart below each product will help identify the most suitable tool for your application.



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Code C100		Group B0709	Ring		7	Material HSS Co	Finish	DIN373
C101	148 147	A1106		Counterbore Deburring Countersink, Cross Hole	90°	HSS	Brt Brt	ב זכוווע
C102	147	A1108		Deburring Countersink, Cross Hole	90°	HSS	TiN	-
C102	146	A1106		Countersink, Single Flute	90°	HSS	Brt	_
C104	146	A1108	Tough Mat.	Countersink, Single Flute	90°	HSS	TiN	_
C105	145	A1106	rough wat.	Countersink, Three Flute	90°	HSS	Brt	_
C106	145	A1108	Tough Mat.	Countersink, Three Flute	90°	HSS	TiN	-
C107	144	A1106	rough mac.	Countersink, Three Flute, N	90°	HSS Co	Brt	DIN335
C108	144	A1108	0	Countersink, Three Flute, UNI	90°	HSS Co	TiAIN	DIN335
Drills				,,				
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Point Type	Tool Material	Surface Finish	Standard
D100	60	A1002	, , , , , , , , , , , , , , , , , , ,	Drill, Stub, Blu	118° Form C	HSS	Blu	ANSI B94-11
D101	54	A1202		Drill, Jobber, Set	118° Standard	HSS	Brt	DIN338
D101	78	A0402		Drill, Jobber	118° Standard	HSS	Brt	DIN338
D102	54	A1202		Drill, Jobber, Set	118° Standard	HSS	Blu	DIN338
D102	78	A0402		Drill, Jobber	118° Standard	HSS	Blu	DIN338
D103	54	A1216		Drill, Jobber, Set	118° Form A	HSS	TiN	DIN338
D103	78	A0420		Drill, Jobber	118° Form A	HSS	TiN	DIN338
D104	76	A0402		Drill, Jobber, Bulk Hang Sell	118° Standard	HSS	Brt	DIN338
D105	76	A0410	Hand Held	Drill, Jobber, Carded Viper	118° Form C	HSS	Brt	DIN338
D106	76	A0416		Drill, Jobber, Carded	118° Form A	HSS	TiN	DIN338
D108	76	A0404		Drill, Jobber, Cobalt Heavy Duty	135° Form C	HSS Co	Colour Temp	DIN338
D109	54	A0404	Tough Mat.	Drill, Jobber, Cobalt Heavy Duty, Set	135° Form C	HSS Co	Colour Temp	DIN338
D109	86	A0404	Tough Mat.	Drill, Jobber, Cobalt Heavy Duty	135° Form C	HSS Co	Colour Temp	DIN338
D110	112	A0502		Drill, Long Series, Carded	118° Standard	HSS	Blu	ANSI B94-11
D111	108	A0506	Long Reach	Drill, Long Series	118° Form A	HSS	TiN	ANSI B94-11
D112	108	A0502	Long Reach	Drill, Long Series	118° Standard	HSS	Brt	ANSI B94-11
D113	108	A0502	Long Reach	Drill, Long Series	118° Standard	HSS	Blu	ANSI B94-11
D114	113	A0502		Drill, Long Series, Tanged	118° Standard	HSS	Blu	ANSI B94-11
D115	121	A0702		Drill, Morse Taper Shank	118° Form A	HSS	Blu	DIN345
D116	131	A0704		Drill, Morse Taper Shank, Extra Long 8"	118° Standard	HSS	Blu	IS0235
D118	132	A0702		Morse Taper Sleeve	110001 1 1	Alloy	Brt	-
D120 D121	133	A0906	New Ferresse	Drill, Reduced Shank, 10mm or 3/8"	118° Standard	HSS	Blu	-
D121	136 137	A0802 A0802	Non Ferrous	Drill, Panel, Single Ended Drill, Panel, Double Ended	135° Standard 135° Standard	HSS HSS	Brt Prt	-
D122	136	A1002	Non Ferrous Non Ferrous	Drill, Panel, Stub	118º Standard	HSS	Brt Brt	-
D123	136	A0802	Ferrous Mat.	Drill, Panel, Single Ended	135° Standard	HSS	Blu	-
D125	137	A0802	Ferrous Mat.	Drill, Panel, Double Ended	135° Standard	HSS	Blu	_
D126	60	A1002	Ferrous Mat.	Drill, Stub, Blu	118° Form C	HSS	Blu	ANSI B94-11
D127	136	A0806	Tough Mat.	Drill, Panel, Single Ended	135° Standard	HSS	TiN	-
D128	137	A0806	Tough Mat.	Drill, Panel, Double Ended	135° Standard	HSS	TiN	-
D130	137	A0802	Tough Steels	Drill, Panel, Double Ended	135° Standard	HSS Co	Blu	-
D132	138	A1002	Non Ferrous	Drill, Panel, Carded. Single Ended, Bulk	135° Standard	HSS	Brt	-
D133	138	A0422	Non Ferrous	Drill, Panel, Carded, Double Ended, Twin	135° Standard	HSS	Brt	-
D134	138	A1002	Non Ferrous	Drill, Panel, Carded, Double Ended, Bulk	135° Standard	HSS	Brt	-
D135	139	A0302		Drill, Centre, A-Type	60° Stepped	HSS	Brt	DIN333
D136	139	A0302		Drill, Centre, Plain	60° Stepped	HSS	Brt	ANSI B94-11
D137	139	A0306	Tough Mat.	Drill, Centre, Plain	60° Stepped	HSS	TiN	ANSI B94-11
D138	139	A0302	Safety Centre	Drill, Centre, Bell-Type	60° Stepped	HSS	Brt	ANSI B94-11
D139	121	A0706		Drill, Morse Taper Shank	118° Form A	HSS	TiAIN	DIN345
D140	129	A0704		Drill, Morse Taper Shank, Long Series	118° Standard	HSS	Blu	DIN 341
D141	127	A0702	Tough Mat.	Drill, Morse Taper Shank, Heavy Duty	118° Form A	HSS Co	Colour Temp	DIN345
D142	132	A0702		Drill, Morse Drill, Drift Key		-	-	
D146	61	A1004	N → H	Drill, Stub, CNC	130° Form B	HSS Co	Brt	DIN1897
D151	61	A1006	$N \rightarrow H$	Drill, Stub, CNC	130° Form B	HSS Co	TiAIN	DIN1897



Drills								
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Point Type	Tool Material	Surface Finish	Standard
D153	72	A1502	0	Drill, Stub, R40 VA, Black Magic	4 Facet	HSS Co	TiAIN	~DIN1897
D155	69	A1502	0	Drill, Stub, R40 UNI	130° 4 Facet Form B	SPM	TiAIN	~DIN1897
D158	90	A0404	$N \rightarrow H$	Drill, Jobber, DHJ	130° Form B	HSS Co	Brt	DIN338
D163	90	A0418	$N \rightarrow H$	Drill, Jobber, DHJ	130° Form B	HSS Co	TiAIN	DIN338
D165	94	A0418	$W \rightarrow N$	Drill, Jobber, DXJ	130° Form A	HSS Co	TiAIN	DIN338
D168	96	A1502	0	Drill, Jobber, R40 UNI	130° 4 Facet Form B	SPM	TiAIN	~DIN338
D169	104	A1502	0	Drill, Jobber, R40 VA, Black Magic	4 Facet Form C	HSS Co	TiAIN	~DIN338
D170	114	A0504	$N \rightarrow H$	Drill, Long Series, DHL	130° Form B	HSS Co	Brt	DIN340
D171	114	A0508	$N \rightarrow H$	Drill, Long Series, DHL	130° Form B	HSS Co	TiAIN	DIN340
D175	140	A1124		Drill, Spotting	90°	HSS Co	TiN	DIN1897
D176	140	A1124		Drill, Spotting	120°	HSS Co	TiN	DIN1897
D177	65	A1006	$W \rightarrow N$	Drill, Stub, DXS	130° Form A	HSS Co	TiAIN	DIN1897
D180	101	A0420	VA	Drill, Jobber, R40 InOx	130°	HSS	TiAIN Tip	~DIN338
D182	99	A1502	$N \rightarrow H$	Drill, Jobber, R40 UNI, IK, HE Shank	130° 4 Facet Form B	HSS Co	TiAIN	-
D186	57	A1002		Drill, Stub, Blu	118º Form C	HSS	Blu	DIN1897
D187	120	A0502		Drill, Extra Long Reach	118° Standard	HSS	Brt	ANSI B94-11
D188	134	A0906		Drill, Reduced Shank, 12.5mm or 1/2"	118° Standard	HSS	Blu	-
D189	131	A0704		Drill, Morse Taper Shank, Extra Long 12"	118° Standard	HSS	Blu	IS0235
D190	65	A1004	$M \rightarrow N$	Drill, Stub, DXS	130° Form A	HSS Co	Brt	DIN1897
D191	117	A0502	$N \rightarrow H$	Drill, Extra Long, DHXL-1	130° Form B	HSS	Ni + Blu	DIN1869-1
D192	118	A0502	$N \rightarrow H$	Drill, Extra Long, DHXL-2	130° Form B	HSS	Ni + Blu	DIN1869-2
D193	119	A0502	$N \rightarrow H$	Drill, Extra Long, DHXL-3	130° Form B	HSS	Ni + Blu	DIN1869-3
D194	117	A0508	$N \rightarrow H$	Drill, Extra Long, DHXL-1	130° Form B	HSS Co	TiAIN	DIN1869-1
D195	118	A0508	N → H	Drill, Extra Long, DHXL-2	130° Form B	HSS Co	TIAIN	DIN1869-2
D196	119	A0508	$N \rightarrow H$	Drill, Extra Long, DHXL-3	130° Form B	HSS Co	TiAIN	DIN1869-3
D197	116	A0502		Drill, Extra Long, 8" Overall Length	130° Form B	HSS	Brt	-
D198	116	A0502		Drill, Extra Long, 10" Overall Length	130° Form B	HSS	Brt	-
D199	116	A0502	14/ N A I	Drill, Extra Long, 12" Overall Length	130° Form B	HSS	Brt	- DINIOOO
D200 D300	94	A0404	$W \rightarrow N$	Drill, Jobber, DXJ	130° Form A	HSS Co	Brt Brt	DIN338
D306	45 45	A0202 A0206		Drill, Stub, Straight Drill, Stub, R15	140° Form C 135° 4 Facet Form C	VHM VHM	TiCN	-
D318	46	A0200 A0202		Drill, Centre	60° Stepped	VHM	Brt	ANSI B94-11
D319	46	A0202		Drill, Centre	60° Stepped	VHM	TiCN	ANSI B94-11
D323	26	A0210		Drill, 3xD, Shank Form HA	140° Form C	VHM	AICrN	DIN6537
D325	26	A0210		Drill, 3xD, Shank Form HE	140° Form C	VHM	AICrN	DIN6537
D326	34	A0210		Drill, 5xD, Shank Form HA	140° Form C	VHM	AICrN	DIN6537
D328	34	A0210		Drill, 5xD, Shank Form HE	140° Form C	VHM	AICrN	DIN6537
D329	30	A0210		Drill, 3xD, Shank Form HA, IK	140° Form C	VHM	AICrN	DIN6537
D331	30	A0210		Drill, 3xD, Shank Form HE, IK	140° Form C	VHM	AICrN	DIN6537
D332	38	A0210		Drill, 5xD, Shank Form HA, IK	140° Form C	VHM	AICrN	DIN6537
D334	38	A0210		Drill, 5xD, Shank Form HE, IK	140° Form C	VHM	AICrN	DIN6537
D335	42	A0210		Drill, 8xD, Shank Form HA, IK	140° Form C	VHM	AICrN	-
D337	42	A0210		Drill, 8xD, Shank Form HE, IK	140° Form C	VHM	AICrN	-
D355	47	A0208		Drill, Spotting	90°	VHM	Brt	DIN1897
D364	47	A0208		Drill, Spotting	90°	VHM	AICrN	DIN1897
D365	47	A0208		Drill, Spotting	142°	VHM	Brt	DIN1897
D366	47	A0208		Drill, Spotting	142°	VHM	AICrN	DIN1897
Endmills								
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Shank	Tool Material	Surface Finish	Standard
E100	388	B0502		Slot Drill, Stub, 2 Flute, R30 N	DIN 1835-A	HSS Co.8	Brt	JIS
E101	388	B0516		Slot Drill, Stub, 2 Flute, R30 N	DIN 1835-A	HSS Co.8	TiCN	JIS
E102	390	B0502		Slot Drill, Long, 2 Flute, R30 N	DIN 1835-A	HSS Co.8	Brt	JIS
E103	390	B0516		Slot Drill, Long, 2 Flute, R30 N	DIN 1835-A	HSS Co.8	TiCN	JIS
E108	392	B0610	0	Slot Drill, Stub, 2 Flute, R30 UNI	DIN 1835-A	SPM	Brt	DIN327
E109	392	B0612	0	Slot Drill, Stub, 2 Flute, R30 UNI	DIN 1835-A	SPM	TiAIN	DIN327
E110	393	B0606	0	Slot Drill, Regular, 2 Flute, R40 Al	DIN 1835-A	HSS Co.8	Brt	DIN844K



Endmills								
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Shank	Tool Material	Surface Finish	Standard
E111	393	B0608	0	Slot Drill, Regular, 2 Flute, R40 Al	DIN 1835-A	HSS Co.8	TiAIN	DIN844K
E112	394	B0608	0	Slot Drill, Regular, 2 Flute, R40 Cu	DIN 1835-A	HSS Co.8	CrN	DIN844K
E113	395	B0502		Slot Drill, Long, Ballnose, 2 Flute, R30	DIN 1835-A	HSS Co.8	Brt	-
E114	395	B0516		Slot Drill, Long, Ballnose, 2 Flute, R30	DIN 1835-A	HSS Co.8	TiCN	-
E118	396	B0612	0	Slot Drill, Stub, Ballnose, 2 Flute, R30 UNI	DIN 1835-A	SPM	TiAIN	DIN327
E121	399	B0610	0	Endmill, Regular, 3 Flute, R45 W	DIN 1835-A	SPM	Brt	DIN844K
E122	399	B0612	0	Endmill, Regular, 3 Flute, R45 W	DIN 1835-A	SPM	TiAIN	DIN844K
E123	400	B0610	0	Endmill, Long, 3 Flute, R40 W	DIN 1835-A	SPM	Brt	DIN844L
E124	400	B0612	0	Endmill, Long, 3 Flute, R40 W	DIN 1835-A	SPM	TiAIN	DIN844L
E125	401	B0502		Endmill, Regular, 4&6 Flute, R30 N	DIN 1835-A	HSS Co.8	Brt	JIS
E126	401	B0516		Endmill, Regular, 4&6 Flute, R30 N	DIN 1835-A	HSS Co.8	TiCN	JIS
E127	403	B0502		Endmill, Long, 4&6 Flute, R30 N	DIN 1835-A	HSS Co.8	Brt	JIS
E128	403	B0516		Endmill, Long, 4&6 Flute, R30 N	DIN 1835-A	HSS Co.8	TiCN	JIS
E134	404	B0612	0	Endmill, Regular, 4 Flute, R30/32, Harmony	DIN 1835-A	SPM	TiAIN	DIN844K
E136	405	B0612	0	Endmill, Long, 4 Flute, R30/32, Harmony	DIN 1835-A	SPM	TiAIN	DIN844L
E137	406	B0612	0	Endmill, Regular, 4 Flute, R50 VA	DIN 1835-A	SPM	TiAIN	DIN844K
E138	410	B0402		Rougher, Regular, 3-6 Flute, R30 NR	Din 1835-A	HSS Co.8	Brt	DIN844K
E139	410	B0404		Rougher, Regular, 3-6 Flute, R30 NR	Din 1835-A	HSS Co.8	TiCN	DIN844K
E140	410	B0402		Rougher, Regular, 3-6 Flute, R30, NR	DIN 1835-B	HSS Co.8	Brt	DIN844K
E141	410	B0404		Rougher, Regular, 3-6 Flute, R30, NR	DIN 1835-B	HSS Co.8	TiCN	DIN844K
E142	409	B0402		Rougher, Regular, 3-6 Flute, R30 NR	JIS	HSS Co.8	Brt	DIN844K
E143	409	B0404		Rougher, Regular, 3-6 Flute, R30 NR	JIS	HSS Co.8	TiCN	DIN844K
E144	409	B0402		Rougher, Regular, 3-6 Flute, R30, NR	JIS	HSS Co.8	Brt	DIN844K
E145	409	B0404		Rougher, Regular, 3-6 Flute, R30, NR	JIS	HSS Co.8	TiCN	DIN844K
E146	411	B0402		Rougher, Long, 3-6 Flute, R30 NR	Din 1835-A	HSS Co.8	Brt	DIN844L
E147	411	B0404		Rougher, Long, 3-6 Flute, R30 NR	Din 1835-A	HSS Co.8	TiCN	DIN844L
E148	411	B0402		Rougher, Long, 3-6 Flute, R30, NR	DIN 1835-B	HSS Co.8	Brt	DIN844L
E149	411	B0404		Rougher, Long, 3-6 Flute, R30, NR	DIN 1835-B	HSS Co.8	TiCN	DIN844L
E150	416	B0408	0	Rougher, Regular, 3-5 Flute, R30 UNI, NR	DIN 1835-B	SPM	TiAIN	DIN844K
E151	417	B0408	0	Rougher, Regular, 3-6 Flute, R45 UNI, HRS	DIN 1835-B	SPM	TiAIN	DIN844K
E152	418	B0406	0	Rougher, Regular, 3 Flute, R35, WR	DIN 1835-B	SPM	Brt	DIN844K
E153	418	B0408	0	Rougher, Regular, 3 Flute, R35, WR	DIN 1835-B	SPM	TiAIN	DIN844K
E154	419	B0406	0	Rougher, Long, 3 Flute, R35, WR	DIN 1835-B	SPM	Brt	DIN844L
E155	419	B0408	0	Rougher, Long, 3 Flute, R35, WR	DIN 1835-B	SPM	TiAIN	DIN844L
E156	420	B0612	0	Rougher, Regular, 4 Flute, R55 VA	DIN 1835-A	SPM	TIAIN	DIN844K
E157	420	B0612	0	Rougher, Regular, 4 Flute, R55 VA	DIN 1835-B	SPM	TiAIN	DIN844K
E158	421	B0406		Rougher, Regular, 4 Flute, R30 Ti	DIN 1835-B	SPM	Brt	DIN844K
E159	421	B0408		Rougher, Regular, 4 Flute, R30 Ti	DIN 1835-B	SPM	TiAIN	DIN844K
E160	412	B0402		Rougher, Stub, 3-4 Flute, R30, HR	DIN 1835-A	HSS Co	Brt	DIN327
E161	412	B0404		Rougher, Stub, 3-4 Flute, R30, HR	DIN 1835-A	HSS Co	TiCN	DIN327
E162	412	B0402		Rougher, Stub, 3-4 Flute, R30, HR	DIN 1835-B	HSS Co	Brt	DIN327
E163	412	B0404		Rougher, Stub, 3-4 Flute, R30, HR	DIN 1835-B	HSS Co	TiCN	DIN327
E164	414	B0402		Rougher, Regular, 4-6 Flute, R30, HR	DIN 1835-A	HSS Co	Brt	DIN844K
E165	414	B0404		Rougher, Regular, 4-6 Flute, R30, HR	DIN 1835-A	HSS Co	TiCN	DIN844K
E166	414	B0402		Rougher, Regular, 4-6 Flute, R30, HR	DIN 1835-B	HSS Co	Brt	DIN844K
E167	414	B0404		Rougher, Regular, 4-6 Flute, R30, HR	DIN 1835-B	HSS Co	TiCN	DIN844K
E168	413	B0402		Rougher, Regular, 4-6 Flute, R30, HR	JIS	HSS Co	Brt	DIN844K
E169	413	B0404		Rougher, Regular, 4-6 Flute, R30, HR	JIS	HSS Co	TiCN	DIN844K
E170	413	B0402		Rougher, Regular, 4-6 Flute, R30, HR	JIS	HSS Co	Brt	DIN844K
E171	413	B0404		Rougher, Regular, 4-6 Flute, R30, HR	JIS	HSS Co	TiCN	DIN844K
E172	415	B0402		Rougher, Long, 4-6 Flute, R30, HR	DIN 1835-A	HSS Co	Brt	DIN844L
E173	415	B0404		Rougher, Long, 4-6 Flute, R30, HR	DIN 1835-A	HSS Co	TiCN	DIN844L
E174	415	B0402		Rougher, Long, 4-6 Flute, R30, HR	DIN 1835-B	HSS Co	Brt	DIN844L
E175	415	B0404		Rougher, Long, 4-6 Flute, R30, HR	DIN 1835-B	HSS Co	TiCN	DIN844L
E176	422	B0408	0	Rougher, Regular, 4-5 Flute, R30, HR	DIN 1835-B	SPM	TiAIN	DIN844K



Endmills								
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Shank	Tool Material	Surface Finish	Standard
E187	397	B0606		Endmill, Stub, 3 Flute, R30 N	DIN 1835-A	HSS Co.8	Brt	DIN327
E188	397	B0608		Endmill, Stub, 3 Flute, R30 N	DIN 1835-A	HSS Co.8	TiAIN	DIN327
E201	407	B0402		Rougher, Regular, 3-6 Flute, R30, NF	DIN 1835-B	HSS Co.8	Brt	DIN844K
E202	407	B0404		Rougher, Regular, 3-6 Flute, R30, NF	DIN 1835-B	HSS Co.8	TiAIN	DIN844K
E205	408	B0402		Rougher, Long, 3-6 Flute, R30, NF	DIN 1835-B	HSS Co.8	Brt	DIN844L
E206	408	B0404		Rougher, Long, 3-6 Flute, R30, NF	DIN 1835-B	HSS Co.8	TiAIN	DIN844L
E225	390	B0502		Slot Drill, Long, 2 Flute, R30, N	DIN 1835-A	HSS Co.8	Brt	JIS
E226	390	B0516		Slot Drill, Long, 2 Flute, R30, N	DIN 1835-A	HSS Co.8	TiCN	JIS
E227	401	B0502		Endmill, Regular, 4&6 Flute, R30, N	DIN 1835-A	HSS Co.8	Brt	JIS
E228	401	B0516		Endmill, Regular, 4&6 Flute, R30, N	DIN 1835-A	HSS Co.8	TiCN	JIS
E229	403	B0502		Endmill, Long, 4&6 Flute, R30, N	DIN 1835-A	HSS Co.8	Brt	JIS
E230	403	B0516		Endmill, Long, 4&6 Flute, R30, N	DIN 1835-A	HSS Co.8	TiCN	JIS
E232	398	B0606		Endmill, Stub, 3 Flute, R30 N, Keyway	DIN 1835-A	HSS Co.8	Brt	DIN327
E240	398	B0608		Endmill, Stub, 3 Flute, R30 N, Keyway	DIN 1835-A	HSS Co.8	TiAIN	DIN327
E304	354	B0208		Slot Drill, Long, 2 Flute, R30, Imperial	DIN 6535 HA	VHM	Brt	-
E307	354	B0210		Slot Drill, Long, 2 Flute, R30 Imperial	DIN 6535 HA	VHM	AICrN	-
E308	355	B0208		Slot Drill, Long, 2 Flute, R30	DIN 6535 HA	VHM	Brt	-
E309	356	B0208		Slot Drill, Extra Long, 2 Flute, R30	DIN 6535 HA	VHM	Brt	-
E310	357	B0208		Slot Drill, Regular, 2 Flute, R40, AlCarb	DIN 6535-HA	VHM	Brt	-
E311	376	B0208		Slot Drill, Regular, Ballnose, 2 Flute, R30, Imperial	DIN 6535-HA	VHM	Brt	-
E314	376	B0210		Slot Drill, Regular, Ballnose, 2 Flute, R30, Imperial	DIN 6535-HA	VHM	AICrN	DIN6527L
E315	378	B0208		Slot Drill, Extra Long, 2 Flute, R30	DIN 6535-HA	VHM	Brt	-
E320	381	B0208		Endmill, Extra Long, Ballnose, 4 Flute, R30	DIN 6535-HA	VHM	Brt	-
E333	364	B0208		Endmill, Regular, 4 Flute, R30, Imperial	DIN 6535-HA	VHM	Brt	-
E336	364	B0210		Endmill, Regular, 4 Flute, R30, Imperial	DIN 6535-HA	VHM	AICrN	-
E337	365	B0202		Endmill, Long, 4 Flute, R30	DIN 6535-HA	VHM	Brt	-
E340	365	B0204		Endmill, Long, 4 Flute, R30	DIN 6535-HA	VHM	AICrN	-
E341	366	B0208		Endmill, Extra Long, 4 Flute, R30	DIN 6535-HA	VHM	Brt	-
E348	370	B0210		Endmill, Regular, 4 Flute, R40, Corner Radius	DIN 6535 HA	VHM	AICrN	-
E500	352	B0208		Slot Drill, Stub, 2 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527K
E502	352	B0210		Slot Drill, Stub, 2 Flute, R30	DIN 6535 HA	VHM	AlCrN	DIN6527K
E504	354	B0208		Slot Drill, Regular, 2 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527L
E506	354	B0210		Slot Drill, Regular, 2 Flute, R30	DIN 6535 HA	VHM	AICrN	DIN6527L
E509	358	B0208		Endmill, Stub, 3 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527K
E511	358 359	B0210 B0208		Endmill, Stub, 3 Flute, R30	DIN 6535 HA DIN 6535 HA	VHM VHM	AlCrN	DIN6527K
E513		B0200		Endmill, Regular, 3 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527L
E515 E517	359 360	B0210	0	Endmill, Regular, 3 Flute, R30 Endmill, Stub, 3 Flute, R45 W	DIN 6535 HA	VHM	AICrN Brt	DIN6527L DIN6527K
E517	360	B0200	0	Endmill, Stub, 3 Flute, R45 W	DIN 6535 HA	VHM	AICrN	DIN6527K
E521	361	B0210	0	Endmill, Regular, 3 Flute, R45 W	DIN 6535 HA	VHM	Brt	DIN6527L
E523	361	B0200	0	Endmill, Regular, 3 Flute, R45 W	DIN 6535 HA	VHM	AICrN	DIN6527L DIN6527L
E525	362	B0210		Endmill, Stub, 4 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527L DIN6527K
E527	362	B0210		Endmill, Stub, 4 Flute, R30	DIN 6535 HA	VHM	AICrN	DIN6527K
E529	364	B0208		Endmill, Regular, 4 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527L
E531	364	B0210		Endmill, Regular, 4 Flute, R30	DIN 6535 HA	VHM	AICrN	DIN6527L
E533	367	B0210	0	Endmill, Stub, 4 Flute, R35/38, <i>Harmony</i>	DIN 6535 HA	VHM Ultra	AICrN	DIN6527K
E535	368	B0210	0	Endmill, Regular, 4 Flute, R35/38, <i>Harmony</i>	DIN 6535 HA	VHM Ultra	AICrN	DIN6527L
E543	369	B0210	-	Endmill, Regular, 6-8 Flute, R45, VH <i>Harmony</i>	DIN 6535 HA	VHM Ultra	AICrN	DIN6527L
E545	372	B0210		Rougher, Regular, 4 Flute, R45, STF	DIN 6535 HA	VHM Ultra	AICrN	DIN6527L
E547	373	B0210		Rougher, Regular, 3-4 Flute, R30, NR	DIN 6535 HA	VHM	AICrN	DIN6527L
E549	374	B0210	0	Rougher, Regular, 3-6 Flute, R45, HRS	DIN 6535 HA	VHM Ultra	AICrN	DIN6527L
E551	376	B0208		Slot Drill, Regular, Ballnose, 2 Flute, R30	DIN 6535 HA	VHM	Brt	DIN6527L
E553	376	B0210		Slot Drill, Regular, Ballnose, 2 Flute, R30	DIN 6535 HA	VHM	AICrN	DIN6527L
E555	377	B0210		Slot Drill, Long Reach, Ballnose, 2 Flute, R30	DIN 6535 HA	VHM Ultra	AICrN	-
E557	380	B0210		Endmill, Long Reach, Ballnose, 4 Flute, R30	DIN 6535 HA	VHM Ultra	AICrN	-
E559	371	B0210	0	Endmill, Regular, 4 Flute, R35/38 Corner Rad, Harmony	DIN 6535 HA	VHM Ultra	AICrN	-



Endmills									
Catalogue		Discount	Colour				Tool	Surface	
Code	Page No.	Group	Ring	Description		Shank	Material	Finish	Standard
E600	353	B0208		Endmill, Regular, 4 Flute, R30		DIN 6535 HA	VHM	Brt	-
E601	363	B0208		Endmill, Regular, 4 Flute, R30		DIN 6535 HA	VHM	Brt	-
E602	375	B0208		Slot Drill, Regular, Ballnose, 2 Flute, F	R30	DIN 6535 HA	VHM	Brt	-
E603	353	B0210		Slot Drill, Stub, 2 Flute, R30		DIN 6535 HA	VHM	TiAIN	-
E604	363	B0210		Endmill, Regular, 4 Flute, R30		DIN 6535 HA	VHM	TIAIN	-
E605	375	B0210		Slot Drill, Regular, Ballnose, 2 Flute, F		DIN 6535 HA	VHM	TiAIN	-
E606	379	B0210		Endmill, Regular, Ballnose, 4 Flute, R3		DIN 6535 HA	VHM	Brt	-
E607 Literature	379	B0210		Endmill, Regular, Ballnose, 4 Flute, R3	30	DIN 6535 HA	VHM	TiAIN	-
		Discount					Total	Ounface	
Catalogue Code	Page No.	Discount Group	Colour Ring	Description		Geometry	Tool Material	Surface Finish	Standard
L100	441	Z0502		Engineers Black Book		-	-	-	-
L200	441	Z0502		Fasteners Black Book		-	-	-	-
Reamers									
Catalogue	Page No.	Discount	Colour Ring	Description		Geometry	Tool	Surface	Standard
Code	raye No.	Group	Coloui niliç	Description		deometry	Material	Finish	Stallualu
R100	428	B0302		Reamer, Hand		10° Left Helix	HSS	Brt	DIN206 / ISO 236
R101	430	B0302		Reamer, Machine		10° Left Helix	HSS	Brt	DIN208 / ISO 521
R102	433	B0302		Reamer, Chucking		10° Left Helix	HSS Co	Brt	DIN212 / ISO 521
R104	434	B0302		Reamer, Bridge		15° Left Helix	HSS	Brt	-
R105	435	B0302		Reamer, Taper Pin		7º Left Helix	HSS	Brt	-
R106	436	B0302		Reamer, Morse Taper Socket, Roug	_	7º Left Helix	HSS	Brt	-
R107 R108	436 437	B0302 B0302		Reamer, Morse Taper Socket, Finish Reamer, Taper Pipe	iirig	7° Left Helix 15° Left Helix	HSS HSS	Brt Brt	-
R109	437	B0302		Reamer, Adjustable		Straight	TCA	Brt	-
R110	438	B0304		Reamer, Adjustable, Blade		-	TCA	Brt	
R111	438	B0304		Reamer, Adjustable, Pilot		_	TCA	Brt	_
R112	438	B0304		Reamer, Adjustable, Nut		-	TCA	Brt	-
Taps									
Catalogue	Page No.	Discount	Colour	Description	Thread	Geometry	Tool	Surface	Standard
Code		Group	Ring			Туре	Material	Finish	
T100	238	D0402		Tap, Gun, N	Metric	N	HSSE V3	Brt	DIN371
T101	239	D 0 4 0 0		T 0 11			11005110	D :	
T102		D0402		Tap, Gun, N	Metric	N	HSSE V3	Brt	DIN376
	238	D0402		Tap, Gun, N	Metric	N	HSSE V3	Blu	DIN376 DIN371
T103	239	D0402 D0402		Tap, Gun, N Tap, Gun, N	Metric Metric	N N	HSSE V3	Blu Blu	DIN376 DIN371 DIN376
T104	239 238	D0402 D0402 D0406		Tap, Gun, N Tap, Gun, N Tap, Gun, N	Metric Metric Metric	N N N	HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN	DIN376 DIN371 DIN376 DIN371
T104 T105	239 238 239	D0402 D0402 D0406 D0406		Tap, Gun, N Tap, Gun, N Tap, Gun, N Tap, Gun, N	Metric Metric Metric Metric	N N N	HSSE V3 HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN TiN	DIN376 DIN371 DIN376 DIN371 DIN376
T104 T105 T106	239 238 239 240	D0402 D0402 D0406 D0406 D0402		Tap, Gun, N Tap, Gun, N Tap, Gun, N Tap, Gun, N Tap, Gun, N	Metric Metric Metric Metric Metric	N N N N	HSSE V3 HSSE V3 HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN TiN Brt	DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376
T104 T105 T106 T107	239 238 239 240 241	D0402 D0402 D0406 D0406	0	Tap, Gun, N	Metric Metric Metric Metric	N N N N N	HSSE V3 HSSE V3 HSSE V3 HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN TiN	DIN376 DIN371 DIN376 DIN376 DIN371 DIN376 DIN371 DIN376
T104 T105 T106	239 238 239 240	D0402 D0402 D0406 D0406 D0402 D0402	0	Tap, Gun, N Tap, Gun, N Tap, Gun, N Tap, Gun, N Tap, Gun, N	Metric Metric Metric Metric Metric Metric Metric	N N N N	HSSE V3 HSSE V3 HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN TiN Brt Brt	DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376
T104 T105 T106 T107 T110	239 238 239 240 241 250	D0402 D0402 D0406 D0406 D0402 D0402 D0402		Tap, Gun, N	Metric	N N N N N N N N N N N N VA	HSSE V3	Blu Blu TiN TiN Brt Brt Brt Blu	DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371
T104 T105 T106 T107 T110	239 238 239 240 241 250 251	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402	0	Tap, Gun, N Tap, Gun, V Tap, Gun, VA Tap, Gun, VA	Metric	N N N N N N N N N VA VA	HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu	DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376
T104 T105 T106 T107 T110 T111 T112 T113 T114	239 238 239 240 241 250 251 250 251 252	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0402 D0408	0 0 0	Tap, Gun, N Tap, Gun, VA	Metric	N N N N N N VA VA VA	HSSE V3 PM-HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu TiCN TiCN Blu Blu	DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371 DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115	239 238 239 240 241 250 251 250 251 252 253	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0408 D0408 D0402 D0402	0 0 0 0	Tap, Gun, N Tap, Gun, VA	Metric	N N N N N N VA VA VA VA VA VA VA VA PM	HSSE V3 PM-HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu TiCN TiCN Blu Blu Blu Blu Blu Blu Blu Blu	DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116	239 238 239 240 241 250 251 250 251 252 253 252	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0402 D0408 D0408 D0408 D0408 D0408	0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM Tap, Gun, VA PM	Metric	N N N N N N VA VA VA VA VA VA VA VA PM VA PM	HSSE V3 PM-HSSE V3 PM-HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN Blu TiCN TiCN	DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117	239 238 239 240 241 250 251 250 251 252 253 252 253	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0408 D0408 D0408 D0408 D0408 D0408	0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM	Metric	N N N N N N VA	HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371 DIN376
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118	239 238 239 240 241 250 251 250 251 252 253 252 253 252	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0408 D0408 D0408 D0408 D0408 D0408 D0408	0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM	Metric	N N N N N N N N N N VA VA VA VA PM NA PM N	HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3	Blu Blu TiN TiN Brt Brt Blu Blu TiCN TiCN Blu TiCN TiCN TiCN TiCN TiCN TICN	DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119	239 238 239 240 241 250 251 250 251 252 253 252 253 252 253	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0408 D0408 D0408 D0408 D0408 D0408 D0408 D0408 D0408	0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK	Metric	N N N N N N N N N N N N N N N N N N N	HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3 PM-HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu TiCN	DIN376 DIN371 DIN376
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119 T120	239 238 239 240 241 250 251 250 251 252 253 252 253 252 253 252	D0402 D0402 D0406 D0406 D0402 D0402 D0402 D0402 D0408	0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK Tap, Gun, VA PM, IK	Metric	N N N N N N N VA N VA VA VA VA N VA	HSSE V3 PM-HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu TiCN TiCN TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119 T120 T121	239 238 239 240 241 250 251 250 251 252 253 252 253 252 253 254 255	D0402 D0402 D0406 D0406 D0406 D0402 D0402 D0402 D0402 D0408	0 0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK Tap, Gun, VA PM, IK Tap, Gun, VADH Tap, Gun, VADH	Metric	N N N N N N N VA N	HSSE V3 PM-HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371 DIN376
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119 T120 T121 T122	239 238 239 240 241 250 251 250 251 252 253 252 253 254 255 246	D0402 D0402 D0406 D0406 D0406 D0402 D0402 D0402 D0402 D0408	0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK Tap, Gun, VA PM, IK Tap, Gun, VADH Tap, Gun, VADH Tap, Gun, W	Metric	N N N N N N N N VA N VA	HSSE V3 PM-HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119 T120 T121 T122 T123	239 238 239 240 241 250 251 250 251 252 253 252 253 252 253 254 255 246 247	D0402 D0402 D0406 D0406 D0406 D0402 D0402 D0402 D0402 D0408	0 0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK Tap, Gun, VA PM, IK Tap, Gun, VADH Tap, Gun, VADH	Metric	N N N N N N N VA N	HSSE V3 PM-HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371 DIN376
T104 T105 T106 T107 T110 T111 T112 T113 T114 T115 T116 T117 T118 T119 T120 T121 T122	239 238 239 240 241 250 251 250 251 252 253 252 253 254 255 246	D0402 D0402 D0406 D0406 D0406 D0402 D0402 D0402 D0402 D0408	0 0 0 0 0 0 0 0 0 0	Tap, Gun, N Tap, Gun, VA PM Tap, Gun, VA PM, IK Tap, Gun, VA PM, IK Tap, Gun, VADH Tap, Gun, WODH Tap, Gun, W	Metric	N N N N N N N N VA VA VA VA VA VA VA VA PM	HSSE V3 PM-HSSE V3 HSSE V3 HSSE V3	Blu Blu TiN Brt Brt Blu Blu TiCN TiCN Blu Blu TiCN TiCN TiCN TiCN TiCN TiCN TiCN TiCN	DIN376 DIN371



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T127	247	D0404	0	Tap, Gun, Cu	Metric	Cu	HSSE V3	CrN	DIN376
T128	248	D0402	0	Tap, Gun, W-AZ	Metric	W - AZ	HSSE V3	Brt	DIN371
T129	249	D0402	0	Tap, Gun, W-AZ	Metric	W - AZ	HSSE V3	Brt	DIN376
T130	248	D0406	0	Tap, Gun, W-AZ	Metric	W - AZ	HSSE V3	TiN	DIN371
T131	249	D0406	0	Tap, Gun, W-AZ	Metric	W - AZ	HSSE V3	TiN	DIN376
T132	244	D0402	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	Brt	DIN371
T133	245	D0402	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	Brt	DIN376
T134	244	D0402	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	Blu	DIN371
T135	245	D0402	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	Blu	DIN376
T140	244	D0410	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	TiAIN	DIN371
T141	245	D0410	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	TiAIN	DIN376
T142	244	D0410	0	Tap, Gun, UNI, IK	Metric	UNI - IK	PM-HSSE V3	TiAIN	DIN371
T143	245	D0410	0	Tap, Gun, UNI, IK	Metric	UNI - IK	PM-HSSE V3	TiAIN	DIN376
T144	256	D0402	0	Tap, Gun, H	Metric	Н	PM-HSS Co	Blu	DIN371
T145	257	D0402	0	Tap, Gun, H	Metric	Н	PM-HSS Co	Blu	DIN376
T146	256	D0408	0	Tap, Gun, H	Metric	Н	PM-HSS Co	TiCN	DIN371
T147	257	D0408	0	Tap, Gun, H	Metric	Н	PM-HSS Co	TiCN	DIN376
T148	256	D0408	0	Tap, Gun, H, IK	Metric	H - IK	PM-HSS Co	TiCN	DIN371
T149	257	D0408	0	Tap, Gun, H, IK	Metric	H - IK	PM-HSS Co	TiCN	DIN376
T150	260	D0402	Ni	Tap, Gun, Ni	Metric	Ni	PM-HSS Co	Brt	DIN371
T151	261	D0402	Ni	Tap, Gun, Ni	Metric	Ni	PM-HSS Co	Brt	DIN376
T152	258	D0408	Ti	Tap, Gun, Ti	Metric	Ti	PM-HSS Co	TiCN	DIN371
T153	259	D0408	Ti	Tap, Gun, Ti	Metric	Ti	PM-HSS Co	TiCN	DIN376
T154	297	D0402		Tap, Gun, N	MF	N	HSSE V3	Brt	DIN374
T155	297	D0402		Tap, Gun, N	MF	N	HSSE V3	Brt	DIN374
T156	297	D0402		Tap, Gun, N	MF	N	HSSE V3	Blu	DIN374
T157	297	D0406		Tap, Gun, N	MF	N	HSSE V3	TiN	DIN374
T158	300	D0402	0	Tap, Gun, VA	MF	VA	HSSE V3	Blu	DIN374
T159	301	D0402	0	Tap, Gun, VA PM	MF	VA PM	PM-HSSE V3	Blu	DIN374
T160	301	D0408	0	Tap, Gun, VA PM	MF	VA PM	PM-HSSE V3	TiCN	DIN374
T161	300	D0408	0	Tap, Gun, VA	MF	VA	HSSE V3	TiCN	DIN374
T162	299	D0402	0	Tap, Gun, UNI	MF	UNI	PM-HSSE V3	Brt	DIN374
T163	299	D0410	0	Tap, Gun, UNI	MF	UNI	PM-HSSE V3	TiAIN	DIN374
T164	310	D0402		Tap, Gun, N	UNC	N	HSSE V3	Brt	DIN2184-1
T166	310	D0402		Tap, Gun, N	UNC	N	HSSE V3	Blu	DIN2184-1
T167	310	D0406		Tap, Gun, N	UNC	N	HSSE V3	TiN	DIN2184-1
T168	312	D0402	0	Tap, Gun, UNI	UNC	UNI	PM-HSSE V3	Blu	DIN2184-1
T169	312	D0410	0	Tap, Gun, UNI	UNC	UNI	PM-HSSE V3	TiAIN	DIN2184-1
T170	314	D0402	0	Tap, Gun, VA	UNC	VA	HSSE V3	Blu	DIN2184-1
T171	314	D0408	0	Tap, Gun, VA	UNC	VA	HSSE V3	TiCN	DIN2184-1
T172	316	D0402	0	Tap, Gun, H	UNC	Н	PM-HSS Co	Blu	DIN2184-1
T173	327	D0402		Tap, Gun, N	UNF	N	HSSE V3	Brt	DIN2184-1
T175	327	D0406		Tap, Gun, N	UNF	N	HSSE V3	TiN	DIN2184-1
T176	329	D0402	0	Tap, Gun, VA	UNF	VA	HSSE V3	Blu	DIN2184-1
T177	329	D0408	0	Tap, Gun, VA	UNF	VA	HSSE V3	TiCN	DIN2184-1
T178	337	D0402		Tap, Gun, N	G (BSPF)	N	HSSE V3	Brt	DIN5156
T179	337	D0402		Tap, Gun, N	G (BSPF)	N	HSSE V3	Blu	DIN5156
T180	337	D0406		Tap, Gun, N	G (BSPF)	N	HSSE V3	TiN	DIN5156
T181	338	D0402	0	Tap, Gun, VA	G (BSPF)	VA	HSSE V3	Blu	DIN5156
T182	338	D0408	0	Tap, Gun, VA	G (BSPF)	VA	HSSE V3	TiCN	DIN5156
T183	262	D0402		Tap, Spiral Flute, R15 N	Metric	N	HSSE V3	Brt	DIN371
T184	263	D0402		Tap, Spiral Flute, R15 N	Metric	N	HSSE V3	Brt	DIN376
T187	264	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN371
T188	265	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN376
T189	264	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Blu	DIN371



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T191	266	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN371
T192	267	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN376
T193	266	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN371
T194	267	D0402		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	DIN376
T195	266	D0402		Tap, Spiral Flute, L40 N	Metric	N	HSSE V3	Brt	DIN371
T196	267	D0402		Tap, Spiral Flute, L40 N	Metric	N	HSSE V3	Brt	DIN376
T197	276	D0402	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	Blu	DIN371
T199	277	D0402	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	Blu	DIN376
T201	276	D0408	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	TiCN	DIN371
T202	277	D0408	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	TiCN	DIN376
T203	278	D0402	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	Blu	DIN371
T204	279	D0402	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	Blu	DIN376
T205	278	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN371
T206	279	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN376
T207	280	D0408	0	Tap, Spiral Flute, R50 VA PM, IK	Metric	VA PM - IK	PM-HSSE V3	TiCN	DIN371
T208	281	D0408	0	Tap, Spiral Flute, R50 VA PM, IK	Metric	VA PM - IK	PM-HSSE V3	TiCN	DIN376
T209	282	D0402	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	Blu	DIN371
T210	283	D0402	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	Blu	DIN376
T211	282	D0408	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	TiCN	DIN371
T212	283	D0408	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	TiCN	DIN376
T213	282	D0408	0	Tap, Spiral Flute, R15 H, IK	Metric	H - IK	PM-HSS Co	TiCN	DIN371
T214	283	D0408	0	Tap, Spiral Flute, R15 H, IK	Metric	H - IK	PM-HSS Co	TiCN	DIN376
T215	284	D0408	Ti	Tap, Spiral Flute, R15 Ti	Metric	Ti	PM-HSS Co	TiCN	DIN371
T216	285	D0408	Ti	Tap, Spiral Flute, R15 Ti	Metric	Ti	PM-HSS Co	TiCN	DIN376
T217	286	D0402	Ni	Tap, Spiral Flute, R10 Ni	Metric	Ni	PM-HSS Co	Brt	DIN371
T218	287	D0402	Ni	Tap, Spiral Flute, R10 Ni	Metric	Ni	PM-HSS Co	Brt	DIN376
T219	270	D0402	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	Brt	DIN371
T220	271	D0402	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	Brt	DIN376
T221	270	D0402	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	Blu	DIN371
T222	271	D0402	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	Blu	DIN376
T227	270	D0410	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	TiAIN	DIN371
T228	271	D0410	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	TiAIN	DIN376
T229	270	D0410	0	Tap, Spiral Flute, R40 UNI, IK	Metric	UNI - IK	PM-HSSE V3	TiAIN	DIN371
T230	271	D0410	0	Tap, Spiral Flute, R40 UNI, IK	Metric	UNI - IK	PM-HSSE V3	TiAIN	DIN376
T231	272	D0402	0	Tap, Spiral Flute, R45 Al	Metric	Al	HSSE V3	Brt	DIN371
T232	273	D0402	0	Tap, Spiral Flute, R45 Al	Metric	Al	HSSE V3	Brt	DIN376
T233	272	D0404	0	Tap, Spiral Flute, R45 Al	Metric	Al	HSSE V3	CrN	DIN371
T234	273	D0404	0	Tap, Spiral Flute, R45 Al	Metric	Al	HSSE V3	CrN	DIN376
T235	274	D0402	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	Ni	DIN371
T236	275	D0402	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	Ni	DIN376
T237	274	D0402	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	Blu	DIN371
T238	275	D0402	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	Blu	DIN376
T239	274	D0404	0	Tap, Spiral Flute, R45 Cu	Metric	Cu	HSSE V3	CrN	DIN371
T240	275	D0404	0	Tap, Spiral Flute, R45 Cu	Metric	Cu	HSSE V3	CrN	DIN376
T241	274	D0406	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	TiN	DIN371
T242	275	D0406	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	TiN	DIN376
T243	302	D0402		Tap, Spiral Flute, R15 N	MF	N	HSSE V3	Brt	DIN374
T244	302	D0406		Tap, Spiral Flute, R15 N	MF	N	HSSE V3	TiN	DIN374
T245	303	D0402		Tap, Spiral Flute, R40 N	MF	N	HSSE V3	Brt	DIN374
T246	303	D0402		Tap, Spiral Flute, R40 N	MF	N	HSSE V3	Brt	DIN374
T247	303	D0402		Tap, Spiral Flute, R40 N	MF	N	HSSE V3	Blu	DIN374
T248	303	D0406	-	Tap, Spiral Flute, R40 N	MF	N	HSSE V3	TiN	DIN374
T249	305	D0402	0	Tap, Spiral Flute, R45 VADH	MF	VADH	HSSE V3	Blu	DIN374
T250 T251	307	D0402	0	Tap, Spiral Flute, R50 VA PM	MF	VA PM	PM-HSSE V3	Blu	DIN374
	305	D0408	0	Tap, Spiral Flute, R45 VADH	MF	VADH	HSSE V3	TiCN	DIN374



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T253	304	D0402	0	Tap, Spiral Flute, R40 UNI	MF	UNI	PM-HSSE V3	Brt	DIN374
T254	304	D0410	0	Tap, Spiral Flute, R40 UNI	MF	UNI	PM-HSSE V3	TiAIN	DIN374
T258	318	D0402		Tap, Spiral Flute, R40 N	UNC	N	HSSE V3	Brt	DIN2184-1
T260	318	D0402		Tap, Spiral Flute, R40 N	UNC	N	HSSE V3	Blu	DIN2184-1
T261	322	D0402	0	Tap, Spiral Flute, R45 VADH	UNC	VADH	HSSE V3	Blu	DIN2184-1
T262	322	D0408	0	Tap, Spiral Flute, R45 VADH	UNC	VADH	HSSE V3	TiCN	DIN2184-1
T263	324	D0402	0	Tap, Spiral Flute, R40 VA	8UN	VA	HSSE V3	Brt	DIN2184-1
T264	324	D0408	0	Tap, Spiral Flute, R40 VA	8UN	VA	HSSE V3	TiCN	DIN2184-1
T265	325	D0402	0	Tap, Spiral Flute, R15 H	UNC	Н	PM-HSS Co	Blu	DIN2184-1
T266	320	D0402	0	Tap, Spiral Flute, R40 UNI	UNC	UNI	PM-HSSE V3	Blu	DIN2184-1
T267	320	D0410	0	Tap, Spiral Flute, R40 UNI	UNC	UNI	PM-HSSE V3	TiAIN	DIN2184-1
T273	318	D0406		Tap, Spiral Flute, R40 N	UNC	N	HSSE V3	TiN	DIN2184-1
T275	331	D0402		Tap, Spiral Flute, R40 N	UNF	N	HSSE V3	Brt	DIN2184-1
T276	333	D0402	0	Tap, Spiral Flute, R45 VADH	UNF	VADH	HSSE V3	Blu	DIN2184-1
T277	333	D0408	0	Tap, Spiral Flute, R45 VADH	UNF	VADH	HSSE V3	TiCN	DIN2184-1
T278	340	D0402		Tap, Spiral Flute, R15 N	G (BSPF)	N	HSSE V3	Brt	DIN5156
T279	340	D0406		Tap, Spiral Flute, R15 N	G (BSPF)	N	HSSE V3	TiN	DIN5156
T281	341	D0402		Tap, Spiral Flute, R40 N	G (BSPF)	N	HSSE V3	Brt	DIN5156
T282	341	D0402		Tap, Spiral Flute, R40 N	G (BSPF)	N	HSSE V3	Blu	DIN5156
T283	341	D0406		Tap, Spiral Flute, R40 N	G (BSPF)	N	HSSE V3	TiN	DIN5156
T284	342	D0402	0	Tap, Spiral Flute, R45 VA	G (BSPF)	VA	HSSE V3	Blu	DIN5156
T285	342	D0408	0	Tap, Spiral Flute, R45 VA	G (BSPF)	VA	HSSE V3	TiCN	DIN5156
T286	230	D0402		Tap, Straight Flute, N	Metric	N	HSSE V3	Brt	DIN371
T287	231	D0402		Tap, Straight Flute, N	Metric	N	HSSE V3	Brt	DIN376
T288	230	D0406		Tap, Straight Flute, N	Metric	N	HSSE V3	TiN	DIN371
T289	231	D0406		Tap, Straight Flute, N	Metric	N	HSSE V3	TiN	DIN376
T290	232	D0402	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	Ni + Blu	DIN371
T291	233	D0402	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	Ni + Blu	DIN376
T292	232	D0408	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	TiCN	DIN371
T293	233	D0408	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	TiCN	DIN376
T294	198	D0408	0	Tap, Straight Flute, XH	Metric	XH	SPM	TiCN	-
T295	198	D0408	0	Tap, Straight Flute, XH	Metric	XH	SPM	TiCN	-
T296	198	D0414	0	Tap, Straight Flute, VH	Metric	VH	VHM	TiCN	DINO74
T298	294	D0402 D0406		Tap, Straight Flute, N	MF	N N	HSSE V3	Brt TiN	DIN374 DIN374
T299 T300	294 295	D0406 D0402	0	Tap, Straight Flute, N Tap, Straight Flute, GG	MF MF	GG	HSSE V3	Ni + Blu	DIN374
	295	D0402 D0408	0	Tap, Straight Flute, GG	MF	GG	HSSE V3	TiCN	DIN374
T301 T302		D0408 D0402	0	Tap, Straight Flute, GG	UNC	GG	HSSE V3	Ni + Blu	DIN374
T304	308 335	D0402		Tap, Straight Flute, N	G (BSPF)	N	HSSE V3	Brt	DIN2164-1
T304	335	D0402 D0406		Tap, Straight Flute, N	G (BSPF)	N	HSSE V3	TiN	DIN5156
T307	336	D0408	0	Tap, Straight Flute, GG	G (BSPF)	GG	HSSE V3	TiCN	DIN5156
T308	345	D0400 D0402	0	Tap, Straight Flute, UNI	NPT	UNI	HSSE V3	Brt	DIN2184-1
T309	289	D0402		Tap, Forming, with no groove	Metric	N	HSSE V3	Brt	DIN2174
T311	289	D0402		Tap, Forming, with no groove	Metric	N	HSSE V3	Brt	DIN2174
T313	289	D0406		Tap, Forming, with no groove	Metric	N	HSSE V3	TiN	DIN2174
T315	289	D0406		Tap, Forming, with no groove	Metric	N	HSSE V3	TiN	DIN2174
T319	290	D0408		Tap, Forming, with multi coolant groove	Metric	N	HSSE V3	TiCN	DIN2174
T320	291	D0408		Tap, Forming, with multi coolant groove	Metric	N	HSSE V3	TiCN	DIN2174
T321	290	D0408		Tap, Forming, with multi coolant groove	Metric	N	HSSE V3	TiCN	DIN2174
T322	291	D0408		Tap, Forming, with multi coolant groove	Metric	N	HSSE V3	TiCN	DIN2174
T325	292	D0400	0	Tap, Forming, with multi coolant groove, UNI	Metric	UNI	SPM	TiAIN	DIN2174
T326	293	D0410	0	Tap, Forming, with multi coolant groove, UNI	Metric	UNI	SPM	TiAIN	DIN2174
T327	292	D0410	0	Tap, Forming, with multi coolant groove, UNI, IK	Metric	UNI - IK	SPM	TiAIN	DIN2174
T328	293	D0410	0	Tap, Forming, with multi coolant groove, UNI, IK	Metric	UNI - IK	SPM	TiAIN	DIN2174
T329	290	D0404	0	Tap, Forming, with multi coolant groove, Cu	Metric	Cu	HSSE V3	CrN	DIN2174
T330	291	D0404	0	Tap, Forming, with multi coolant groove, Cu	Metric	Cu	HSSE V3	CrN	DIN2174



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T335	234	D0408	DC	Tap, Straight Flute, DC	Metric	DC	PM-HSS Co	TiCN	DIN371
T336	235	D0408	DC	Tap, Straight Flute, DC	Metric	DC	PM-HSS Co	TiCN	DIN376
T337	242	D0402		Tap, Gun, Extra Length, N	Metric	N	HSSE V3	Brt	-
T338	243	D0402		Tap, Gun, Extra Length, N	Metric	N	HSSE V3	Brt	-
T339	268	D0402		Tap, Spiral Flute, Extra Length, R40 N	Metric	N	HSSE V3	Brt	-
T340	269	D0402		Tap, Spiral Flute, Extra Length, R40 N	Metric	N	HSSE V3	Brt	-
T349	339	D0402	0	Tap, Gun, VA PM	G (BSPF)	VA PM	PM-HSSE V3	Blu	DIN5156
T350	339	D0408	0	Tap, Gun, VA PM	G (BSPF)	VA PM	PM-HSSE V3	TiCN	DIN5156
T351	343	D0402	0	Tap, Spiral Flute, R50 VA PM	G (BSPF)	VA PM	PM-HSSE V3	Blu	DIN5156
T352	343	D0408	0	Tap, Spiral Flute, R50 VA PM	G (BSPF)	VA PM	PM-HSSE V3	TiCN	DIN5156
T357	234	D0408	DC	Tap, Straight Flute, DC, IK	Metric	DC - IK	PM-HSS Co	TiCN	DIN371
T358	235	D0408	DC	Tap, Straight Flute, DC, IK	Metric	DC - IK	PM-HSS Co	TiCN	DIN376
T361	344	D0402		Tap, Forming, with multi coolant groove	G (BSPF)	N	HSSE V3	Brt	DIN2189
T363	344	D0408		Tap, Forming, with multi coolant groove	G (BSPF)	N	HSSE V3	TiCN	DIN2189
T365	227	D0412	Synchro	Tap, Spiral Flute, Synchro, L20	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T367	227	D0412	Synchro	Tap, Spiral Flute, Synchro, L20, IK	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T369	228	D0412	Synchro	Tap, Spiral Flute, Synchro, R45 Al	Metric	~DIN1835-B /HSC	PM-HSSE V3	CrN	-
T371	228	D0412	Synchro	Tap, Spiral Flute, Synchro, R45 Al, IK	Metric	~DIN1835-B /HSC	PM-HSSE V3	CrN	-
T373	226	D0412	Synchro	Tap, Spiral Flute, Synchro, R50	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T375	226	D0412	Synchro	Tap, Spiral Flute, Synchro, R50, IK	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T377	225	D0412	Synchro	Tap, Gun, Synchro	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T379	225	D0412	Synchro	Tap, Gun, Synchro, IK	Metric	~DIN1835-B /HSC	PM-HSSE V3	TiCN	-
T381	229	D0412	Synchro	Tap, Forming, Synchro	Metric	~DIN1835-B /HSC		TiN	-
T383	229	D0412	Synchro	Tap, Forming, Synchro, IK	Metric			TiN	-
T384	152	D0702	,	Tap, Straight Flute, N	Metric	Taper	HSS	Brt	IS0529
T385	152	D0702		Tap, Straight Flute, N	Metric	Intermediate	HSS	Brt	IS0529
T386	152	D0702		Tap, Straight Flute, N	Metric	Bottoming	HSS	Brt	IS0529
T387	153	D0706		Tap, Straight Flute, N	Metric	Intermediate	HSS	TiN	IS0529
T388	153	D0706		Tap, Straight Flute, N	Metric	Bottoming	HSS	TiN	IS0529
T389	154	D0702		Tap, Straight Flute, N, Left Hand	Metric	Taper	HSS	Brt	IS0529
T390	154	D0702		Tap, Straight Flute, N, Left Hand	Metric	Intermediate	HSS	Brt	IS0529
T391	154	D0702		Tap, Straight Flute, N, Left Hand	Metric	Bottoming	HSS	Brt	IS0529
T392	154	D0702		Tap, Straight Flute, N, Oversize	Metric	Bottoming	HSS	Brt	IS0529
T401	155	D0702		Tap, Straight Flute, N	MF	Taper	HSS	Brt	IS0529
T402	155	D0702		Tap, Straight Flute, N	MF	Intermediate	HSS	Brt	IS0529
T403	155	D0702		Tap, Straight Flute, N	MF	Bottoming	HSS	Brt	IS0529
T404	156	D0706		Tap, Straight Flute, N	MF	Intermediate	HSS	TiN	IS0529
T405	156	D0706		Tap, Straight Flute, N	MF	Bottoming	HSS	TiN	IS0529
T414	157	D0702		Tap, Straight Flute, N	UNC	Taper	HSS	Brt	IS0529
T415	157	D0702		Tap, Straight Flute, N	UNC	Intermediate	HSS	Brt	IS0529
T416	157	D0702		Tap, Straight Flute, N	UNC	Bottoming	HSS	Brt	IS0529
T417	158	D0702		Tap, Straight Flute, N	UNC	Intermediate	HSS	TiN	IS0529
T418	158	D0706		Tap, Straight Flute, N	UNC	Bottoming	HSS	TiN	IS0529
T419	159	D0700		Tap, Straight Flute, N, Left Hand	UNC	Taper	HSS	Brt	IS0529
T420	159	D0702		Tap, Straight Flute, N, Left Hand	UNC	Intermediate	HSS	Brt	IS0529
T421	159	D0702		Tap, Straight Flute, N, Left Hand	UNC	Bottoming	HSS	Brt	IS0529
T431	160	D0702		Tap, Straight Flute, N	UNF	Taper	HSS	Brt	IS0529
T432	160	D0702 D0702		Tap, Straight Flute, N	UNF	Intermediate	HSS	Brt	IS0529
T432	160	D0702		Tap, Straight Flute, N	UNF	Bottoming	HSS	Brt	IS0529
T433	161	D0702 D0706		Tap, Straight Flute, N	UNF	Intermediate	HSS	TiN	IS0529
					UNF				
T435	161	D0706		Tap, Straight Flute, N		Bottoming	HSS	TiN	IS0529
T436	162	D0702		Tap, Straight Flute, N, Left Hand	UNF	Taper	HSS	Brt	IS0529
T437	162	D0702		Tap, Straight Flute, N, Left Hand	UNF	Intermediate	HSS	Brt	IS0529
T438	162	D0702		Tap, Straight Flute, N, Left Hand	UNF	Bottoming	HSS	Brt	IS0529
T445	163	D0702		Tap, Gun, N	UNF	Intermediate	HSSE V3	Brt	IS0529
T446	163	D0702		Tap, Straight Flute, N	UNEF	Intermediate	HSS	Brt	IS0529



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T447	163	D0702		Tap, Straight Flute, N	UNEF	Bottoming	HSS	Brt	IS0529
T448	164	D0702		Tap, Straight Flute, N	8UN	Taper	HSS	Brt	IS0529
T449	164	D0702		Tap, Straight Flute, N	8UN	Intermediate	HSS	Brt	IS0529
T450	164	D0702		Tap, Straight Flute, N	8UN	Bottoming	HSS	Brt	IS0529
T451	165	D0702		Tap, Straight Flute, N	BSW	Taper	HSS	Brt	IS0529
T452	165	D0702		Tap, Straight Flute, N	BSW	Intermediate	HSS	Brt	IS0529
T453	165	D0702		Tap, Straight Flute, N	BSW	Bottoming	HSS	Brt	IS0529
T454	166	D0706		Tap, Straight Flute, N	BSW	Intermediate	HSS	TiN	IS0529
T455	166	D0706		Tap, Straight Flute, N	BSW	Bottoming	HSS	TiN	IS0529
T456	167	D0702		Tap, Straight Flute, N, Left Hand	BSW	Bottoming	HSS	Brt	IS0529
T466	168	D0702		Tap, Straight Flute, N	BSF	Taper	HSS	Brt	IS0529
T467	168	D0702		Tap, Straight Flute, N	BSF	Intermediate	HSS	Brt	IS0529
T468	168	D0702		Tap, Straight Flute, N	BSF	Bottoming	HSS	Brt	IS0529
T469	168	D0702		Tap, Straight Flute, N	BA	Taper	HSS	Brt	IS0529
T470	168	D0702		Tap, Straight Flute, N	BA	Intermediate	HSS	Brt	IS0529
T471	168	D0702		Tap, Straight Flute, N	BA	Bottoming	HSS	Brt	IS0529
T472	168	D0702		Tap, Straight Flute, N	BSB	Taper	HSS	Brt	IS0529
T473	168	D0702		Tap, Straight Flute, N	BSB	Intermediate	HSS	Brt	IS0529
T474	168	D0702		Tap, Straight Flute, N	BSB	Bottoming	HSS	Brt	IS0529
T475	171	D0702		Tap, Straight Flute, Pipe	Rc (BSPT)	Bottoming	HSS	Brt	IS02284
T476	171	D0706		Tap, Straight Flute, Pipe	Rc (BSPT)	Bottoming	HSS	TiN	IS02284
T477	171	D0702		Tap, Straight Flute, Pipe	Rp (BSPPL)	Bottoming	HSS	Brt	IS02284
T478	171	D0702		Tap, Straight Flute, Pipe	Pg	Bottoming	HSS	Brt	IS0529
T479	169	D0702		Tap, Straight Flute, Pipe	G (BSPF)	Taper	HSS	Brt	IS02284
T480	169	D0702		Tap, Straight Flute, Pipe	G (BSPF)	Intermediate	HSS	Brt	IS02284
T481	169	D0702		Tap, Straight Flute, Pipe	G (BSPF)	Bottoming	HSS	Brt	IS02284
T482	170	D0706		Tap, Straight Flute, Pipe	G (BSPF)	Intermediate	HSS	TiN	IS02284
T483	170	D0706		Tap, Straight Flute, Pipe	G (BSPF)	Bottoming	HSS	TiN Calaur Taran	IS02284
T486	172	D0702		Tap, Straight Flute, Pipe	NPSF	Bottoming	HSS	Colour Temp	ANSI B94-
T487	172	D0702		Tap, Straight Flute, Pipe	NPT NPTF	Bottoming	HSS	Colour Temp	ANSI B94-
T488	172	D0702 D0702		Tap, Straight Flute, Pipe Tap, Straight Flute, Tyre Valve		Bottoming Bottoming	HSS HSS	Brt	ANSI B94-9 IS0529
T489	163 163			Tap, Straight Flute, Stitching	Tyre valve	Bottoming		Brt	
T490 T491	208	D0702 D0602		Tap, Gun, N	Stitching BSW		HSSE V3	Brt	ISO529 JIS
T492	208	D0602		Tap, Gun, N	BSW	N N	HSSE V3	Blu	JIS
T492	209	D0602		Tap, Gun, Long Series, N	BSW	N	HSSE V3	Brt	JIS
T494	208	D0602		Tap, Gun, N	BSW	N	HSSE V3	TiN	JIS
T495	210	D0610		Tap, Spiral Flute, R40 N	BSW	N N	HSSE V3	Brt	JIS
T495	210	D0602		Tap, Spiral Flute, R40 N	BSW	N N	HSSE V3	Blu	JIS
T497	211	D0602		Tap, Spiral Flute, Long Series, R40 N	BSW	N N	HSSE V3	Brt	JIS
T498	210	D0602		Tap, Spiral Flute, R40 N	BSW	N N	HSSE V3	TiN	JIS
T499	182	D0602		Tap, Gun, N	Metric	N	HSSE V3	Brt	JIS
T500	182	D0602		Tap, Gun, N	Metric	N	HSSE V3	Blu	JIS
T501	183	D0602		Tap, Gun, Long Series, N	Metric	N	HSSE V3	Brt	JIS
T502	182	D0610		Tap, Gun, N	Metric	N	HSSE V3	TiN	JIS
T503	189	D0602		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Brt	JIS
T504	189	D0602		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	Blu	JIS
T507	190	D0602		Tap, Spiral Flute, Long Series, R40 N	Metric	N	HSSE V3	Brt	JIS
T508	189	D0610		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	TiN	JIS
T510	178	D0606		Tap, Forming, single coolant groove, P lead	Metric	N	HSS Co.8	Ni	JIS
T511	179	D0606		Tap, Forming, single coolant groove, B lead	Metric	N	HSS Co.8	Ni	JIS
T512	178	D0606		Tap, Forming, single coolant groove, P lead	Metric	N	HSS Co.8	Blu	JIS
T513	179	D0606		Tap, Forming, single coolant groove, B lead	Metric	N	HSS Co.8	Blu	JIS
T514	178	D0614		Tap, Forming, single coolant groove, P lead	Metric	N	HSS Co.8	TiN	JIS
T515	179	D0614		Tap, Forming, single coolant groove, B lead	Metric	N	HSS Co.8	TiN	JIS
T516	180	D0606		Tap, Forming, multi coolant groove, P lead	Metric	N	HSS Co.8	Ni	JIS



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T517	181	D0606		Tap, Forming, multi coolant groove, B lead	Metric	N	HSS Co.8	Ni	JIS
T518	180	D0606		Tap, Forming, multi coolant groove, P lead	Metric	N	HSS Co.8	Blu	JIS
T519	181	D0606		Tap, Forming, multi coolant groove, B lead	Metric	N	HSS Co.8	Blu	JIS
T520	180	D0614		Tap, Forming, multi coolant groove, P lead	Metric	N	HSS Co.8	TiN	JIS
T521	181	D0614		Tap, Forming, multi coolant groove, B lead	Metric	N	HSS Co.8	TiN	JIS
T522	200	D0606		Tap, Forming, single coolant groove, P lead	UNC	N	HSS Co.8	Ni	JIS
T523	200	D0606		Tap, Forming, single coolant groove, B lead	UNC	N	HSS Co.8	Ni	JIS
T526	200	D0614		Tap, Forming, single coolant groove, P lead	UNC	N	HSS Co.8	TiN	JIS
T527	200	D0614		Tap, Forming, single coolant groove, B lead	UNC	N	HSS Co.8	TiN	JIS
T528	201	D0606		Tap, Forming, multi coolant groove, P lead	UNC	N	HSS Co.8	Ni	JIS
T529	201	D0606		Tap, Forming, multi coolant groove, B lead	UNC	N	HSS Co.8	Ni	JIS
T534	204	D0606		Tap, Forming, single coolant groove, P lead	UNF	N	HSS Co.8	Ni	JIS
T535	204	D0606		Tap, Forming, single coolant groove, B lead	UNF	N	HSS Co.8	Ni	JIS
T538	204	D0614		Tap, Forming, single coolant groove, P lead	UNF	N	HSS Co.8	TiN	JIS
T539	204	D0614		Tap, Forming, single coolant groove, B lead	UNF	N	HSS Co.8	TiN	JIS
T540	205	D0606		Tap, Forming, multi coolant groove, P lead	UNF	N	HSS Co.8	Ni	JIS
T541	205	D0606		Tap, Forming, multi coolant groove, B lead	UNF	N	HSS Co.8	Ni	JIS
T544	205	D0614		Tap, Forming, multi coolant groove, P lead	UNF	N	HSS Co.8	TiN	JIS
T545	205	D0614		Tap, Forming, multi coolant groove, B lead	UNF	N	HSS Co.8	TiN	JIS
T546	185	D0602	0	Tap, Gun, W	Metric	W	HSSE V3	Ni	JIS
T548	187	D0602	0	Tap, Gun, VA	Metric	VA	HSSE V3	Blu	JIS
T549	187	D0610	0	Tap, Gun, VA	Metric	VA	HSSE V3	TiCN	JIS
T550	188	D0602	0	Tap, Gun, H	Metric	Н	PM-HSS Co	Brt	JIS
T552	188	D0610	0	Tap, Gun, H	Metric	Н	PM-HSS Co	TiCN	JIS
T553	186	D0610	0	Tap, Gun, Cu	Metric	Cu	HSSE V3	CrN	JIS
T566	196	D0610	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	JIS
T567	193	D0602	0	Tap, Spiral Flute, R45 W	Metric	W	HSSE V3	Ni	JIS
T570	195	D0602	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	Blu	JIS
T571	195	D0610	0	Tap, Spiral Flute, R45 VADH	Metric	VADH	HSSE V3	TiCN	JIS
T573	192	D0602	0	Tap, Spiral Flute, R45 Al	Metric	Al	HSSE V3	Brt	JIS
T576	191	D0610	0	Tap, Spiral Flute, R40 UNI	Metric	UNI	PM-HSSE V3	TiAIN	JIS
T577	197	D0602	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	Brt	JIS
T578	197	D0610	0	Tap, Spiral Flute, R15 H	Metric	Н	PM-HSS Co	TiCN	JIS
T583	194	D0610	0	Tap, Spiral Flute, R45 Cu	Metric	Cu	HSSE V3	CrN	JIS
T599	199	D0602	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	Ni/Ox	JIS
T600	199	D0610	0	Tap, Straight Flute, GG	Metric	GG	HSSE V3	TiCN	JIS
T605	184	D0610	0	Tap, Gun, UNI	Metric	UNI	PM-HSSE V3	TiAIN	JIS
T606	189	D0602		Tap, Spiral Flute, R40 N (Point Removed)	Metric	N	HSSE V3	Brt	JIS
T607	189	D0602		Tap, Spiral Flute, R40 N (Point Removed)	Metric	N	HSSE V3	Blu	JIS
T608	191	D0610	0	Tap, Spiral Flute, R40 UNI (Point Removed) Tap, Spiral Flute, R45 AI (Point Removed)	Metric	UNI	PM-HSSE V3	TiAIN	JIS JIS
T609	192	D0602	0		Metric	AI W	HSSE V3	Brt	
T610	193	D0602		Tap, Spiral Flute, R45 W (Point Removed)	Metric Metric	VADH		Ni	JIS
T611	195	D0602	0	Tap, Spiral Flute, R45 VADH (Point Removed) Tap, Spiral Flute, R45 VADH (Point Removed)	Metric Metric		HSSE V3	Blu	JIS
T612	195	D0610	0	17.1 7 7	Metric	VADH VA PM	HSSE V3	TICN	JIS
T613 T614	196	D0610	0	Tap, Spiral Flute, R50 VA PM (Point Removed) Tap, Spiral Flute, R15 H (Point Removed)	Metric Metric		PM-HSSE V3	TiCN	JIS
T615	197	D0610	0	17.1 7 4	Metric	H	PM-HSS Co	TiCN	JIS
T616	202	D0602 D0602		Tap, Gun, N Tap, Gun, N	UNC	N N	HSSE V3	Brt Blu	JIS JIS
T617	202 202	D0602 D0610		Tap, Gun, N	UNC	N N	HSSE V3	TiN	JIS
		D0610 D0602			UNC	N N		Brt	JIS
T618 T619	203			Tap, Spiral Flute, R40 N			HSSE V3		
	203	D0602		Tap, Spiral Flute, R40 N	UNC	N N	HSSE V3	Blu	JIS
T620	203	D0610		Tap, Spiral Flute, R40 N	UNC	N	HSSE V3	TiN	JIS
T621	206	D0602		Tap, Gun, N	UNF	N N	HSSE V3	Brt	JIS
T622 T623	206	D0602		Tap, Gun, N	UNF	N	HSSE V3	Blu	JIS
117.5	206	D0610		Tap, Gun, N	UNF	N	HSSE V3	TiN	JIS



Taps									
Catalogue Code	Page No.	Discount Group	Colour Ring	Description	Thread	Geometry Type	Tool Material	Surface Finish	Standard
T626	207	D0602		Tap, Spiral Flute, R40 N	UNF	N	HSSE V3	Blu	JIS
T627	207	D0610		Tap, Spiral Flute, R40 N	UNF	N	HSSE V3	TiN	JIS
T633	182	D0610		Tap, Gun, N	Metric	N	HSSE V3	TiCN	JIS
T634	189	D0610		Tap, Spiral Flute, R40 N	Metric	N	HSSE V3	TiCN	JIS
T635	208	D0610		Tap, Gun, N	BSW	N	HSSE V3	TiCN	JIS
T636	210	D0610		Tap, Spiral Flute, R40 N	BSW	N	HSSE V3	TiCN	JIS
T638	197	D0602	0	Tap, Spiral Flute, R15 H (Point Removed)	Metric	Н	PM-HSS Co	Brt	JIS
T639	189	D0610		Tap, Spiral Flute, R40 N (Point Removed)	Metric	N	HSSE V3	TiN	JIS
T640	189	D0610		Tap, Spiral Flute, R40 N (Point Removed)	Metric	N	HSSE V3	TiCN	JIS
T648	240	D0402		Tap, Gun, N, Left Hand	Metric	N - LH	HSSE V3	Brt	DIN371
T649	241	D0402		Tap, Gun, N, Left Hand	Metric	N - LH	HSSE V3	Brt	DIN376
T662	201	D0614		Tap, Forming, multi coolant groove, P lead	UNC	N	HSS Co.8	TiN	JIS
T663	201	D0614		Tap, Forming, multi coolant groove, B lead	UNC	N	HSS Co.8	TiN	JIS
T666	316	D0408	0	Tap, Gun, H	UNC	Н	PM-HSS Co	TiCN	DIN2184-1
T667	325	D0408	0	Tap, Spiral Flute, R15 H	UNC	Н	PM-HSS Co	TiCN	DIN2184-1
T668	296	D0408	DC	Tap, Straight Flute, DC	MF	DC	PM-HSS Co	TiCN	DIN374
T669	296	D0408	DC	Tap, Straight Flute, DC, IK	MF	DC	PM-HSS Co	TiCN	DIN374
T670	232	D0414	0	Tap, Straight Flute, GG	Metric	GG	VHM	TiCN	DIN371
T671	233	D0414	0	Tap, Straight Flute, GG	Metric	GG	VHM	TiCN	DIN376
T676	278	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN371
T677	279	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN376
T678	278	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN371
T679	279	D0408	0	Tap, Spiral Flute, R50 VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN376
T680	252	D0408	0	Tap, Gun, VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN371
T681	253	D0408	0	Tap, Gun, VA PM	Metric	VA PM	PM-HSSE V3	TiCN	DIN376
T690	195	D0602	0	Tap, Spiral Flute, R45 VA	Metric	VA	HSSE V3	Blu	JIS
T901	152	D0702		Set, Tap, 3 piece	Metric	Taper/Inter/Bott	HSS	Brt	IS0529
T902	155	D0702		Set, Tap, 3 piece	MF	Taper/Inter/Bott	HSS	Brt	IS0529
T903	157	D0702		Set, Tap, 3 piece	UNC	Taper/Inter/Bott	HSS	Brt	IS0529
T904	160	D0702		Set, Tap, 3 piece	UNF	Taper/Inter/Bott	HSS	Brt	IS0529
T905	165	D0702		Set, Tap, 3 piece	BSW	Taper/Inter/Bott	HSS	Brt	IS0529
T906	168	D0702		Set, Tap, 3 piece	BSF	Taper/Inter/Bott	HSS	Brt	IS0529
T907	168	D0702		Set, Tap, 3 piece	BA	Taper/Inter/Bott	HSS	Brt	IS0529
T908	168	D0702		Set, Tap, 3 piece	BSB	Taper/Inter/Bott	HSS	Brt	IS0529
T909	169	D0702		Set, Tap, 3 piece	G (BSPF)	Taper/Inter/Bott	HSS	Brt	IS0529
T910	164	D0702		Set, Tap, 3 piece	8UN	Taper/Inter/Bott	HSS	Brt	IS0529
Tool holding	ıg								
Catalogue Code	Page No.	Discount Group	Descripti	on					
Z101	223	Z1104	Holder - Sy	nchroflex SFT Attachment					
Z110	223	Z1110	Accessory -	Collet, Round Drive ER11					
Z111	223	Z1110	Accessory -	Collet, Square Drive ER20					
Z112	223	Z1110		Collet, Square Drive ER25					
Z113	223	Z1110		Collet, Square Drive ER40					
Z130	223	Z1108	Accessory -	BT Arbor, 25mm Bore					
Z135	223	Z1108	Accessory -	BT Pull Stud					

online material based product selection...



Expert Tool Selector



Online product advice has never been easier with Sutton Tools' revolutionary Expert Tools Selector.

The Sutton Tools Expert Tools Selector will recommend the correct tool for your specific application with everything from suitable coolant choices through to cutting calculations.

Our Expert Tool Selector provides easy stepby-step detailed information that includes:

- Fast and easy to use tool selection system
- High speed navigation
- Quickly search by product description or catalogue number
- Material classifications
- Suitable tool and machining data, based on the latest research
- Animated demonstrations of machining processes
- Stock availability

Visit www.suttontools.com.au to find the right tool for your job.

Colour Band Selection



Sutton Tools have made the tool selection for cutting different materials easy by applying colour coded bands to the shanks of the tools which relates to the material it is best suited to.

Why Colour Band?

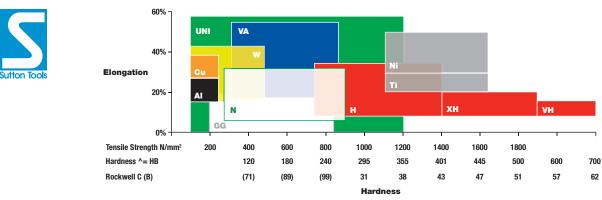
- Each colour gives clear assignment of materials, different choice of tools and applications
- Internationally recognised
- All suitable standard tools are identified at a glance
- A simplified tool selection lends itself to rationalisation
- Rejects are reduced due to correct tool choice

Selection Made Easy!

- Type UNI Universal use for a wide range of material, preferred application: steels up to 1200 N/mm²
- Type VA Use in stainless steels, high-strength steels up to 900 N/mm²
- Type H Use in hard materials up to 1400 N/mm²
- Type Al Use in wrought Al alloys, pure-copper and thermoplastics
- Type W Use in soft materials, free-cutting steels, AISi alloys
- Type Cu Use in wrought Al alloys and coppers
- Type GG Use in grey cast iron GG, brittle plastics, hard bronzes

Materials	HB	N/mm²	% Elong.	Material examples						
1.0 Steels				ANSI / USA	JIS	DIN	Material #			
1.1 Mild steels, magnetic soft steel	<200	>200 <400	10			RFe100	1.1013			
1.2 Free cutting, structural, unalloyed	<200	>350 < 700	30	1010, 1015, 1020	S10C, 515C, 520C	C10, C15, ST37, ST52	1.0301, 1.0401, 1.0044			
1.3 Plain carbon, low alloyed	<300	>350 <850	20	1045, 1095	545C, 55BC	C45, C92D, D95-S	1.0503, 1.0618			
1.4 Alloy steels harden. / tempered	<250	>500 <850	30				1.7223,			
1.5 Alloy steels harden. / tempered	<350	>850 <1200	30	4140, 4340,	SCM440,	41CrMo4, 36CrNiMo4.	1.6511, 1.2343.			
1.6 Hardened, heat treated, high tensile alloy	<420	<1500	12	D2, 02,	SKD6, SKD11	X155CrVMo12-1, 90MnV8	1.2379, 1.2344,			
1.7 Hardened Steel 45-50 RC	<550		<12	H13			1.2842			
1.8 Hardened Steel 50-62 RC	<700		<12	M2, M42	SKH59	HS2-10-1-8	1.3247			
2.0 Stainless Steels										
2.1 Free machining	<250	<850	25	303, 430F	SUS303, SUS430F	X8CrNiS18-9	1.4305, 1.4104			
2.2 Austenitic	<250	<850	20	304, 316	SUS304, SUS316	X5CrNi18-10	1.4301, 1.4401, 1.4571			
2.3 Ferritic + martensitic	<250	<850	20	403, 420, 440F	SUS420, SUS403	X20Cr13	1.4021			
3.0 Cast Irons										
3.1 Lamellar graphite (Grey soft)	<150	<500	10	A48-20B, A48-60B	FC10, FC20	GG10, GG40	0.6010, 0.6040			
3.2 Lamellar graphite (Grey hard)	<300	<1000	10	120-90-02	FCD40,	GGG40,	0.7080,			
3.3 Nodular (spheroidal) graphite & malleable	<200	<700	10	80-55-06	FCD60, FCD70	GGG80	0.7040, 0.7060			
4.0 Titaniums										
4.1 Pure Titanium	<250	<850	20	4902, 4941		Ti99.7, Ti99.8	3.7024, 3.7034			
4.2 Titanium alloys	>250	>850	20	4911, 4928, 4965		TiCu2, TiAl6V4	3.7164, 3.7124			
5.0 Nickels										
5.1 Nickel alloys	<250	<850	25	INCONEL 600		Ni38,	1.3913, 2.4816,			
5.2 Nickel alloys	>250	>850	25	HASTELLOY, INCONEL 718		Ni54, NiCr16FeTi	2.4669, 2.4665			
6.0 Coppers										
6.1 Pure Copper (electrolytic copper)	<120	<400	12	C10200, C12200		SF-Cu	2.0090			
6.2 Short chip Brass, Phosphor Bronze, gun metal	<200	<700	12	C3800, C91700		G-CuSn12Ni	2.1060			
6.3 Long chip Brass, Bronze	<200	<700	12	C17000, C94100		G-CuPb20Sn	2.1188			
7.0 Aluminiums										
7.1 Aluminium unalloyed	<100	<350	15	1050A	A1050	Al99.5	3.0255			
7.2 Magnesium unalloyed	<150	<350	15	6463		Al99.85Mg0.5	3.3307, 3.2307, 3.3211			
7.3 Al Alloyed Si < 1.5 %	<120	<500	15	5050B, 7075, 6061	A6061	AlMg1.5	3.3316			
7.4 Al Alloyed 1.5 % < Si < 10%	<120	<400	10	380	A380, ADC10	AlSi10Mg	3.2161			
7.5 Al Alloyed > 10% Si	-	<400	N	390, 393		AlSi17Cu4				
7.6 Magnesium alloys	-	<400	N	SAE52		MgAl3Zn	3.5312			
8.0 Plastics										
8.1 Plastics, Thermoplastics, Polyethylene	<340	<50	N		ABS, PVC, Polycarb	onate, Polypropylene				

Colour Band Selection





what's NEW to Sutton Tools already extensive range of cutting tools...















T670 Tap Metric GG VHM



C108 Countersink 3 Flute DIN 335

T325 Tap Forming UNI

new generation coatings...

a quantum leap in tool wear resistance

Aluminium Chromium Nitride

The new magic tool coating formula is Aluminium Chromium Nitride (AICrN). Coatings of this new G6 generation developed, markedly expand the performance envelope versus conventional titanium based coatings (such as TiAIN, AITIN or TiCN).

Unique coating properties

The AICrN coating exhibits until now, an unmatched degree of oxidation resistance and hot hardness. These properties have triggered a quantum leap in tool wear resistance.

The bottom line: greater productivity!

Tools coated with AICrN let you choose noticeably higher cutting speeds and allow you to more effectively exploit the potential of modern machine tools. You can produce more parts per time / unit to decisively boost the productivity of your manufacturing resources and hone your competitive edge.

Extraordinary performance gains have been demonstrated in dry and wet machining processes involving:

- Unalloyed steels
- High strength steels
- High hardness steels (up to 54 HRC)

Superior performance for the entire life of the tool AICrN is suitable for re-coating tools with no tradeoff in performance.

Coating properties:

- Very high abrasion resistance
- High and constant temperature resistance
- Unrivalled oxidation resistance
- Titanium free coating

