SWISS >UT

HIGHER QUALITY, GREATER PRECISION

MASTER CATALOG

About Us :

SwissCut was founded with vast experience and has grown to be a robust and stable company recognized globally for the products we offer for machine shops. With outstanding human resources and distinguished technology, SwissCut is always looking towards the future. SwissCut has gained continuous trust from customers by virtue of obtaining an efficient logistics system and also a shortening delivery time. We periodically acquire and update technology for meeting specific requirements of customers. Through the skill and innovation of our people, we deliver products that solve customer challenges and enable exceptional performance. Our mission is all about performance for our customers. SwissCut is committed to customer requirements and satisfaction. We provide quality products to excel in required performance, reliability, durability, consistency, cost-effectiveness and delivery.

OUR NETWORKING

INDIA

AHMEDABAD - RAJKOT - MUMBAI - PUNE - AURANGABAD - BANGLORE - CHENNAI
DELHI - COIMBATORE - ZIRAKPUR - CHANDIGARH - KOLKATA - HYDERABAD - NASHIK
INDORE - SURAT - BELGAUM

EXPORT

USA - UK - FRANCE - GERMANY - PORTUGAL - AUSTRALIA - ITALY

Corporate Vision :

- To be the world leader in providing our customers high-quality products and creative solutions that will allow our customers to prosper.

Corporate Mission :

- Swisscut 's mission is to provide cutting tool products with outstanding quality, service and value. We focused on delivering customer satisfaction by providing cutting tools that increase productivity, reduce costs and improve work piece quality
- Our Mission at Swiss Cut Works is to adapt change, to take the responsibility, make a commitment and fulfill it.
- It is to ensure our customers that when we smile at them it's because we mean it.

Quality :

- Quality first begins inside and then it works its way out. We believe in accuracy & we raise the quality standard of our products as much as we can.
- Our principle is that the job cannot be finished before it is improved to please the customers. We work as closely as possible to reach our boundaries of our abilities.
- What we can do - is only what we can do.

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TURNING INSERT

4 FLUTE - FLAT END 45 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - FLAT END 45 HRC

4 FLUTE - FLAT END 55 HRC

- Designed for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - FLAT END 55 HRC

4 FLUTE - FLAT END 63 HRC

- Designed for a Carbon Steel, Tool Steel, Alloy Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- Nanocomposite PLATIT Coating (nACo Coating)
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - FLAT END 63 HRC

4 FLUTE - FLAT END 45, 55, 63 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F1-3-50-4F	1	3	50	3/4/6	4F
F1.5-4-50-4F	1.5	4	50	3/4/6	4F
F2-6-50-4F	2	6	50	3/4/6	4F
F2.5-8-50-4F	2.5	8	50	3/4/6	4F
F3-8-50-4F	3	8	50	3/4/6	4F
F3-10-75-4F	3	10	75	3/4/6	4F
F3-12-100-4F	3	12	100	3/4/6	4F
F3.5-10-50-4F	3.5	10	50	4/6	4F
F4-10-50-4F	4	10	50	4/6	4F
F4-12-75-4F	4	12	75	4/6	4F
F4-15-100-4	4	15	100	4/6	4F
F5-13-50-4F	5	13	50	5/6	4F
F5-20-75-4F	5	20	75	5/6	4F
F5-25-100-4F	5	25	100	5/6	4F
F6-15-50-4F	6	15	50	6	4F
F6-20-75-4F	6	20	75	6	4F
F6-25-100-4F	6	25	100	6	4F
F6-30-150-4F	6	30	150	6	4F
F8-20-60-4F	8	20	60	8	4F
F8-25-75-4F	8	25	75	8	4F
F8-35-100-4F	8	35	100	8	4F
F8-40-150-4F	8	40	150	8	4F
F10-25-75-4F	10	25	75	10	4F
F10-40-100-4F	10	40	100	10	4F
F10-45-150-4F	10	45	150	10	4F
F12-30-75-4F	12	30	75	12	4F
F12-45-100-4F	12	45	100	12	4F
F12-50-150-4F	12	50	150	12	4F
F12-60-200-4F	12	60	200	12	4F
F14-40-100-4F	14	40	100	14	4F
F14-50-150-4F	14	50	150	14	4F
F16-40-100-4F	16	40	100	16	4F
F16-55-150-4F	16	55	150	16	4F
F16-60-200-4F	16	60	200	16	4F
F18-40-100-4F	18	40	100	18	4F
F20-40-100-4F	20	40	100	20	4F
F20-50-150-4F	20	50	150	20	4F

2 FLUTE - FLAT END 45 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum.
- Excellent Wear Resistance.
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - FLAT END 45 HRC

2 FLUTE - FLAT END 55 HRC

- Designed for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - FLAT END 55 HRC

2 FLUTE - FLAT END 63 HRC

- Designed for a Carbon Steel, Tool Steel, Alloy Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- Nanocomposite PLATIT Coating (nACo Coating)
- 2 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - FLAT END 63 HRC

2 FLUTE - FLAT END 45, 55, 63 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F0.3-0.75-50-2F	0.3	0.75	50	3/4	2F
F0.4-1-50-2F	0.4	1	50	3/4	2F
F0.5-1.25-50-2F	0.5	1.25	50	3/4	2F
F0.6-1.5-50-2F	0.6	1.5	50	3/4	2F
F0.8-2-50-2F	0.8	2	50	3/4	2F
F1-3-50-2F	1	3	50	3/4/6	2F
F1.5-4-50-2F	1.5	4	50	3/4/6	2F
F2-6-50-2F	2	6	50	3/4/6	2F
F2.5-8-50-2F	2.5	8	50	3/4/6	2F
F3-8-50-2F	3	8	50	3/4/6	2F
F3-10-75-2F	3	10	75	3/4/6	2F
F3-12-100-2F	3	12	100	3/4/6	2F
F3.5-10-50-2F	3.5	10	50	4/6	2F
F4-10-50-2F	4	10	50	4/6	2F
F4-12-75-2F	4	12	75	4/6	2F
F4-15-100-2F	4	15	100	4/6	2F
F5-13-50-2F	5	13	50	5/6	2F
F5-20-75-2F	5	20	75	5/6	2F
F5-25-100-2F	5	25	100	5/6	2F
F6-15-50-2F	6	15	50	6	2F
F6-20-75-2F	6	20	75	6	2F
F6-25-100-2F	6	25	100	6	2F
F6-30-150-2F	6	30	150	6	2F
F8-20-60-2F	8	20	60	8	2F
F8-25-75-2F	8	25	75	8	2F
F8-35-100-2F	8	35	100	8	2F
F8-40-150-2F	8	40	150	8	2F
F10-25-75-2F	10	25	75	10	2F
F10-40-100-2F	10	40	100	10	2F
F10-45-150-2F	10	45	150	10	2F
F12-30-75-2F	12	30	75	12	2F
F12-45-100-2F	12	45	100	12	2F
F12-50-150-2F	12	50	150	12	2F
F12-60-200-2F	12	60	200	12	2F
F14-40-100-2F	14	40	100	14	2F
F14-50-150-2F	14	50	150	14	2F
F16-40-100-2F	16	40	100	16	2F
F16-55-150-2F	16	55	150	16	2F
F16-60-200-2F	16	60	200	16	2F
F18-40-100-2F	18	40	100	18	2F
F20-40-100-2F	20	40	100	20	2F
F20-50-150-2F	20	50	150	20	2F

4 FLUTE - BALL NOSE 45 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - BALL NOSE 45 HRC

4 FLUTE - BALL NOSE 55 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - BALL NOSE 55 HRC

4 FLUTE - BALL NOSE 63 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- 4 flutes allows for better work piece finish
- Nanocomposite PLATIT Coating (nACo Coating)
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - BALL NOSE 63 HRC

4 FLUTE - BALL NOSE 45, 55, 63 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
B1-2-50-4F	1	2	50	3/4/6	4F
B1.5-3-50-4F	1.5	3	50	3/4/6	4F
B2-4-50-4F	2	4	50	3/4/6	4F
B2.5-5-50-4F	2.5	5	50	3/4/6	4F
B3-6-50-4F	3	6	50	3/4/6	4F
B3-6-75-4F	3	6	75	3/4/6	4F
B3-6-100-4F	3	6	100	3/4/6	4F
B3.5-7-50-4F	3.5	7	50	4/6	4F
B4-8-50-4F	4	8	50	4/6	4F
B4-8-75-4F	4	8	75	4/6	4F
B4-8-100-4F	4	8	100	4/6	4F
B5-10-50-4F	5	10	50	5/6	4F
B5-10-75-4F	5	10	75	5/6	4F
B5-10-100-4F	5	10	100	5/6	4F
B6-12-50-4F	6	12	50	6	4F
B6-12-75-4F	6	12	75	6	4F
B6-12-100-4F	6	12	100	6	4F
B6-12-150-4F	6	12	150	6	4F
B8-16-60-4F	8	16	60	8	4F
B8-16-75-4F	8	16	75	8	4F
B8-16-100-4F	8	16	100	8	4F
B8-16-150-4F	8	16	150	8	4F
B10-20-75-4F	10	20	75	10	4F
B10-20-100-4F	10	20	100	10	4F
B10-20-150-4F	10	20	150	10	4F
B12-24-75-4F	12	24	75	12	4F
B12-24-100-4F	12	24	100	12	4F
B12-24-150-4F	12	24	150	12	4F
B14-28-100-4F	14	28	100	14	4F
B14-28-150-4F	14	28	150	14	4F
B16-32-100-4F	16	32	100	16	4F
B16-32-150-4F	16	32	150	16	4F
B18-36-100-4F	18	36	100	18	4F
B20-40-150-4F	20	40	150	20	4F
B20-50-150-4F	20	50	150	20	4F

2 FLUTE - BALL NOSE 45 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - BALL NOSE 45 HRC

2 FLUTE - BALL NOSE 55 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - BALL NOSE 55 HRC

2 FLUTE - BALL NOSE 63 HRC

- Designed for a mild steel, copper, plastic, wood, brass and aluminum
- Excellent Wear Resistance
- Designed for milling of radius bottom slots, fillets and special contours
- Application in high speed machining, wet and dry cutting condition.
- 2 flutes allows for better work piece finish
- Nanocomposite PLATIT Coating (nACo Coating)
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - BALL NOSE 63 HRC

2 FLUTE - BALL NOSE 45, 55, 63 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
B1-2-50-2F	1	2	50	3/4/6	2F
B1.5-3-50-2F	1.5	3	50	3/4/6	2F
B2-4-50-2F	2	4	50	3/4/6	2F
B2.5-5-50-2F	2.5	5	50	3/4/6	2F
B3-6-50-2F	3	6	50	3/4/6	2F
B3-6-75-2F	3	6	75	3/4/6	2F
B3-6-100-2F	3	6	100	3/4/6	2F
B3.5-7-50-2F	3.5	7	50	4/6	2F
B4-8-50-2F	4	8	50	4/6	2F
B4-8-75-2F	4	8	75	4/6	2F
B4-8-100-2F	4	8	100	4/6	2F
B5-10-50-2F	5	10	50	5/6	2F
B5-10-75-2F	5	10	75	5/6	2F
B5-10-100-2F	5	10	100	5/6	2F
B6-12-50-2F	6	12	50	6	2F
B6-12-75-2F	6	12	75	6	2F
B6-12-100-2F	6	12	100	6	2F
B6-12-150-2F	6	12	150	6	2F
B8-16-60-2F	8	16	60	8	2F
B8-16-75-2F	8	16	75	8	2F
B8-16-100-2F	8	16	100	8	2F
B8-16-150-2F	8	16	150	8	2F
B10-20-75-2F	10	20	75	10	2F
B10-20-100-2F	10	20	100	10	2F
B10-20-150-2F	10	20	150	10	2F
B12-24-75-2F	12	24	75	12	2F
B12-24-100-2F	12	24	100	12	2F
B12-24-150-2F	12	24	150	12	2F
B14-28-100-2F	14	28	100	14	2F
B14-28-150-2F	14	28	150	14	2F
B16-32-100-2F	16	32	100	16	2F
B16-32-150-2F	16	32	150	16	2F
B18-36-100-2F	18	36	100	18	2F
B20-40-150-2F	20	40	150	20	2F
B20-50-150-2F	20	50	150	20	2F

ROUGHING END MILL - 45HRC

- Desined for a Roughing purpose
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6
- Corner radius endmills also available

ROUGHING ENDMILL - 45HRC

ROUGHING ENDMILL - 55HRC

- Desined for a Roughing purpose
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6
- Corner radius endmills also available

ROUGHING ENDMILL - 55HRC

ROUGHING ENDMILL 45, 55 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F4-10-50-4F	4	10	50	4	4F
F6-15-50-4F	6	15	50	6	4F
F8-20-50-4F	8	20	50	8	4F
F10-25-75-4F	10	25	75	10	4F
F12-30-75-4F	12	30	75	12	4F
F14-40-100-4F	14	40	100	14	4F
F16-40-100-4F	16	40	100	16	4F
F18-40-100-4F	18	40	100	18	4F
F20-40-100-4F	20	40	100	20	4F

6 FLUTE FLAT ENDMILL - 55HRC

- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6
- Corner radius endmills also available

6 FLUTE ENDMILL - 55HRC

Item Number	Type of Endmill	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F6-15-50-4F	Flat	6	15	50	6	6F
F6-20-75-4F	Flat	6	20	75	6	6F
F6-25-100-4F	Flat	6	25	100	6	6F
F8-20-60-4F	Flat	8	20	60	8	6F
F8-25-75-4F	Flat	8	25	75	8	6F
F8-35-100-4F	Flat	8	35	100	8	6F
F10-25-75-4F	Flat	10	25	75	10	6F
F10-40-100-4F	Flat	10	40	100	10	6F
F12-30-75-4F	Flat	12	30	75	12	6F
F12-45-100-4F	Flat	12	45	100	12	6F
F12-60-200-4F	Flat	12	60	200	12	6F
F14-40-100-4F	Flat	14	40	100	14	6F
F16-40-100-4F	Flat	16	40	100	16	6F
F18-40-100-4F	Flat	18	40	100	18	6F

3 FLUTE - FLAT END - FOR ALUMINUM

- Speccially designed 3 fluted for aluminum
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- Polished uncoated endmill
- 3 flutes allows for better work piece finish for Aluminum
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

3 FLUTE - FLAT END - for Aluminum

2 FLUTE - FLAT END - FOR ALUMINUM

- Speccially designed 3 fluted for aluminum
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- Polished uncoated endmill
- 3 flutes allows for better work piece finish for Aluminum
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - FLAT END - FOR ALUMINUM

3 FLUTE - FLAT END - FOR ALUMINUM

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F1-3-50-3F-Alu	1	3	50	3/4/6	3F
F1.5-4-50-3F-Alu	1.5	4	50	3/4/6	3F
F2-6-50-3F-Alu	2	6	50	3/4/6	3F
F2.5-8-50-3F-Alu	2.5	8	50	3/4/6	3F
F3-8-50-3F-Alu	3	8	50	3/4/6	3F
F3-10-50-3F-Alu	3	10	50	3/4/6	3F
F3-12-100-3F-Alu	3	12	100	3/4/6	3F
F3.5-10-50-3F-Alu	3.5	10	50	4/6	3F
F4-10-50-3F-Alu	4	10	50	4/6	3F
F4-12-75-3F-Alu	4	12	75	4/6	3F
F4-15-100-3F-Alu	4	15	100	4/6	3F
F5-13-50-3F-Alu	5	13	50	5/6	3F
F5-20-75-3F-Alu	5	20	75	5/6	3F
F5-25-100-3F-Alu	5	25	100	5/6	3F
F6-15-50-3F-Alu	6	15	50	6	3F
F6-20-75-3F-Alu	6	20	75	6	3F
F6-25-100-3F-Alu	6	25	100	6	3F
F6-30-150-3F-Alu	6	30	150	6	3F
F8-20-60-3F-Alu	8	20	60	8	3F
F8-25-75-3F-Alu	8	25	75	8	3F
F8-35-100-3F-Alu	8	35	100	8	3F
F8-40-150-3F-Alu	8	40	150	8	3F
F10-25-75-3F-Alu	10	25	75	10	3F
F10-40-100-3F-Alu	10	40	100	10	3F
F10-45-150-3F-Alu	10	45	150	10	3F
F12-30-75-3F-Alu	12	30	75	12	3F
F12-45-100-3F-Alu	12	45	100	12	3F
F12-50-150-3F-Alu	12	50	150	12	3F
F14-40-100-3F-Alu	14	40	100	14	3F
F14-50-150-3F-Alu	14	50	150	14	3F
F16-40-100-3F-Alu	16	40	100	16	3F
F16-55-150-3F-Alu	16	55	150	16	3F
F18-40-100-3F-Alu	18	40	100	18	3F
F20-40-100-3F-Alu	20	40	100	20	3F
F20-50-150-3F-Alu	20	50	150	20	3F

2 FLUTE - FLAT END - FOR ALUMINUM

Item Number	Endmill Cutting Dia.	Flute Length	Over All Length	Shank Dia	Number of Flutes
F1-3-50-2F-Alu	1	3	50	3/4/6	2F
F1.5-4-50-2F-Alu	1.5	4	50	3/4/6	2F
F2-6-50-2F-Alu	2	6	50	3/4/6	2F
F2.5-8-50-2F-Alu	2.5	8	50	3/4/6	2F
F3-8-50-2F-Alu	3	8	50	3/4/6	2F
F3-10-50-2F-Alu	3	10	75	3/4/6	2F
F3-12-100-2F-Alu	3	12	100	3/4/6	2F
F3.5-10-50-2F-Alu	3.5	10	50	4/6	2F
F4-10-50-2F-Alu	4	10	50	4/6	2F
F4-12-75-2F-Alu	4	12	75	4/6	2F
F4-15-100-2F-Alu	4	15	100	4/6	2F
F5-13-50-2F-Alu	5	13	50	5/6	2F
F5-20-75-2F-Alu	5	20	75	5/6	2F
F5-25-100-2F-Alu	5	25	100	5/6	2F
F6-15-50-2F-Alu	6	15	50	6	2F
F6-20-75-2F-Alu	6	20	75	6	2F
F6-25-100-2F-Alu	6	25	100	6	2F
F6-30-150-2F-Alu	6	30	150	6	2F
F8-20-60-2F-Alu	8	20	60	8	2F
F8-25-75-2F-Alu	8	25	75	8	2F
F8-35-100-2F-Alu	8	35	100	8	2F
F8-40-150-2F-Alu	8	40	150	8	2F
F10-25-75-2F-Alu	10	25	75	10	2F
F10-40-100-2F-Alu	10	40	100	10	2F
F10-45-150-2F-Alu	10	45	150	10	2F
F12-30-75-2F-Alu	12	30	75	12	2F
F12-45-100-2F-Alu	12	45	100	12	2F
F12-50-150-2F-Alu	12	50	150	12	2F
F14-40-100-2F-Alu	14	40	100	14	2F
F14-50-150-2F-Alu	14	50	150	14	2F
F16-40-100-2F-Alu	16	40	100	16	2F
F16-55-150-2F-Alu	16	55	150	16	2F
F18-40-100-2F-Alu	18	40	100	18	2F
F20-40-100-2F-Alu	20	40	100	20	2F
F20-50-150-2F-Alu	20	50	150	20	2F

4 FLUTE - CORNER RADIUS END - 45HRC

- Desined for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - CORNER RADIUS END - 45HRC

4 FLUTE - CORNER RADIUS END - 55HRC

- Desined for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - CORNER RADIUS END - 55HRC

4 FLUTE - CORNER RADIUS END - 45, 55 HRC

Item Number	Endmill Cutting Dia.	Flute Length	Radius	Over All Length	Shank Dia	Number of Flutes
F1-3-50-4F	1	3	0.2/0.3/0.5/1	50	3/4/6	4F
F1.5-4-50-4F	1.5	4	0.2/0.3/0.5/1	50	3/4/6	4F
F2-6-50-4F	2	6	0.2/0.3/0.5/1	50	3/4/6	4F
F2.5-8-50-4F	2.5	8	0.2/0.3/0.5/1	50	3/4/6	4F
F3-8-50-4F	3	8	0.2/0.3/0.5/1	50	3/4/6	4F
F3-10-75-4F	3	10	0.2/0.3/0.5/1	75	3/4/6	4F
F3-12-100-4F	3	12	0.2/0.3/0.5/1	75	3/4/6	4F
F3.5-10-50-4F	3.5	10	0.2/0.3/0.5/1	50	4/6	4F
F4-10-50-4F	4	10	0.2/0.3/0.5/1	50	4/6	4F
F4-12-75-4F	4	20	0.2/0.3/0.5/1	75	4/6	4F
F4-15-100-4F	4	25	0.2/0.3/0.5/1	100	4/6	4F
F5-13-50-4F	5	13	0.2/0.3/0.5/1/1.5	50	5/6	4F
F5-20-75-4F	5	20	0.2/0.3/0.5/1/1.5	75	5/6	4F
F5-25-100-4F	5	25	0.2/0.3/0.5/1/1.5	100	5/6	4F
F6-15-50-4F	6	15	0.2/0.3/0.5/1/1.5	50	6	4F
F6-20-75-4F	6	20	0.2/0.3/0.5/1/1.5	75	6	4F
F6-25-100-4F	6	25	0.2/0.3/0.5/1/1.5	100	6	4F
F6-30-150-4F	6	30	0.2/0.3/0.5/1/1.5	150	6	4F
F8-20-60-4F	8	20	0.2/0.3/0.5/1/1.5/2/2.5	60	8	4F
F8-25-75-4F	8	25	0.2/0.3/0.5/1/1.5/2/2.5	75	8	4F
F8-35-100-4F	8	35	0.2/0.3/0.5/1/1.5/2/2.5	100	8	4F
F8-40-150-4F	8	40	0.2/0.3/0.5/1/1.5/2/2.5	150	8	4F
F10-25-75-4F	10	25	0.2/0.3/0.5/1/1.5/2/2.5	75	10	4F
F10-40-100-4F	10	40	0.2/0.3/0.5/1/1.5/2/2.5	100	10	4F
F10-45-150-4F	10	45	0.2/0.3/0.5/1/1.5/2/2.5	150	10	4F
F12-30-75-4F	12	30	0.2/0.3/0.5/1/1.5/2/2.5	75	12	4F
F12-45-100-4F	12	45	0.2/0.3/0.5/1/1.5/2/2.5	100	12	4F
F12-50-150-4F	12	50	0.2/0.3/0.5/1/1.5/2/2.5	150	12	4F
F12-60-200-4F	12	60	0.2/0.3/0.5/1/1.5/2/2.5	200	12	4F
F14-40-100-4F	14	40	0.2/0.3/0.5/1/1.5/2/2.5	100	14	4F
F14-50-150-4F	14	50	0.2/0.3/0.5/1/1.5/2/2.5	150	14	4F
F16-40-100-4F	16	40	0.2/0.3/0.5/1/1.5/2/2.5	100	16	4F
F16-55-150-4F	16	55	0.2/0.3/0.5/1/1.5/2/2.5	150	16	4F
F16-60-200-4F	16	60	0.2/0.3/0.5/1/1.5/2/2.5	200	16	4F
F18-40-100-4F	18	40	0.2/0.3/0.5/1/1.5/2/2.5	100	18	4F
F20-40-100-4F	20	40	0.2/0.3/0.5/1/1.5/2/2.5	100	20	4F
F20-50-150-4F	20	50	0.2/0.3/0.5/1/1.5/2/2.5	150	20	4F

4 FLUTE - LONG NECK FLAT END - 55HRC

- Desined for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

4 FLUTE - LONG NECK END - 55HRC

Item Number	Endmill Cutting Dia.	Flute Length	Long Neck Length	Over All Length	Shank Dia	Number of Flutes
F0.4-1-2LN-50-2F	0.4	1	2	50	3/4	2F
F0.5-1-3LN-50-2F	0.5	1	3	50	3/4	2F
F0.5-1-6LN-50-2F	0.5	1	6	50	3/4	2F
F0.6-1-3LN-50-2F	0.6	1	3	50	3/4	2F
F0.6-1-5LN-50-2F	0.6	1	5	50	3/4	2F
F0.8-1-3LN-50-2F	0.8	1	3	50	3/4	2F
F0.8-1-6LN-50-2F	0.8	1	6	50	3/4	2F
F1-3-4LN-50-4F	1	3	4	50	3/4/6	4F
F1-3-6LN-50-4F	1	3	6	50	3/4/6	4F
F1-3-8LN-50-4F	1	3	8	50	3/4/6	4F
F1-3-10LN-50-4F	1	3	10	50	3/4/6	4F
F1-3-12LN-50-4F	1	3	12	50	3/4/6	4F
F1-3-14LN-50-4F	1	3	14	50	3/4/6	4F
F1-3-16LN-50-4F	1	3	16	50	3/4/6	4F
F1-3-18LN-50-4F	1	3	18	50	3/4/6	4F
F1-3-20LN-50-4F	1	3	20	50	3/4/6	4F
F1-3-22LN-50-4F	1	3	22	50	3/4/6	4F
F1-3-25LN-50-4F	1	3	25	50	3/4/6	4F
F1.5-4-8LN-50-4F	1.5	4	8	50	3/4/6	4F
F1.5-4-10LN-50-4F	1.5	4	10	50	3/4/6	4F
F1.5-4-12LN-50-4F	1.5	4	12	50	3/4/6	4F
F1.5-4-14LN-50-4F	1.5	4	14	50	3/4/6	4F
F1.5-4-16LN-50-4F	1.5	4	16	50	3/4/6	4F
F1.5-4-18LN-50-4F	1.5	4	18	50	3/4/6	4F
F1.5-4-20LN-50-4F	1.5	4	20	50	3/4/6	4F
F1.5-4-22LN-50-4F	1.5	4	22	50	3/4/6	4F
F1.5-4-25LN-50-4F	1.5	4	25	50	3/4/6	4F
F2-6-10LN-50-4F	2	6	10	50	3/4/6	4F

4 FLUTE - LONG NECK END - 55HRC

Item Number	Endmill Cutting Dia.	Flute Length	Long Neck Length	Over All Length	Shank Dia	Number of Flutes
F2-6-12LN-50-4F	2	6	12	50	3/4/6	4F
F2-6-14LN-50-4F	2	6	14	50	3/4/6	4F
F2-6-16LN-50-4F	2	6	16	50	3/4/6	4F
F2-6-18LN-50-4F	2	6	18	50	3/4/6	4F
F2-6-20LN-50-4F	2	6	20	50	3/4/6	4F
F2-6-22LN-50-4F	2	6	22	50	3/4/6	4F
F2-6-25LN-50-4F	2	6	25	50	3/4/6	4F
F2.5-8-10LN-50-4F	2.5	8	10	50	3/4/6	4F
F2.5-8-12LN-50-4F	2.5	8	12	50	3/4/6	4F
F2.5-8-14LN-50-4F	2.5	8	14	50	3/4/6	4F
F2.5-8-16LN-50-4F	2.5	8	16	50	3/4/6	4F
F2.5-8-18LN-50-4F	2.5	8	18	50	3/4/6	4F
F2.5-8-20LN-50-4F	2.5	8	20	50	3/4/6	4F
F2.5-8-22LN-50-4F	2.5	8	22	50	3/4/6	4F
F2.5-8-25LN-50-4F	2.5	8	25	50	3/4/6	4F
F3-8-12LN-50-4F	3	8	12	50	3/4/6	4F
F3-8-14LN-50-4F	3	8	14	50	3/4/6	4F
F3-8-16LN-50-4F	3	8	16	50	3/4/6	4F
F3-8-18LN-50-4F	3	8	18	50	3/4/6	4F
F3-8-20LN-50-4F	3	8	20	50	3/4/6	4F
F3-8-22LN-50-4F	3	8	22	50	3/4/6	4F
F3-8-25LN-50-4F	3	8	25	50	3/4/6	4F
F3.5-10-14LN-50-4F	3.5	10	14	50	4/6	4F
F3.5-10-16LN-50-4F	3.5	10	16	50	4/6	4F
F3.5-10-18LN-50-4F	3.5	10	18	50	4/6	4F
F3.5-10-20LN-50-4F	3.5	10	20	50	4/6	4F
F3.5-10-25LN-50-4F	3.5	10	22	50	4/6	4F
F4-10-14LN-50-4F-6S	4	10	14	50	6	4F
F4-10-16LN-50-4F-6S	4	10	16	50	6	4F
F4-10-18LN-50-4F-6S	4	10	18	50	6	4F
F4-10-20LN-50-4F-6S	4	10	20	50	6	4F
F4-10-25LN-50-4F-6S	4	10	25	50	6	4F
F5-13-14LN-50-4F-6S	5	13	14	50	6	4F
F5-13-16LN-50-4F-6S	5	13	16	50	6	4F
F5-13-18LN-50-4F-6S	5	13	18	50	6	4F
F5-13-20LN-50-4F-6S	5	13	20	50	6	4F
F5-13-25LN-50-4F-6S	5	13	25	50	6	4F

2 FLUTE - LONG NECK BALL NOSE - 55HRC

- Desined for a Carbon Steel, Tool Steel, Alloy Steel and Stainless Steel
- Excellent Wear Resistance
- Application in high speed machining, wet and dry cutting condition.
- TiAlN coated
- 4 flutes allows for better work piece finish
- Mill dia. Tolerance(mm) - 0 to -0.030
- Shank dia. Tolerance - h6

2 FLUTE - LONG NECK BALL NOSE - 55HRC

Item Number	Endmill Cutting Dia.	Flute Length	Long Neck Length	Over All Length	Shank Dia	Number of Flutes
B0.5-1-4LN-50-2F	0.5	1	4	50	3/4	2F
B0.5-1-6LN-50-2F	0.5	1	6	50	3/4	2F
B0.5-1-8LN-50-2F	0.5	1	8	50	3/4	2F
B0.5-1-10LN-50-2F	0.5	1	10	50	3/4	2F
B1-2-4LN-50-2F	1	2	4	50	3/4/6	2F
B1-2-6LN-50-2F	1	2	6	50	3/4/6	2F
B1-2-8LN-50-2F	1	2	8	50	3/4/6	2F
B1-2-10LN-50-2F	1	2	10	50	3/4/6	2F
B1-2-12LN-50-2F	1	2	12	50	3/4/6	2F
B1-2-14LN-50-2F	1	2	14	50	3/4/6	2F
B1-2-16LN-50-2F	1	2	16	50	3/4/6	2F
B1-2-18LN-50-2F	1	2	18	50	3/4/6	2F
B1-2-20LN-50-2F	1	2	20	50	3/4/6	2F
B1-2-22LN-50-2F	1	2	22	50	3/4/6	2F
B1-2-25LN-50-2F	1	2	25	50	3/4/6	2F
B1.5-3-8LN-50-2F	1.5	3	8	50	3/4/6	2F
B1.5-3-10LN-50-2F	1.5	3	10	50	3/4/6	2F
B1.5-3-12LN-50-2F	1.5	3	12	50	3/4/6	2F
B1.5-3-14LN-50-2F	1.5	3	14	50	3/4/6	2F
B1.5-3-20LN-50-2F	1.5	3	20	50	3/4/6	2F
B1.5-3-22LN-50-2F	1.5	3	22	50	3/4/6	2F
B1.5-3-25LN-50-2F	1.5	3	25	50	3/4/6	2F
B2-4-10LN-50-2F	2	4	10	50	3/4/6	2F
B2-4-12LN-50-2F	2	4	12	50	3/4/6	2F
B2-4-14LN-50-2F	2	4	14	50	3/4/6	2F
B2-4-16LN-50-2F	2	4	16	50	3/4/6	2F
B2-4-18LN-50-2F	2	4	18	50	3/4/6	2F
B2-4-20LN-50-2F	2	4	20	50	3/4/6	2F

2 FLUTE - LONG NECK BALL NOSE - 55HRC

Item Number	Endmill Cutting Dia.	Flute Length	Long Neck Length	Over All Length	Shank Dia	Number of Flutes
B2-4-22LN-50-2F	2	4	22	50	3/4/6	2F
B2-4-25LN-50-2F	2	4	25	50	3/4/6	2F
B2.5-5-10LN-50-2F	2.5	5	10	50	3/4/6	2F
B2.5-5-12LN-50-2F	2.5	5	12	50	3/4/6	2F
B2.5-5-14LN-50-2F	2.5	5	14	50	3/4/6	2F
B2.5-5-16LN-50-2F	2.5	5	16	50	3/4/6	2F
B2.5-5-18LN-50-2F	2.5	5	18	50	3/4/6	2F
B2.5-5-20LN-50-2F	2.5	5	20	50	3/4/6	2F
B2.5-5-22LN-50-2F	2.5	5	22	50	3/4/6	2F
B2.5-5-25LN-50-2F	2.5	5	25	50	3/4/6	2F
B3-6-12LN-50-2F	3	6	12	50	3/4/6	2F
B3-6-14LN-50-2F	3	6	14	50	3/4/6	2F
B3-6-16LN-50-2F	3	6	16	50	3/4/6	2F
B3-6-18LN-50-2F	3	6	18	50	3/4/6	2F
B3-6-20LN-50-2F	3	6	20	50	3/4/6	2F
B3-6-22LN-50-2F	3	6	22	50	3/4/6	2F
B3-6-25LN-50-2F	3	6	25	50	3/4/6	2F
B3.5-7-12LN-50-2F	3.5	7	12	50	4/6	2F
B3.5-7-14LN-50-2F	3.5	7	14	50	4/6	2F
B3.5-7-16LN-50-2F	3.5	7	16	50	4/6	2F
B3.5-7-18LN-50-2F	3.5	7	18	50	4/6	2F
B3.5-7-20LN-50-2F	3.5	7	20	50	4/6	2F
B3.5-7-22LN-50-2F	3.5	7	22	50	4/6	2F
B3.5-7-25LN-50-2F	3.5	7	25	50	4/6	2F
B4-8-10LN-50-2F-6S	4	8	10	50	6	2F
B4-8-12LN-50-2F-6S	4	8	12	50	6	2F
B4-8-14LN-50-2F-6S	4	8	14	50	6	2F
B4-8-20LN-50-2F-6S	4	8	20	50	6	2F
B4-8-25LN-50-2F-6S	4	8	25	50	6	2F
B5-10-10LN-50-2F-6S	5	10	10	50	6	2F
B5-10-12LN-50-2F-6S	5	10	12	50	6	2F
B5-10-14LN-50-2F-6S	5	10	14	50	6	2F
B5-10-20LN-50-2F-6S	5	10	20	50	6	2F
B5-10-25LN-50-2F-6S	5	10	25	50	6	2F

CARBIDE ENDMILLS

CARBIDE DRILLS

SOLID CARBIDE DRILLS - 3D FLUTE-45HRC

- 3D Flute Lendgth
- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - 3D FLUTE-45HRC

SOLID CARBIDE DRILLS - 3D FLUTE-55HRC

- 3D Flute Lendgth
- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - 3D FLUTE-55HRC

SOLID CARBIDE DRILLS - 3D FLUTE - 45,55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD1.0-3.0-34	1	1	3	34
CD1.1-3.3-36	1.1	1.1	3.3	36
CD1.2-3.6-38	1.2	1.2	3.6	38
CD1.3-3.9-38	1.3	1.3	3.9	38
CD1.4-4.2-40	1.4	1.4	4.2	40
CD1.5-4.5-40	1.5	1.5	4.5	40
CD1.6-4.8-43	1.6	1.6	4.8	43
CD1.7-5.1-43	1.7	1.7	5.1	43
CD1.8-5.4-46	1.8	1.8	5.4	46
CD1.9-5.7-46	1.9	1.9	5.7	46
CD2.0-6.0-49	2	2	6	49
CD2.1-6.3-49	2.1	2.1	6.3	49
CD2.2-6.6-60	2.2	2.2	6.6	60
CD2.3-6.9-60	2.3	2.3	6.9	60
CD2.4-7.2-60	2.4	2.4	7.2	60
CD2.5-7.5-60	2.5	2.5	7.5	60
CD2.6-7.8-60	2.6	2.6	7.8	60
CD2.7-8.1-60	2.7	2.7	8.1	60
CD2.8-8.4-60	2.8	2.8	8.4	60
CD2.9-8.7-60	2.9	2.9	8.7	60
CD3.0-9.0-60	3	3	9	60
CD3.1-9.3-60	3.1	3.1	9.3	60
CD3.2-9.6-60	3.2	3.2	9.6	60
CD3.3-9.9-60	3.3	3.3	9.9	60
CD3.4-10.2-60	3.4	3.4	10.2	60
CD3.5-10.5-60	3.5	3.5	10.5	60
CD3.6-10.8-60	3.6	3.6	10.8	60
CD3.7-11.1-60	3.7	3.7	11.1	60
CD3.8-11.4-60	3.8	3.8	11.4	60
CD3.9-11.7-60	3.9	3.9	11.7	60
CD4.0-12.0-60	4	4	12	60
CD4.1-12.3-60	4.1	4.1	12.3	60
CD4.2-12.6-60	4.2	4.2	12.6	60
CD4.3-12.9-60	4.3	4.3	12.9	60
CD4.4-13.2-60	4.4	4.4	13.2	60
CD4.5-13.5-60	4.5	4.5	13.5	60
CD4.6-13.8-60	4.6	4.6	13.8	60

SOLID CARBIDE DRILLS - 3D FLUTE - 45, 55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD4.7-14.1-60	4.7	4.7	14.1	60
CD4.8-14.4-60	4.8	4.8	14.4	60
CD4.9-14.7-60	4.9	4.9	14.7	60
CD5.0-15.0-60	5	5	15	60
CD5.1-15.3-60	5.1	5.1	15.3	60
CD5.2-15.6-60	5.2	5.2	15.6	60
CD5.3-15.9-60	5.3	5.3	15.9	60
CD5.4-16.2-60	5.4	5.4	16.2	60
CD5.5-16.5-60	5.5	5.5	16.5	60
CD5.6-16.8-60	5.6	5.6	16.8	60
CD5.7-17.1-60	5.7	5.7	17.1	60
CD5.8-17.4-60	5.8	5.8	17.4	60
CD5.9-17.7-60	5.9	5.9	17.7	60
CD6.0-18.0-60	6	6	18	60
CD6.1-18.3-60	6.1	6.1	18.3	60
CD6.2-18.6-60	6.2	6.2	18.6	60
CD6.3-18.9-60	6.3	6.3	18.9	60
CD6.4-19.2-60	6.4	6.4	19.2	60
CD6.5-19.5-60	6.5	6.5	19.5	60
CD6.6-19.8-60	6.6	6.6	19.8	60
CD6.7-20.1-60	6.7	6.7	20.1	60
CD6.8-20.4-60	6.8	6.8	20.4	60
CD6.9-20.7-60	6.9	6.9	20.7	60
CD7.0-21.0-70	7	7	21	70
CD7.1-21.3-70	7.1	7.1	21.3	70
CD7.2-21.6-70	7.2	7.2	21.6	70
CD7.3-21.9-70	7.3	7.3	21.9	70
CD7.4-22.2-70	7.4	7.4	22.2	70
CD7.5-22.5-70	7.5	7.5	22.5	70
CD7.6-22.8-70	7.6	7.6	22.8	70
CD7.7-23.1-70	7.7	7.7	23.1	70
CD7.8-23.4-70	7.8	7.8	23.4	70
CD7.9-23.7-70	7.9	7.9	23.7	70
CD8.0-24.0-70	8	8	24	70
CD8.1-24.3-70	8.1	8.1	24.3	70
CD8.2-24.6-70	8.2	8.2	24.6	70
CD8.3-24.9-70	8.3	8.3	24.9	70

SOLID CARBIDE DRILLS - 3D FLUTE - 45,55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD8.4-25.2-70	8.4	8.4	25.2	70
CD8.5-25.5-70	8.5	8.5	25.5	70
CD8.6-25.8-70	8.6	8.6	25.8	70
CD8.7-26.1-70	8.7	8.7	26.1	70
CD8.8-26.4-70	8.8	8.8	26.4	70
CD8.9-26.7-70	8.9	8.9	26.7	70
CD9.0-27.0-100	9	9	27	100
CD9.1-27.3-100	9.1	9.1	27.3	100
CD9.2-27.6-100	9.2	9.2	27.6	100
CD9.3-27.9-100	9.3	9.3	27.9	100
CD9.4-28.2-100	9.4	9.4	28.2	100
CD9.5-28.5-100	9.5	9.5	28.5	100
CD9.6-28.8-100	9.6	9.6	28.8	100
CD9.7-29.1-100	9.7	9.7	29.1	100
CD9.8-29.4-100	9.8	9.8	29.4	100
CD9.9-29.7-100	9.9	9.9	29.7	100
CD10.0-30.0-100	10	10	30	100
CD10.1-30.3-100	10.1	10.1	30.3	100
CD10.2-30.6-100	10.2	10.2	30.6	100
CD10.3-30.9-100	10.3	10.3	30.9	100
CD10.4-31.2-100	10.4	10.4	31.2	100
CD10.5-31.5-100	10.5	10.5	31.5	100
CD10.6-31.8-100	10.6	10.6	31.8	100
CD10.7-32.1-100	10.7	10.7	32.1	100
CD10.8-32.4-100	10.8	10.8	32.4	100
CD10.9-32.7-100	10.9	10.9	32.7	100
CD11.0-33.0-100	11	11	33	100
CD11.5-34.5-100	11.5	11.5	34.5	100
CD12.0-36.0-120	12	12	36	120

SOLID CARBIDE DRILLS - 5D FLUTE-45HRC

- 5D Flute Length
- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - 5D FLUTE-45HRC

SOLID CARBIDE DRILLS - 5D FLUTE-55HRC

- 5D Flute Length
- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - 5D FLUTE-55HRC

SOLID CARBIDE DRILLS - 5D FLUTE - 45,55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD1.0-5-34	1	1	5	34
CD1.1-5.5-36	1.1	1.1	5.5	36
CD1.2-6-38	1.2	1.2	6	38
CD1.3-6.5-38	1.3	1.3	6.5	38
CD1.4-7-40	1.4	1.4	7	40
CD1.5-7.5-40	1.5	1.5	7.5	40
CD1.6-8-43	1.6	1.6	8	43
CD1.7-8.5-43	1.7	1.7	8.5	43
CD1.8-9-46	1.8	1.8	9	46
CD1.9-9.5-46	1.9	1.9	9.5	46
CD2.0-10-49	2	2	10	49
CD2.1-10.5-60	2.1	2.1	10.5	49
CD2.2-11-60	2.2	2.2	11	60
CD2.3-11.5-60	2.3	2.3	11.5	60
CD2.4-12-60	2.4	2.4	12	60
CD2.5-12.5-60	2.5	2.5	12.5	60
CD2.6-13-60	2.6	2.6	13	60
CD2.7-13.5-60	2.7	2.7	13.5	60
CD2.8-14-60	2.8	2.8	14	60
CD2.9-14.5-60	2.9	2.9	14.5	60
CD3.0-15-60	3	3	15	60
CD3.1-15.5-60	3.1	3.1	15.5	60
CD3.2-16-60	3.2	3.2	16	60
CD3.3-16.5-60	3.3	3.3	16.5	60
CD3.4-17-60	3.4	3.4	17	60
CD3.5-17.5-60	3.5	3.5	17.5	60
CD3.6-18-60	3.6	3.6	18	60
CD3.7-18.5-60	3.7	3.7	18.5	60
CD3.8-19-60	3.8	3.8	19	60
CD3.9-19.5-60	3.9	3.9	19.5	60
CD4.0-20-60	4	4	20	60
CD4.1-20.5-60	4.1	4.1	20.5	60
CD4.2-21-60	4.2	4.2	21	60
CD4.3-21.5-60	4.3	4.3	21.5	60
CD4.4-22-60	4.4	4.4	22	60
CD4.5-22.5-60	4.5	4.5	22.5	60
CD4.6-23-60	4.6	4.6	23	60

SOLID CARBIDE DRILLS - 5D FLUTE - 45,55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD4.7-23.5-60	4.7	4.7	23.5	60
CD4.8-24-60	4.8	4.8	24	60
CD4.9-24.5-60	4.9	4.9	24.5	60
CD5.0-25-60	5	5	25	60
CD5.1-25.5-60	5.1	5.1	25.5	60
CD5.2-26-60	5.2	5.2	26	60
CD5.3-26.5-60	5.3	5.3	26.5	60
CD5.4-27-60	5.4	5.4	27	60
CD5.5-27.5-60	5.5	5.5	27.5	60
CD5.6-28-60	5.6	5.6	28	60
CD5.7-28.5-60	5.7	5.7	28.5	60
CD5.8-29-60	5.8	5.8	29	60
CD5.9-29.5-60	5.9	5.9	29.5	60
CD6.0-30-60	6	6	30	60
CD6.1-30.5-60	6.1	6.1	30.5	60
CD6.2-31-60	6.2	6.2	31	60
CD6.3-31.5-60	6.3	6.3	31.5	60
CD6.4-32-60	6.4	6.4	32	60
CD6.5-32.5-60	6.5	6.5	32.5	60
CD6.6-33-60	6.6	6.6	33	60
CD6.7-33.5-60	6.7	6.7	33.5	60
CD6.8-34-60	6.8	6.8	34	60
CD6.9-34.5-60	6.9	6.9	34.5	60
CD7.0-35-70	7	7	35	70
CD7.1-35.5-70	7.1	7.1	35.5	70
CD7.2-36-70	7.2	7.2	36	70
CD7.3-36.5-70	7.3	7.3	36.5	70
CD7.4-37-70	7.4	7.4	37	70
CD7.5-37.5-70	7.5	7.5	37.5	70
CD7.6-38-70	7.6	7.6	38	70
CD7.7-38.5-70	7.7	7.7	38.5	70
CD7.8-39-70	7.8	7.8	39	70
CD7.9-39.5-70	7.9	7.9	39.5	70
CD8.0-40-70	8	8	40	70
CD8.1-40.5-70	8.1	8.1	40.5	70
CD8.2-41-70	8.2	8.2	41	70
CD8.3-41.5-70	8.3	8.3	41.5	70

SOLID CARBIDE DRILLS - 5D FLUTE - 45,55 HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD8.4-42-70	8.4	8.4	42	70
CD8.5-42.5-70	8.5	8.5	42.5	70
CD8.6-43-70	8.6	8.6	43	70
CD8.7-43.5-70	8.7	8.7	43.5	70
CD8.8-44-70	8.8	8.8	44	70
CD8.9-44.5-70	8.9	8.9	44.5	70
CD9.0-45-100	9	9	45	100
CD9.1-45.5-100	9.1	9.1	45.5	100
CD9.2-46-100	9.2	9.2	46	100
CD9.3-46.5-100	9.3	9.3	46.5	100
CD9.4-47-100	9.4	9.4	47	100
CD9.5-47.5-100	9.5	9.5	47.5	100
CD9.6-48-100	9.6	9.6	48	100
CD9.7-48.5-100	9.7	9.7	48.5	100
CD9.8-49-100	9.8	9.8	49	100
CD9.9-49.5-100	9.9	9.9	49.5	100
CD10-50-100	10	10	50	100
CD10.1-50.5-100	10.1	10.1	50.5	100
CD10.2-51-100	10.2	10.2	51	100
CD10.3-51.5-100	10.3	10.3	51.5	100
CD10.4-52-100	10.4	10.4	52	100
CD10.5-52.5-100	10.5	10.5	52.5	100
CD10.6-53-100	10.6	10.6	53	100
CD10.7-53.5-100	10.7	10.7	53.5	100
CD10.8-54-100	10.8	10.8	54	100
CD10.9-54.5-100	10.9	10.9	54.5	100
CD11-55-100	11	11	55	100
CD11.5-57.5-100	11.5	11.5	57.5	100
CD12-60-120	12	12	60	120

SOLID CARBIDE DRILLS - EXTRA LONG FLUTE-45HRC

- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - EXTRA LONG FLUTE-45HRC

SOLID CARBIDE DRILLS - EXTRA LONG FLUTE-55HRC

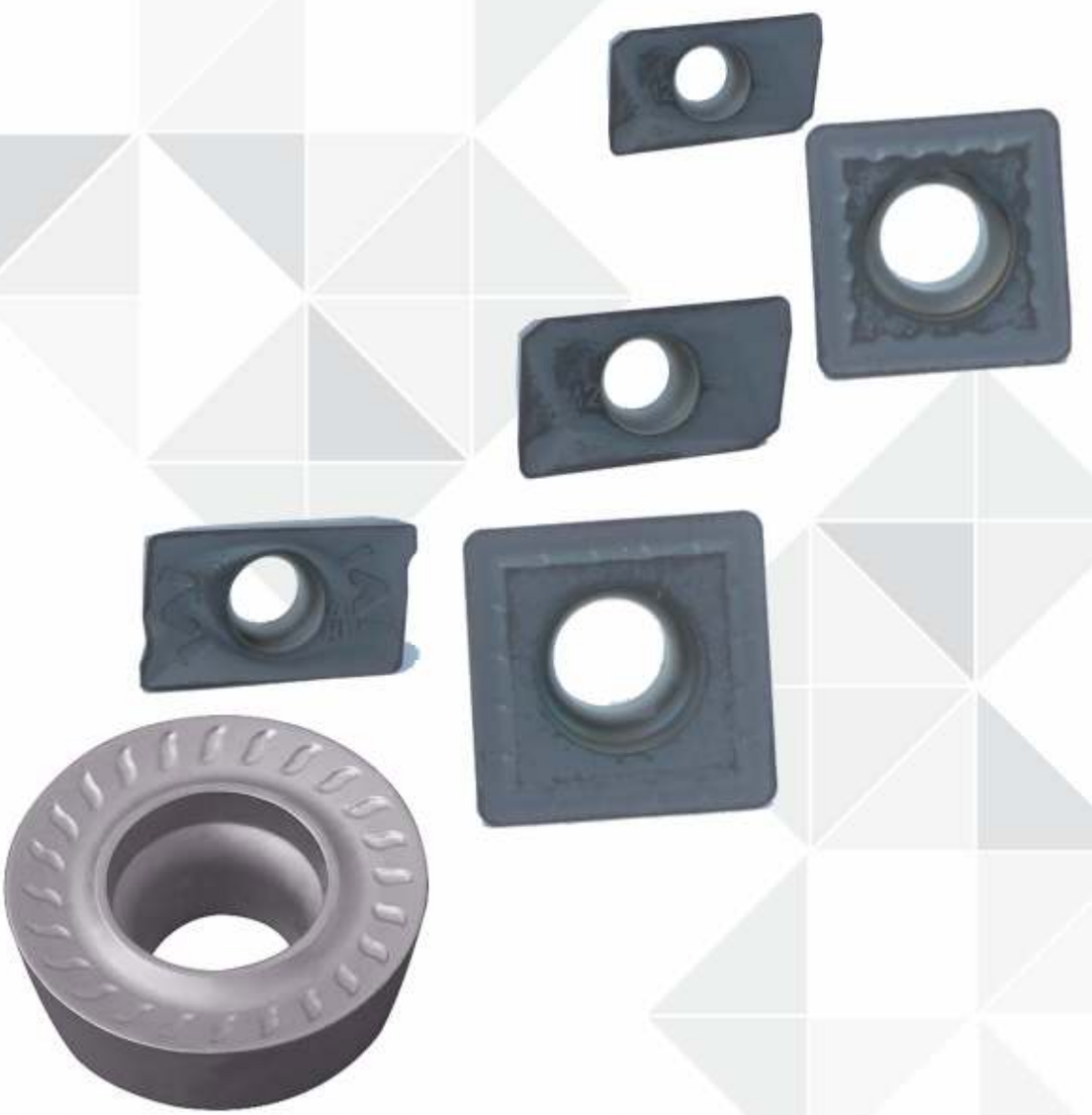
- Micro Grain Carbide
- TiAlN Coated

SOLID CARBIDE DRILLS - EXTRA LONG FLUTE-55HRC

SOLID CARBIDE DRILLS - EXTRA LONG FLUTE-55HRC

Item Number	Diameter (mm)	Shank Dia	Flutes length	Total length
CD1.0-12-34	1	1	12	34
CD1.5-18-40	1.5	1.5	18	40
CD2.0-24-49	2	2	24	49
CD2.5-30-60	2.5	2.5	30	60
CD3.0-33-60	3	3	33	60
CD3.5-39-70	3.5	3.5	39	70
CD4.0-43-75	4	4	43	75
CD4.5-47-80	4.5	4.5	47	80
CD5.0-52-86	5	5	52	86
CD5.5-57-93	5.5	5.5	57	93
CD6.0-57-93	6	6	57	93
CD6.5-63-100	6.5	6.5	63	100
CD7.0-69-109	7	7	69	109
CD7.5-69-109	7.5	7.5	69	109
CD8.0-75-117	8	8	75	117
CD8.5-75-117	8.5	8.5	75	117
CD9.0-81-125	9	9	81	125
CD9.5-81-125	9.5	9.5	81	125
CD10.0-87-133	10	10	87	133
CD10.5-87-133	10.5	10.5	87	133
CD11.0-94-142	11	11	94	142
CD11.5-94-142	11.5	11.5	94	142
CD12.0-101-151	12	12	101	151

MILLING & DRILLING INSERT



PVD GRADES

		SWISS UT	KENNAMETAL	MITSUBISHI	TaeguTec	SANDVIK Coromant	Tungaloy	ISCAR
P	Finish	Sc110						IC 907
	Medium	SC330	KC715M	VP15TF	Tt8020 // TT9030	GC 1015//GC1025		IC 908
	Semi Rough	SC330	KC522M	VP30RT	TT8020 // TT9030	GC 1015//GC1025	Gh330/ /AH330	IC 908
	Rough							
M	Finish	SC110	KC715M	VP15TF	TT8020 // TT9030	GC 1025//GC1030	GH330	IC 907
	Medium	SC330	KC522M	VP20RT	TT8030	GC 1025//GC1030	AH120	IC 908
K	Medium	SC110	KC510M	VP15TF		GC 1010//GC1020	AH110	IC 907
	Rough	SC330	KC520M	VP20RT	TT6030	GC1020	AH120	IC 908
S	Light	SC110	KC510M	VP15TF	TT6030	GC1025	AH120	IC 907
	Medium	SC330	KC522M	VP15TF		GC1025		IC 908
	Heavy							

BASE INFORMATION	STEEL							
	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc
DESCRIPTION ISO	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max
APKT1003PDTR -PM-SC330	0.11	0.18	130	190	0.5	9	0.11	0.21
APKT100308PDTR-PM-SC330	0.11	0.18	130	190	0.5	9	0.11	0.21
APKT160408PDTR-PM-SC330	0.2	0.35	130	190	0.5	15	0.22	0.35
APMT1135PDTR-PF-SC330	0.12	0.2	130	190	0.5	10	0.12	0.2
APMT1135PDTR-PM-SC330	0.16	0.24	130	190	0.5	10	0.16	0.24
APMT1604PDTR- PM-SC330	0.2	0.3	130	190	0.5	15	0.2	0.3
AOMT123608PDTR-PM-SC330	0.11	0.18	130	190	0.5	11	0.11	0.18
TPKN1603PDTR-SC330	0.16	0.25	130	190	0.5	12		
TPKN2204PDTR-SC330	0.18	0.3	130	190	0.5	18		
TPKR1603PDTR-SC330	0.12	0.19	130	190	0.5	12	0.13	0.19
TPKR2204PDTR-SC330	0.16	0.25	130	190	0.5	18	0.16	0.25
RDMT10T3M0-PM- Sc330	0.15	0.44	130	190	0.5	2.5	0.15	0.5
RDMT1204M0-PM-SC330	0.21	0.51	130	190	0.5	3	0.21	0.58
RPMT08T2M0-PM-SC330	0.14	0.38	130	190	0.5	2.5	0.14	0.38
RPMT10T3M0-PM-SC330	0.15	0.44	130	190	0.5	2.5	0.15	0.5
RPMT1204M0-PM-SC330	0.21	0.51	130	190	0.5	3	0.21	0.58
RPMW1204M0-SC330	0.23	0.52	130	190	0.3	2		
SPKN1203PDTR-SC330	0.15	0.3	130	190	0.5	7		
SPKR1203 PDTR-SC330	0.15	0.3	130	190	0.5	7	0.15	0.3
SEKT1204AFTN-PM-SC330	0.15	0.32	130	190	0.5	6	0.15	0.32
SEKT12T3AGSN-PM-SC330	0.15	0.32	130	190	0.5	6	0.15	0.32
SEKN1203AFTN-SC330	0.15	0.32	130	190	0.5	7		
SEKN1204AFTN-SC330	0.15	0.32	130	190	0.5	7		
SEKR1203AFTN-SC330	0.15	0.32	130	190	0.5	7	0.15	0.32
SEKR1204AFTN-SC330	0.15	0.32	130	190	0.5	7	0.15	0.32
OFMT05T305TN-SC330	0.18	0.35	130	190	0.5	3.5	0.18	0.35
WCMX030208-PM-SC330	0.04	0.09	100	170				
WCMX040208-PM-SC330	0.04	0.09	100	170			0.04	0.09
.WCMX050308-PM-SC330	0.05	0.1	100	170			0.04	0.09
WCMX06T308-PM-SC330	0.06	0.11	100	170			0.05	0.1
WCMX080412-PM-SC330	0.07	0.14	100	170			0.06	0.11
SPMG050204 -PM-SC330	0.04	0.09	100	170			0.06	0.11
SPMG060204-PM-SC330	0.04	0.09	100	170			0.04	0.09
SPMG07T308-PM-SC330	0.05	0.1	100	170			0.04	0.09
SPMG090408-PM-SC330	0.06	0.11	100	170			0.05	0.1
SPMG0111408-PM-SC330	0.07	0.14	100	170			0.06	0.11
SPMG140512-PM-SC330	-	-	-	-			0.06	0.11

STAINLESS STEEL					CAST IRON					
DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	
Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	
190	250	0.5	9	0.13	0.26	150	220	0.5	9	
190	250	0.5	9	0.13	0.26	150	220	0.5	9	
190	250	0.5	15	0.18	0.32	150	220	0.5	15	
190	250	0.5	10	0.13	0.22	150	220	0.5	10	
190	250	0.5	10	0.16	0.24	150	220	0.5	10	
190	250	0.5	15	0.2	0.3	150	220	0.5	15	
190	250	0.5	11	0.13	0.22	150	220	0.5	11	
				0.15	0.27	150	220	0.5	12	
				0.18	0.32	150	220	0.5	18	
140	200	0.5	12	0.14	0.27	150	220	0.5	12	
140	200	0.5	18	0.16	0.27	150	220	0.5	18	
190	250	0.5	2.5	0.18	0.64	150	220	0.5	2.5	
190	250	0.5	3	0.25	0.74	150	220	0.5	3	
190	250	0.5	2.5	0.16	0.45	150	220	0.5	2.5	
190	250	0.5	2.5	0.18	0.64	150	220	0.5	2.5	
190	250	0.5	3	0.25	0.74	150	220	0.5	3	
				0.2	0.8	170	250	0.3	3	
				0.18	0.43	150	220	0.5	7	
150	210	0.5	7	0.18	0.43	150	220	0.5	7	
190	250	0.5	6	0.18	0.46	150	220	0.5	6	
190	250	0.5	6	0.18	0.46	150	220	0.5	6	
				0.18	0.46	150	220	0.5	7	
				0.18	0.46	150	220	0.5	7	
190	250	0.5	7	0.18	0.46	150	220	0.5	7	
190	250	0.5	7	0.18	0.46	150	220	0.5	7	
190	250	0.5	3.5	0.22	0.51	150	220	0.5	3.5	
170	230			0.07	0.1	150	210			
170	230			0.07	0.1	150	210			
170	230			0.1	0.11	150	210			
170	230			0.1	0.12	150	210			
170	230			0.1	0.15	150	210			
170	230			0.07	0.1	150	210			
170	230			0.07	0.1	150	210			
170	230			0.1	0.11	150	210			
170	230			0.1	0.12	150	210			
170	230			0.1	0.15	150	210			

MILLING INSERTS DESIGNATION SYSTEM- ISO

1. INSERT SHAPE

			
A	B	C	D
			
E	H	K	L
			
O	P	R	S
		SPeCIaL	
T	W	X	

2. CLEARANCE ANGLE

5°	7°	15°	20°
b	C	D	e
25°	30°	0°	11°
f	g	n	P

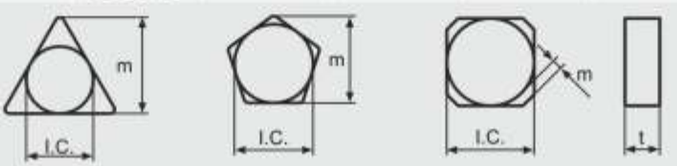
4. Cross Section

		
a	f	g
		
M	n	R
 C'Sink40°– 60°	 C'Sink40°– 60°	SPeCIaL
T	W	X

S	P	K	n
1	2	3	4

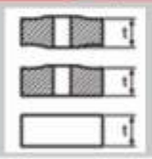
3. TOLERANCEOLERANCE (MM)

	T			I.C. Size (mm)					
	m	t	I.C.	6.35	9.525	12.7	15.875	19.05	25.4
A	± ± 0.005	± ± 0.025	± ± 0.025	•	•	•	•	•	•
C	± ± 0.013	± ± 0.025	± ± 0.025	•	•	•	•	•	•
E	± ± 0.025	± ± 0.025	± ± 0.025	•	•	•	•	•	•
F	± ± 0.005	± ± 0.025	± ± 0.013	•	•	•	•	•	•
G	± ± 0.025	± ± 0.13	± ± 0.025	•	•	•	•	•	•
H	± ± 0.013	± ± 0.025	± ± 0.013	•	•	•	•	•	•
K	± ± 0.013	± ± 0.025	± ± 0.05	•	•				
			± ± 0.08			•			
			± ± 0.10				•	•	
			± ± 0.13						•
M	± ± 0.08	± ± 0.13	± ± 0.05	•	•				
	± ± 0.13		± ± 0.08			•			
	± ± 0.15		± ± 0.10				•	•	
	± ± 0.18		± ± 0.13						•



MILLING INSERTS DESIGNATION SYSTEM- ISO

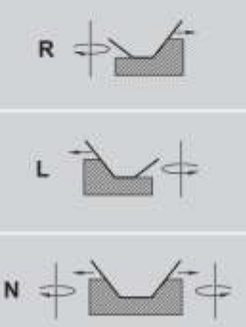
6. Thickness (mm)



t	mm
02	2.38
03	3.18
T3	3.97
04	4.76
06	6.35
07	7.94
09	9.52

8. Edge Preparation

9. Cutting Direction



10. Chip Breaker

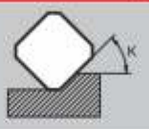
For Application

12	03	ED	T	R	CHIP BREAKER
5	6	7	8	9	10

5. Cutting Edge Length (mm)

I.C.	C	S	R	T	H	O
L						
5.56				09		
6.35	06	06	06	11		
7.94	08			13		
9.525	09	09	09	16		
12.7	12	12	12	22	05	05
15.875	16	15	15	27	09	
17.94						07
19.05	19	19	19	33	10	
25.4	25	25	25			

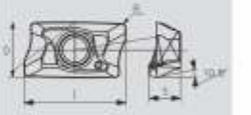
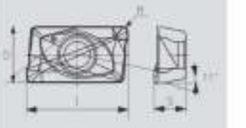
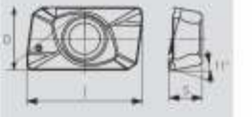
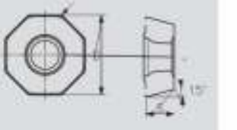
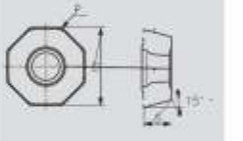
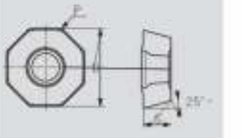
7. Lead Angle & Relief Angle of Minor Cutting Edge



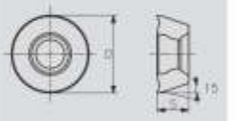
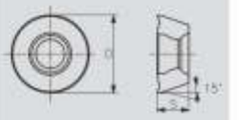
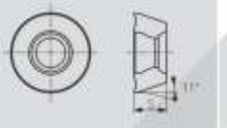
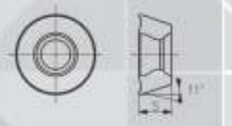
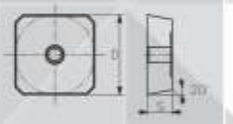
Lead Angle	
A	45°
D	60°
E	75°
F	85°
P	90°
Z	SPECIAL

Relief Angle of minor	
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
Z	SPECIAL

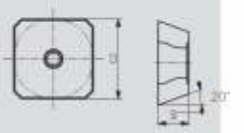
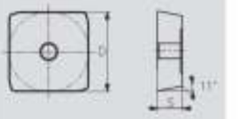
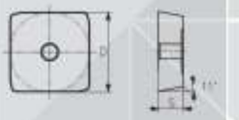
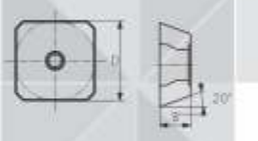
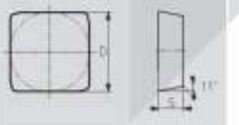
MILLING INSERTS

Insert Shape	Designation	Dimensions					Geometry & Related Cutter
		I	D	S	φ	R	
	AOMT 123608PDTR	12	6.6	3.6	11	0.8	
	APKT 1003PDTR	10.5	6.7	3.5	11	0.5	
	APKT 100308PDTR	10.5	6.7	3.5	11	0.8	
	APKT 1604PDTR	16.3	9.5	5.3	11	0.8	
	APKT 160416PDTR	16.3	9.5	5.3	11	1.6	
	APMT 1135PDTR	11.18	6.2	3.5	11	0.4	
	APMT 113508PDTR	11.18	6.2	3.5	11	0.8	
	APMT 1604PDTR	17.19	9.5	5.5	11	0.8	
	ODMT 060508	-	15.88	5.56	15	-	
	ODMW 060508	-	15.88	5.56	15	-	
	OFMT 05T305TN	-	12.7	4	25	-	

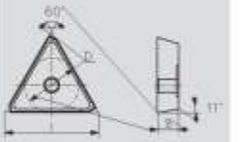
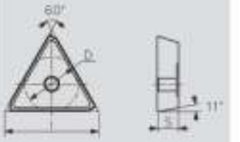
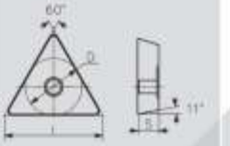
MILLING INSERTS

Insert Shape	Designation	Dimensions					Geometry & Related Cutter
		l	D	S	φ	R	
	RDMT 0602M0	-	6	3.18	15	-	
	RDMT 0802M0	-	8	3.97	15	-	
	RDMT 0803M0	-	8		15	-	
	RDMT 10T3M0	-	10		15	-	
	RDMT 1204M0	-	12		15	-	
	RDMW 0602M0	-	6	3.97	15	-	
	RDMW 0802M0	-	8		15	-	
	RDMW 10T3M0	-	10		15	-	
	RDMW 1204M0	-	12	2.78	15	-	
	RPMT 08T2M0	-	8	3.97	11	-	
	RPMT 10T3M0	-	10		11	-	
	RPMT 1204M0	-	12	3.97	11	-	
	RPMW 10T3M0	-	10		11	-	
	RPMW 1204M0	-	12	3.18	11	-	
	SEKN 1203AFTN	-	12.7		20	-	
	SEKN 1504AFTN	-	15.88		20	-	
	SEKR 1203AFTN	-	12.7	3.18	20	-	

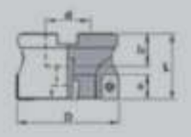
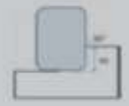
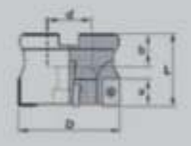
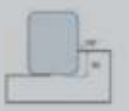
MILLING INSERTS

Insert Shape	Designation	Dimensions					Geometry & Related Cutter
		l	D	S	φ	R	
	SEKT 12T3AGSN	-	13.4	4	20	-	
	SEKT 1204AFTN	-	12.7	4.76	20	-	
	SEMT 1204AFTN	-	12.7	5.06	20	-	
	SEKT 13T3AGSN	-	13.4	4	20	-	
	SPKN 1203EDTR	-	12.7	3.18	11	-	
	SPKN 1504EDTR	-	15.88	4.76	11	-	
	SPKR 1203EDTR	-	12.7	3.18	11	-	
	SPMT 12T308	-	13.29	3.97	11	-	
	SPUN 120308	-	12.7	3.18	11	-	

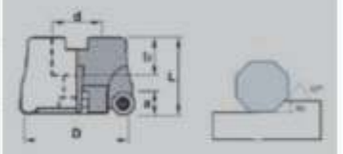
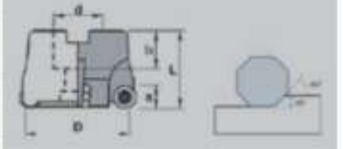
MILLING INSERTS

Insert Shape	Designation	Dimensions					Geometry & Related Cutter
		I	D	S	φ	R	
	TPKN 1603PDTR	16.4	9.525	3.18	11	-	
	TPKN 2204PDTR	22.1	12.7	4.76	11	-	
	TPKR 1603PDTR	16.4	9.525	3.18	11	-	
	TPKR 2204PDTR	16.4	9.525	3.18	11	-	
	TPUN 160308	16.4	9.525	3.18	11	-	

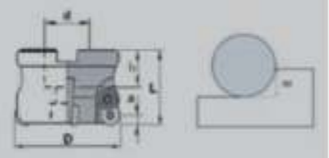
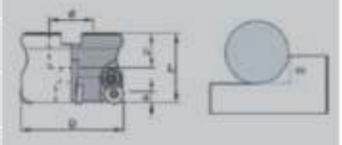
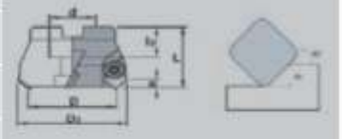
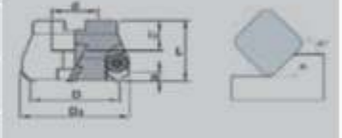
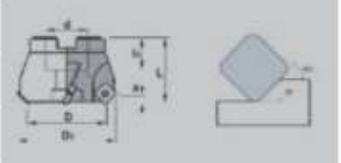
MILLING CUTTERS

Cutter Shape	Designation	Dimensions D2	D	d	L	Z	AP	Geometry & Related Cutter
	YBP9010-D040/6		40	16	40	6	9	 
	YBP9010-D050/7		50	22	40	7	9	
	YBP9010-D063/8		63	22	40	8	9	
	YBP9010-D080/10		80	27	50	10	9	
	YBP9016-D040/4		40	16	40	4	15	 
	YBP9016-D050/5		50	22	40	5	15	
	YBP9016-D063/6		63	22	40	6	15	
	YBP9016-D080/7		80	27	50	7	15	
	YBP9016-D100/8		100	32	50	8	15	
	YBP9016-D125/9		125	40	63	9	15	
	YBP9016-D160/10		160	40	63	10	15	
	YBP9011-D010/1		10	16	100	1	9	 
	YBP9011-D012/1		12	16	100	1	9	
	YBP9011-D016/2		16	16	120	2	9	
	YBP9011-D020/3		20	20	120	3	9	
	YBP9011-D016/2		16	16	150	2	9	
	YBP9011-D020/2		20	20	150	2	9	
	YBP9011-D025/4		25	25	150	4	9	
	YBP9011-D025/4		25	25	200	4	9	
	YBP9011-D032/5		32	25	150	5	9	
	YBP9011-D032/4		32	25	200	4	9	
	YBO9012-D040/6		40	22	40	6	10	 
	YBO9012-D050/7		50	22	40	7		

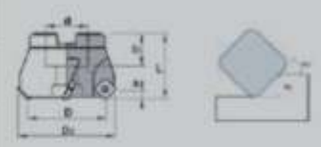
MILLING CUTTERS

Cutter Shape	Designation	Dimensions D2	D	d	L	Z	AP	Geometry & Related Cutter
	YBD4206-D040/4	-	40	16	40	4	5	
	YBD4206-D050/4	-	50	22	40	4	5	
	YBD4206-D063/5	-	63	27	50	5	5	
	YBD4206-D080/6	-	80	32	50	6	5	
	YBD4206-D100/7	-	100	40	50	7	5	
	YBD4206-D125/7	-	125	40	63	7	5	
	YBF4305-D032/3	-	32	16	40	3	3	
	YBF4305-D040/3	-	40	16	40	3	3	
	YBF4305-D050/4	-	50	22	40	4	3	
	YBF4305-D063/5	-	63	22	40	5	3	
	YBF4305-D080/6	-	80	27	50	6	3	
	YBF4305-D100/7	-	100	32	50	7	3	
	YBF4305-D125/8	-	125	40	63	8	3	
	YBDR06-D016/2	-	16	16	150	2	3	
	YBDR06-D020/3	-	20	20	180	3	3	
	YBDR06-D025/3	-	25	25	180	3	3	
	YBDR08-D020/2	-	20	20	180	2	5	
	YBDR08-D025/3	-	25	25	180	3	5	
	YBDR08-D032/3	-	32	32	180	3	5	
	YBDR10-D020/2	-	20	20	180	2	5	
	YBDR10-D025/3	-	25	25	180	3	5	
	YBDR10-D032/3	-	32	32	180	3		

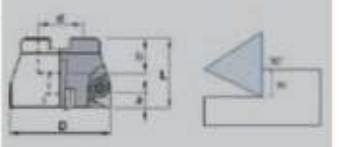
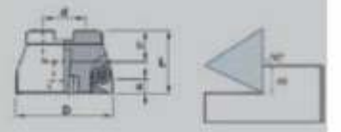
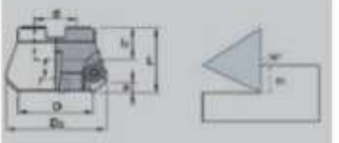
MILLING CUTTERS

Cutter Shape	Designation	Dimensions D2	D	d	L	Z	AP	Geometry & Related Cutter
	YBDR12-D040/4	-	40	16	40	4	6	
	YBDR12-D050/4	-	50	22	50	4	6	
	YBDR12-D063/5	-	63	27	50	5	6	
	YBDR12-D080/6	-	80	32	50	6	6	
	YBDR12-D100/7	-	100	40	50	7	6	
	YBPR12-D040/3	-	40	16	40	3	6	
	YBPR12-D050/4	-	50	22	40	4	6	
	YBPR12-D063/5	-	63	27	50	5	6	
	YBPR12-D080/6	-	80	32	50	6	6	
	YBPR12-D100/7	-	100	40	50	7	6	
	YBPR12-D125/7	-	125	40	63	7	6	
	YBE4512-D63/5	76	63	22	48	5	6	
	YBE4512-D80/6	93	80	27	50	6	6	
	YBE4512-D100/6	113	100	32	50	6	6	
	YBE4512-D125/7	138	125	40	63	7	6	
	YBE4515-D100/8	118	100	32	50	9	8	
	YBE4515-D125/8	143	125	40	63	9	8	
	YBE4515-D160/10	178	160	40	63	9	10	
	YBE4515-D200/12	218	200	60	63	9	12	
	YBE4512-D040/3	53	40	16	40	3	6	
	YBE4512-D050/4	63	50	22	48	4	6	
	YBE4512-D063/5	76	63	22	48	5	6	
	YBE4512-D080/6	93	80	27	50	6	6	
	YBE4512-D100/6	113	100	32	50	6	6	
	YBE4512-D125/7	138	125	40	63	7	6	
	YBE4512-D160/8	173	160	40	63	8	6	

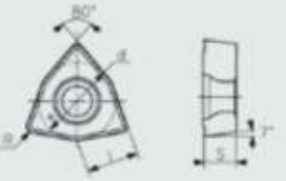
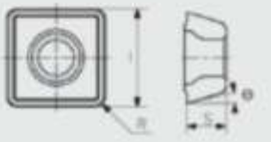
MILLING CUTTERS

Cutter Shape	Designation	Dimensions D2	D	d	L	Z	AP	Geometry & Related Cutter
	YBE4512-D040/3	53	40	16	40	3	6	
	YBE4512-D050/4	63	50	22	48	4	6	
	YBE4512-D063/5	76	63	22	48	5	6	
	YBE4512-D080/6	93	80	27	50	6	6	
	YBE4512-D100/6	113	100	32	50	6	6	
	YBE4512-D125/7	138	125	40	63	7	6	
	YBE4512-D160/8	173	160	40	63	8	6	
	YBP7512-D63/4	69	63	22	40	4	9	
	YBP7512-D80/5	86	80	27	50	5	9	
	YBP7512-D100/7	106	100	32	50	7	9	
	YBP7512-D125/8	131	125	40	63	8	9	
	YBP7515-D100/7	108	100	32	50	12	7	
	YBP7515-D125/8	133	125	40	63	12	8	
	YBP7515-D160/10	168	160	40	63	12	10	
	YBP7515-D200/12	208	200	60	63	12	12	
	YBP9012-D040/3	-	40	16	40	3	11	
	YBP9012-D050/4	-	50	22	40	4	11	
	YBP9012-D063/5	-	63	22	48	5	6	
	YBP9012-D80/6	-	80	27	50	6	6	
	YBP9012-D100/8	-	100	32	50	6	6	
	YBP9012-D125/8	-	125	40	63	7	6	
	YBP7512-D063/4	69	63	22	40	4	9	
	YBP7512-D080/5	86	80	27	50	5	9	
	YBP7512-D100/7	106	100	32	50	7	9	
	YBP7512-D125/8	131	125	40	63	8	9	

MILLING CUTTERS

Cutter Shape	Designation	Dimensions D2	D	d	L	Z	AP	Geometry & Related Cutter
	YBP9016-D63/4	-	63	22	50	4	12	 TPKN (R)
	YBP9016-D80/5	-	80	27	50	5	12	
	YBP9016-D100/6	-	100	32	50	6	12	
	YBP9016-D125/6	-	125	40	63	6	12	
	YBP9022-D80/4	-	80	27	50	4	18	 TPKN (R)
	YBP9022-D100/5	-	100	32	50	5	18	
	YBP9022-D125/6	-	125	40	63	6	18	
	YBP9022-D160/7	-	160	40	63	7	18	
	YBP9016-D63/4	41	63	22	50	4	12	
	YBP9016-D80/5	59	80	27	50	5	12	
	YBP9016-D100/6	78	100	32	50	6	12	
	YBP9016-D125/6	98	125	40	63	6	12	

DRILLING INSERTS

Cutter Shape	Designation	Dimensions l	D	S	θ	R	Geometry & Related Cutter
	WCMX 040208	3.99	6.35	2.38	7	0.8	
	WCMX 050308	5.07	7.94	3.18	7	0.8	
	WCMX 06T308	6.14	9.52	3.97	7	0.8	
	WCMX 080412	8.14	12.7	4.76	7	1.2	
	SPMG 050204	5	-	2.38	11	0.4	
	SPMG 060204	6	-	2.38	11	0.4	
	SPMG 07T308	7.94	-	3.97	11	0.8	
	SPMG 090408	9.8	-	4.3	11	0.8	
	SPMG 110408	11.5	-	4.8	11	0.8	
	SPMG 140512	14.3	-	5.2	11	1.2	

INDEXABLE DRILLS

INDEXABLE DRILLS / U-DRILLS - 2D

- High hole diameter accuracy
- Unique insert design to control chip flow
- Made out of high quality H13 material

INDEXABLE DRILLS / U-DRILLS - 2D

INDEXABLE DRILLS / U-DRILLS - 3D

- High hole diameter accuracy
- Unique insert design to control chip flow
- Made out of high quality H13 material

INDEXABLE DRILLS / U-DRILLS - 3D

INDEXABLE DRILLS / U-DRILLS - 4D

- High hole diameter accuracy
- Unique insert design to control chip flow
- Made out of high quality H13 material

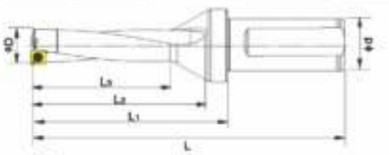
INDEXABLE DRILLS / U-DRILLS - 4D

INDEXABLE DRILLS / U-DRILLS - 5D

- High hole diameter accuracy
- Unique insert design to control chip flow
- Made out of high quality H13 material

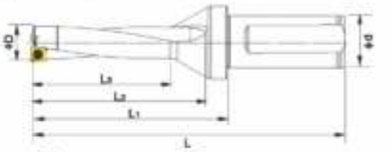
INDEXABLE DRILLS / U-DRILLS - 5D

INDEXABLE DRILLS - 2D



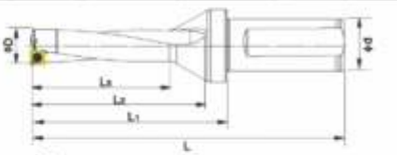
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP12.5-S20-2D	12.5	26	94	44	31	20	SPMG05 / SPMX05	M2.2X5	T6
SP13-S20-2D	13	26	94	44	31				
SP13.5-S20-2D	13.5	28	96	46	33				
SP14-S25-2D	14	28	96	46	33	25			
SP14.5-S25-2D	14.5	30	99	49	35				
SP15-S25-2D	15	30	99	49	35				
SP15.5-S25-2D	15.5	32	108	52	37				
SP16-S25-2D	16	32	108	52	37		SPMG06 / SPMX06	M2.2X5.5	T7
SP16.5-S25-2D	16.5	34	110	54	39				
SP17-S25-2D	17	34	110	54	39				
SP17.5-S25-2D	17.5	36	113	57	41				
SP18-S25-2D	18	36	113	57	41				
SP18.5-S25-2D	18.5	38	115	59	43				
SP19-S25-2D	19	38	115	59	43				
SP19.5-S25-2D	19.5	40	119	63	45				
SP20-S25-2D	20	40	119	63	45				
SP20.5-S25-2D	20.5	42	121	65	47				
SP21-S25-2D	21	42	121	65	47				
SP21.5-S25-2D	21.5	44	123	67	49				
SP22-S25-2D	22	44	123	67	49		SPMG07 / SPMX07	M2.2X8	T8
SP22.5-S25-2D	22.5	46	131	71	51				
SP23-S25-2D	23	46	131	71	51				
SP23.5-S25-2D	23.5	48	134	74	53				
SP24-S25-2D	24	48	134	74	53				
SP24.5-S25-2D	24.5	50	137	77	55				
SP25-S32-2D	25	50	137	77	55	32			
SP25.5-S32-2D	25.5	52	139	79	57				
SP26-S32-2D	26	52	139	79	57				
SP26.5-S32-2D	26.5	54	142	81	59				
SP27-S32-2D	27	54	142	81	59				

INDEXABLE DRILLS - 2D



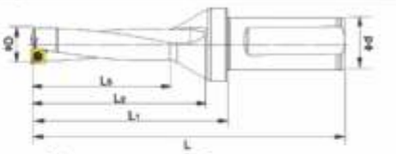
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP27.5-S32-2D	27.5	56	144	84	61	32	SPMG09 / SPMX09	M22X10	T15
SP28-S32-2D	28	56	144	84	61				
SP28.5-S32-2D	28.5	58	146	86	63				
SP29-S32-2D	29	58	146	86	63				
SP29.5-S32-2D	29.5	60	148	88	65				
SP30-S32-2D	30	60	148	88	65				
SP30.5-S32-2D	30.5	62	150	90	67				
SP31-S32-2D	31	62	50	90	67				
SP31.5-S32-2D	31.5	64	152	92	69				
SP32-S32-2D	32	64	152	92	69				
SP32.5-S32-2D	32.5	66	154	94	71				
SP33-S32-2D	33	66	154	94	71				
SP34-S32-2D	34	68	156	96	73				
SP35-S32-2D	35	70	158	98	95				
SP36-S32-2D	36	72	160	100	77				
SP37-S32-2D	37	74	162	102	79				
SP38-S32-2D	38	76	164	104	81				
SP39-S32-2D	39	78	166	106	83				
SP40-S32-2D	40	80	185	115	85				
SP41-S32-2D	41	82	187	117	87				
SP42-S40-2D	42	84	189	119	89	40	SPMG14 / SPMX14	M22X11	T20
SP43-S40-2D	43	86	191	121	91				
SP44-S40-2D	44	88	193	123	93				
SP45-S40-2D	45	90	195	125	95				
SP46-S40-2D	46	92	197	127	97				
SP47-S40-2D	47	94	199	129	99				
SP48-S40-2D	48	96	201	131	101				
SP49-S40-2D	49	98	203	133	103				
SP50-S40-2D	50	100	205	135	105				

INDEXABLE DRILLS - 3D



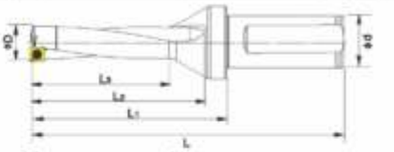
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP12.5-S20-3D	12.5	37.5	123.5	67.5	42.5	20	SPMG05 / SPMX05	M2.2X5	T6
SP13-S20-3D	13	39	125	69	44				
SP13.5-S20-3D	13.5	40.5	126.5	70.5	45.5				
SP14-S25-3D	14	42	128	72	47	25			
SP14.5-S25-3D	14.5	43.5	129.5	73.5	48.5				
SP15-S25-3D	15	45	131	75	50				
SP15.5-S25-3D	15.5	46.5	132.5	76.5	51.5				
SP16-S25-3D	16	48	134	78	53		SPMG06 / SPMX06	M2.2X5.5	T7
SP16.5-S25-3D	16.5	49.5	135.5	79.5	54.5				
SP17-S25-3D	17	51	137	81	56				
SP17.5-S25-3D	17.5	52.5	138.5	82.5	57.5				
SP18-S25-3D	18	54	140	84	59				
SP18.5-S25-3D	18.5	55.5	141.5	85.5	60.5				
SP19-S25-3D	19	57	143	87	62				
SP19.5-S25-3D	19.5	58.5	144.5	88.5	63.5				
SP20-S25-3D	20	60	146	90	65				
SP20.5-S25-3D	20.5	61.5	147.5	91.5	66.5				
SP21-S25-3D	21	63	158	98	68				
SP21.5-S25-3D	21.5	64.5	153.5	99.5	69.5				
SP22-S25-3D	22	66	161	101	71		SPMG07 / SPMX07	M2.2X8	T8
SP22.5-S25-3D	22.5	67.5	162.5	102.5	72.5				
SP23-S25-3D	23	69	164	104	74				
SP23.5-S25-3D	23.5	70.5	165.5	105.5	75.5				
SP24-S25-3D	24	72	167	107	77				
SP24.5-S25-3D	24.5	73.5	168.5	108.5	78.5				
SP25-S32-3D	25	75	170	110	80	32			
SP25.5-S32-3D	25.5	76.5	171.5	111.5	81.5				
SP26-S32-3D	26	78	173	113	83				
SP26.5-S32-3D	26.5	79.5	174.5	114.5	84.5				
SP27-S32-3D	27	81	176	116	86				

INDEXABLE DRILLS / U-DRILLS - 3D



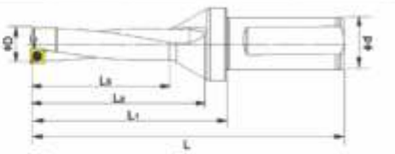
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP27.5-S32-3D	27.5	82.5	177.5	117.5	87.5	32	SPMG09 / SPMX09	M2.2X10	T15
SP28-S32-3D	28	84	179	119	89				
SP28.5-S32-3D	28.5	85.5	180.5	120.5	90.5				
SP29-S32-3D	29	87	182	122	92				
SP29.5-S32-3D	29.5	88.5	183.5	123.5	93.5				
SP30-S32-3D	30	90	185	125	95				
SP30.5-S32-3D	30.5	91.5	186.5	126.5	96.5				
SP31-S32-3D	31	93	188	128	98				
SP31.5-S32-3D	31.5	94.5	189.5	129.5	99.5				
SP32-S32-3D	32	96	191	131	101				
SP32.5-S32-3D	32.5	97.5	192.5	132.5	102.5				
SP33-S32-3D	33	99	194	134	104				
SP34-S32-3D	34	102	197	137	107				
SP35-S32-3D	35	105	200	140	110				
SP36-S32-3D	36	108	203	143	113				
SP37-S32-3D	37	111	206	146	116				
SP38-S32-3D	38	114	209	149	119				
SP39-S32-3D	39	117	212	152	122				
SP40-S32-3D	40	120	215	155	125				
SP41-S32-3D	41	123	218	158	128				
SP42-S40-3D	42	126	221	161	131	40	SPMG14 / SPMX14	M2.2X11	T20
SP43-S40-3D	43	129	239	169	134				
SP44-S40-3D	44	132	242	172	137				
SP45-S40-3D	45	135	245	175	140				
SP46-S40-3D	46	138	248	178	143				
SP47-S40-3D	47	141	251	181	146				
SP48-S40-3D	48	144	254	184	149				
SP49-S40-3D	49	147	257	187	152				
SP50-S40-3D	50	150	260	190	155				

INDEXABLE DRILLS / U-DRILLS - 4D



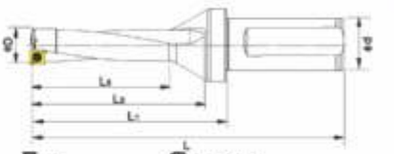
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP12.5-S20-4D	12.5	50	136	80	55	20	SPMG05 / SPMX05	M2.2X5	T6
SP13-S20-4D	13	52	138	82	57				
SP13.5-S20-4D	13.5	54	140	84	59				
SP14-S25-4D	14	56	142	86	61	25			
SP14.5-S25-4D	14.5	58	144	88	63				
SP15-S25-4D	15	60	146	90	65				
SP15.5-S25-4D	15.5	62	148	92	67				
SP16-S25-4D	16	64	150	94	69		SPMG06 / SPMX06	M2.2X5.5	T7
SP16.5-S25-4D	16.5	66	152	96	71				
SP17-S25-4D	17	68	154	98	73				
SP17.5-S25-4D	17.5	70	156	100	75				
SP18-S25-4D	18	72	158	102	77				
SP18.5-S25-4D	18.5	74	160	104	79				
SP19-S25-4D	19	76	162	106	81				
SP19.5-S25-4D	19.5	78	164	108	83				
SP20-S25-4D	20	80	166	110	85				
SP20.5-S25-4D	20.5	82	168	112	87				
SP21-S25-4D	21	84	179	119	89				
SP21.5-S25-4D	21.5	86	181	121	91				
SP22-S25-4D	22	88	183	123	93		SPMG07 / SPMX07	M2.2X8	T8
SP22.5-S25-4D	22.5	90	185	125	95				
SP23-S25-4D	23	92	187	127	97				
SP23.5-S25-4D	23.5	94	189	129	99				
SP24-S25-4D	24	96	191	131	101				
SP24.5-S25-4D	24.5	98	193	133	103				
SP25-S32-4D	25	100	195	135	105	32			
SP25.5-S32-4D	25.5	102	197	137	107				
SP26-S32-4D	26	104	199	139	109				
SP26.5-S32-4D	26.5	106	201	141	111				
SP27-S32-4D	27	108	203	143	113				

INDEXABLE DRILLS / U-DRILLS - 4D



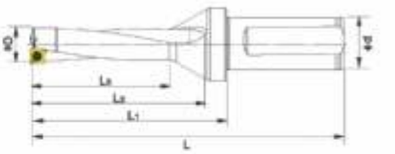
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP27.5-S32-4D	27.5	110	205	145	115	32	SPMG09 / SPMX09	M22X10	T15
SP28-S32-4D	28	112	207	147	117				
SP28.5-S32-4D	28.5	114	209	149	119				
SP29-S32-4D	29	116	211	151	121				
SP29.5-S32-4D	29.5	118	213	153	123				
SP30-S32-4D	30	120	215	155	125				
SP30.5-S32-4D	30.5	122	217	157	127				
SP31-S32-4D	31	124	219	159	129				
SP31.5-S32-4D	31.5	126	221	161	131				
SP32-S32-4D	32	128	223	163	133				
SP32.5-S32-4D	32.5	130	225	165	135				
SP33-S32-4D	33	132	227	167	137				
SP34-S32-4D	34	136	231	171	141				
SP35-S32-4D	35	140	235	175	145				
SP36-S32-4D	36	144	239	179	149				
SP37-S32-4D	37	148	243	183	153				
SP38-S32-4D	38	152	247	187	157				
SP39-S32-4D	39	156	251	191	161				
SP40-S32-4D	40	160	255	195	165				
SP41-S32-4D	41	164	259	199	169				
SP42-S40-4D	42	168	263	203	173	40	SPMG14 / SPMX14	M22X11	T20
SP43-S40-4D	43	172	282	212	177				
SP44-S40-4D	44	176	286	216	181				
SP45-S40-4D	45	180	290	220	185				
SP46-S40-4D	46	184	294	224	189				
SP47-S40-4D	47	188	298	228	193				
SP48-S40-4D	48	192	302	232	197				
SP49-S40-4D	49	196	306	236	201				
SP50-S40-4D	50	200	310	240	205				

INDEXABLE DRILLS / U-DRILLS - 5D



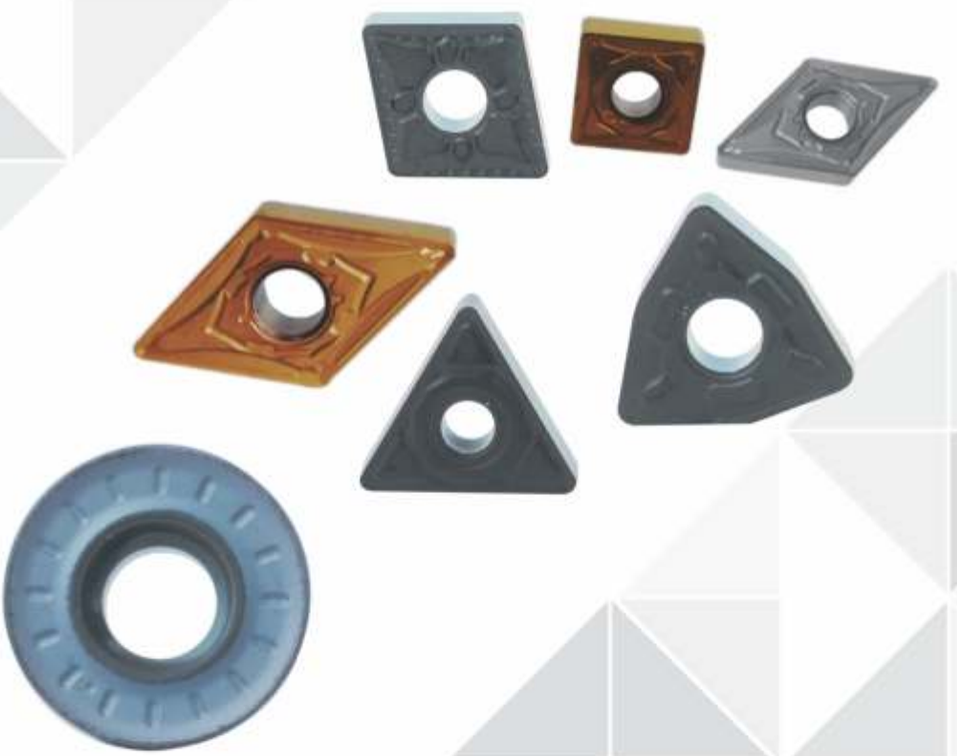
Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP15-S25-5D	15	75	161	105	55	20	SPMG05 / SPMX05	M22X5	T6
SP16-S25-5D	16	80	166	110	57				
SP17-S25-5D	17	85	171	115	59				
SP18-S25-5D	18	90	176	120	61	25			
SP19-S25-5D	19	95	181	125	63				
SP20-S25-5D	20	100	186	130	65				
SP21-S25-5D	21	105	200	135	67				
SP22-S25-5D	22	110	205	140	69		SPMG06 / SPMX06	M22X5.5	T7
SP23-S25-5D	23	115	210	145	71				
SP24-S25-5D	24	120	215	150	73				
SP25-S32-5D	25	125	220	155	75				
SP26-S32-5D	26	130	225	160	77				
SP27-S32-5D	27	135	230	165	79				
SP28-S32-5D	28	140	235	170	81				
SP29-S32-5D	29	145	240	175	83				
SP30-S32-5D	30	150	245	180	85				
SP31-S32-5D	31	155	250	185	87				
SP32-S32-5D	32	160	255	190	89				
SP33-S32-5D	33	165	260	195	91				
SP34-S32-5D	34	170	265	200	93		SPMG07 / SPMX07	M22X8	T8
SP35-S32-5D	35	175	270	205	95				
SP36-S32-5D	36	180	275	210	97				
SP37-S32-5D	37	185	280	215	99				
SP38-S32-5D	38	190	285	220	101				
SP39-S32-5D	39	195	290	225	103				
SP40-S32-5D	40	200	295	230	105	32			
SP41-S32-5D	41	205	300	235	107				
SP42-S40-5D	42	210	305	240	109				
SP43-S40-5D	43	215	310	245	111				
SP44-S40-5D	44	220	315	250	113				

INDEXABLE DRILLS / U-DRILLS - 5D



Items #	Size in mm D#	Flute Length L3	L	L1	L2	Shank Size S	For Inserts	Screw Size	Wrench
SP45-S40-5D	45	225	320	255	230	40	SPMG14 / SPMX14	M2.2X11	T20
SP46-S40-5D	46	230	325	260	235				
SP47-S40-5D	47	235	330	265	240				
SP48-S40-5D	48	240	335	270	245				
SP49-S40-5D	49	245	340	275	250				
SP50-S40-5D	50	250	345	280	255				
SP51-S40-5D	51	255	350	285	260				
SP52-S40-5D	52	260	355	290	265				
SP53-S40-5D	53	265	360	295	270				
SP54-S40-5D	54	270	365	300	275				
SP55-S40-5D	55	275	370	305	280				
SP56-S40-5D	56	280	375	310	285				
SP57-S40-5D	57	285	380	315	290				
SP58-S40-5D	58	290	385	320	295				
SP59-S40-5D	59	295	390	325	300				
SP60-S40-5D	60	300	395	330	305				

TURNING INSERT



CVD TURNING

		SWISS UT	KENNAMETAL	MITSUBISHI	TaeguTec	SANDVIK Coromant	Tungaloy	ISCAR
P	Finish	SC 7010 / / SC 110	KCP05 KC9105	VP10MF				Ic428, IC9150 IC8150
	Medium	SC 6020	"KCP10 KC9110 TN7005	VP15TF VP20MF	Tt1300	Gc4005 GC4205	T9005	Ic9150, IC9015, IC8150
	Semi Rough	SC 6020	TN7010"	VP15TF VP20MF	TT1500	GC4215 GC4015	T9005 T9015	Ic9025, IC9250 IC9054, IC8350
	Rough	SC 5030	KCP25 KC9025 KC9125 Tn7015	VP15TF VP20MF	TT3500 TT5100	Gc4015 GC4225 Gc4025 GC4215 LC25	T9015 T9025	Ic9350, IC656, IC8350
M	Finish	SC 5030	KCP30 KCP40 KC8050 TN7025	VP10MF	TT2500	Gc4225 GC4235 GC4025 GC4035 GC2135	T9025 T9035	IC9250
	Medium	SC 6020	KCM15, TN7010	VP15TF VP20MF	TT3500	GC2015	T9015	Ic9250, IC9025 IC9054
K	Medium	SC 6020	KC9225 TN7015	VP10RT VP15TF VP20RT	TT1300	GC2025	T6020 T9025	IC9150
	Rough	SC 7010	KVK15, KCK20 Kc9315, KC9110 TN5015	VP15TF	TT1500	Gc3205 GC3210 GC3215	T5010	Ic9150, IC9015 IC418, IC428 IC4010
S	Light	SC 110	KCK20, KC9320 TN5020	VP05RT VP10RT		GC3215	T5020	
	Medium	SC 110	KC5410 KC5010	VP10RT VP15TF				
	Heavy		KC5025 KC5525	VP15TF				

CVD TURNING

		SWISS UT	KENNAMETAL	SECO	MITSUBISHI
		HIGHER QUALITY, GREATER PRECISION			MITSUBISHI CARBI
P	Finish	PF	FF	FF1, FF2	PK FH, FP FY
	Medium	PM	P MN	MF3 MF5, M3 M5	MP MA MH
	Semi Rough	(STD)	RN, RP	MR6, MR7	RP GH Std.
	Rough	PR	MR RM RH	R7 R8, RR9	HR, HZ, HL HM, HX HV
M	Finish	PF	FP	MF1	SH, LM
	Medium	PM	LF*	MF4	MS, GM MM, MA ES
K	Medium	(STD)	MP	M5	MK, GK Std.
	Rough	(A) Flat	RP,UN		RK
S	Light	PF	MS	MF4, MF5	LS,MJ,MJ
	Medium	PM	UP, P, NGP*	MI	MS
	Heavy	PR	RP	M5, MR3, MR4	RS, GJ

	FP5	FA	QF LC	OT* TF, TI ZF	DP* GP, PP XP, XP-T, XF
	MP5	PC, MP MT SM	PM QM, XM	NM, ZM TM, AM DM, 33, 37, 38	PG, CJ, GS PS, HS PT
	RP5, RP7 NM6, NM9	RT	PR, HM XMR	TH Std.	PH GT Std.
	NR6, NRF NRR	RX, RH HD, HY, HT HZ, EH	QR, PR HR, MR	TRS TU TUS	PX
	NF4	SF	MF	SS	MQ, GU
	RM5 NM4	ML EM VF	MM QM, XM K	SA, SF SM S	MS, MU SU, HU, TK ST
	RK5, NM5		KM	CM Std.	KG, Std., C
	RK7		KR		KH, GC
	NF4, NFT	EA	SGP	HRF	
	NMS, NMT		NGP*, SM	HRM SA, HMM	MS, MU, TK
	NRS, NRT	ET	SR, SMR		

CVD FOR TURNING APPLICATION

BASE INFORMATION	STEEL							
	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc
DESCRIPTION ISO	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max
CNMG120404-PF-SC5030	0.10	0.40	120	260	0.3	1.5	0.10	0.40
CNMG120404-PF-SC6020	0.10	0.40	120	280	0.3	1.5	0.10	0.40
CNMG120408-SC5030	0.18	0.45	120	200	0.5	7.0	0.18	0.45
CNMG120408-PF-SC5030	0.10	0.40	120	260	0.4	1.5	0.10	0.40
CNMG120408-PF-SC6020	0.10	0.40	120	280	0.4	1.5	0.10	0.40
CNMG120408-PM-SC7010	0.12	0.30	120	300	0.4	5.5	0.12	0.30
CNMG120408-PM-SC6020	0.12	0.30	120	280	0.4	5.5	0.12	0.30
CNMG120408-PM-SC5030	0.12	0.30	120	260	0.4	5.5	0.12	0.30
CNMG120408-PR-SC7010	0.20	0.50	140	220	0.7	7.0	0.20	0.50
CNMG120408-PR-SC6020	0.20	0.50	140	220	0.7	7.0	0.20	0.50
CNMG120408-PR-SC5030	0.20	0.50	120	200	0.7	7.0	0.20	0.50
CNMG120412-SC7010	0.18	0.45	140	220	0.8	7.0	0.18	0.45
CNMG120412-SC6020	0.18	0.45	140	220	0.8	7.0	0.18	0.45
CNMG120412-PM-SC7010	0.12	0.30	120	300	0.7	5.5	0.12	0.30
CNMG120412-PM-SC6020	0.12	0.30	120	280	0.7	5.5	0.12	0.30
CNMG120412-PM-SC5030	0.12	0.30	120	260	0.7	5.5	0.12	0.30
CNMG120412-PR-SC7010	0.20	0.50	140	220	0.1	7.0	0.20	0.50
CNMG120412-PR-SC6020	0.20	0.50	140	220	0.1	7.0	0.20	0.50
CNMG120412-PR-SC5030	0.20	0.50	120	200	0.1	7.0	0.20	0.50
DNMG110404-PFSC6020	0.10	0.40	120	280	0.3	1.5	0.10	0.40
DNMG110408-PM-SC6020	0.10	0.40	120	220	0.5	1.5	0.10	0.40
DNMG150608-PF-SC6020	0.10	0.40	120	280	0.4	1.5	0.10	0.40
DNMG150608-PM-SC6020	0.10	0.40	120	240	0.5	1.5	0.10	0.40
TNMG160408-SC7010	0.20	0.55	120	210	0.6	5.5	0.20	0.55
TNMG160412-SC7010	0.20	0.55	140	220	0.8	5.5	0.20	0.55
TNMG160404-PF-SC6020	0.10	0.40	120	240	0.3	1.5	0.10	0.40
TNMG160404-PF-SC110	0.10	0.40	120	220	0.3	2.5	0.10	0.40
TNMG160404-PM-SC110	0.15	0.50	120	220	0.4	5.0	0.15	0.50
TNMG160408-PF-SC110	0.10	0.40	120	220	0.4	2.5	0.10	0.40
TNMG160408-PM-SC110	0.15	0.50	120	220	0.5	5.0	0.15	0.50
TNMG160408-SC6020	0.20	0.55	120	240	0.6	5.5	0.20	0.55
TNMG160408-PF-SC6020	0.10	0.40	120	240	0.4	1.5	0.10	0.40
TNMG160408-PM-SC6020	0.15	0.50	120	240	0.5	5.0	0.15	0.50
TNMG160408-PR-SC6020	0.20	0.55	120	240	0.7	6.0	0.20	0.55
TNMG160412-SC6020	0.20	0.55	120	240	0.8	5.5	0.20	0.55
TNMG160412-PM-SC6020	0.15	0.50	120	240	0.7	5.0	0.15	0.50
TNUX160404-R-SC110	0.10	0.20	120	220	0.3	2.5	0.10	0.20

STAINLESS STEEL					CAST IRON					
)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)
	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max
	140	230	0.3	1.5	0.10	0.40	150	250	0.3	1.5
	140	240	0.3	1.5	0.10	0.40	160	270	0.3	1.5
	140	210	0.5	7.0	0.18	0.45	140	230	0.5	7.0
	140	230	0.4	1.5	0.10	0.40	150	250	0.4	1.5
	140	240	0.4	1.5	0.10	0.40	160	270	0.4	1.5
	140	250	0.4	5.5	0.12	0.30	150	290	0.4	5.5
	140	240	0.4	5.5	0.12	0.30	160	270	0.4	5.5
	140	230	0.4	5.5	0.12	0.30	150	250	0.4	5.5
	140	210	0.7	7.0	0.20	0.50	140	220	0.7	7.0
	140	210	0.7	7.0	0.20	0.50	140	220	0.7	7.0
	120	210	0.7	7.0	0.20	0.50	120	200	0.7	7.0
	140	210	0.8	7.0	0.18	0.45	140	220	0.8	7.0
	140	210	0.8	7.0	0.18	0.45	140	220	0.8	7.0
	140	250	0.7	5.5	0.12	0.30	150	290	0.7	5.5
	140	240	0.7	5.5	0.12	0.30	160	270	0.7	5.5
	140	230	0.7	5.5	0.12	0.30	150	250	0.7	5.5
	140	210	0.1	7.0	0.20	0.50	140	220	0.1	7.0
	140	210	0.1	7.0	0.20	0.50	140	220	0.1	7.0
	120	210	0.1	7.0	0.20	0.50	120	200	0.1	7.0
	140	240	0.3	1.5	0.10	0.40	160	270	0.3	1.5
	140	220	0.5	1.5	0.10	0.40	160	230	0.5	1.5
	140	240	0.4	1.5	0.10	0.40	160	270	0.4	1.5
	140	240	0.5	1.5	0.10	0.40	160	250	0.5	1.5
	140	210	0.6	5.5	0.20	0.55	120	230	0.6	5.5
	140	220	0.8	5.5	0.20	0.55	140	240	0.8	5.5
	140	240	0.3	1.5	0.10	0.40	160	250	0.3	1.5
	140	220	0.3	2.5	0.10	0.40	160	230	0.3	2.5
	140	220	0.4	5.0	0.15	0.50	120	230	0.4	5.0
	140	220	0.4	2.5	0.10	0.40	160	230	0.4	2.5
	140	220	0.5	5.0	0.15	0.50	120	230	0.5	5.0
	140	240	0.6	5.5	0.20	0.55	120	250	0.6	5.5
	140	240	0.4	1.5	0.10	0.40	160	250	0.4	1.5
	140	240	0.5	5.0	0.15	0.50	120	250	0.5	5.0
	140	240	0.7	6.0	0.20	0.55	120	250	0.7	6.0
	140	240	0.8	5.5	0.20	0.55	120	250	0.8	5.5
	140	240	0.7	5.0	0.15	0.50	120	250	0.7	5.0
	140	220	0.3	2.5	0.10	0.20	140	230	0.3	2.5

CVD FOR TURNING APPLICATION

BASE INFORMATION	STEEL							
	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc
DESCRIPTION ISO	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max
TNUX160408-R-SC110	0.14	0.24	120	220	0.4	2.5	0.14	0.24
VNMG160404-PF-SC6020	0.08	0.30	140	250	0.3	1.5	0.08	0.30
VNMG160408-PM-SC6020	0.08	0.30	140	250	0.4	1.5	0.08	0.30
WNMG060404-PF-SC6020	0.10	0.40	120	280	0.2	1.5	0.10	0.40
WNMG060408-PM-SC5030	0.10	0.40	120	260	0.4	1.5	0.10	0.40
WNMG060408-PM-SC6020	0.10	0.40	120	280	0.4	1.5	0.10	0.40
WNMG080404-PF-SC5030	0.10	0.40	120	260	0.3	1.5	0.10	0.40
WNMG080404-PF-SC6020	0.10	0.40	120	280	0.3	1.5	0.10	0.40
WNMG080408-SC7010	0.18	0.45	140	220	0.5	7.0	0.18	0.45
WNMG080408-SC6020	0.18	0.45	140	220	0.5	7.0	0.18	0.45
WNMG080408-SC5030	0.18	0.45	120	200	0.5	7.0	0.18	0.45
WNMG080408-PF-SC5030	0.10	0.40	120	260	0.4	1.5	0.10	0.40
WNMG080408-PF-SC6020	0.10	0.40	120	280	0.4	1.5	0.10	0.40
WNMG080408-PM-SC7010	0.12	0.30	120	300	0.4	5.5	0.12	0.30
WNMG080408-PM-SC6020	0.12	0.30	120	280	0.4	5.5	0.12	0.30
WNMG080408-PM-SC5030	0.12	0.30	120	260	0.4	5.5	0.12	0.30
WNMG080408-PR-SC7010	0.20	0.50	140	220	0.7	7.0	0.20	0.50
WNMG080408-PR-SC6020	0.20	0.50	140	220	0.7	7.0	0.20	0.50
WNMG080408-PR-SC5030	0.20	0.50	120	200	0.7	7.0	0.20	0.50
WNMG080412-SC6020	0.18	0.45	140	220	0.8	7.0	0.18	0.45
WNMG080412-SC7010	0.18	0.45	140	220	0.8	7.0	0.18	0.45
WNMG080412-PR-SC7010	0.20	0.50	140	220	0.1	7.0	0.20	0.50
WNMG080412-PR-SC6020	0.20	0.50	140	220	0.1	7.0	0.20	0.50
WNMG080412-PR-SC5030	0.20	0.50	120	200	0.1	7.0	0.20	0.50
CNMA120408-SC7010								
CNMA120412-SC7010								
TNMA160404-SC7010								
TNMA160408-SC7010								
TNMA160412-SC7010								
WNMA080408-SC7010								
WNMA080412-SC7010								
CCMT060204-PM-SC110	0.12	0.18	120	210	0.3	1.4	0.12	0.18
CCMT060204-PM-SC6020	0.12	0.18	120	210	0.3	1.4	0.12	0.18
CCMT09T304-PM-SC110	0.14	0.22	120	210	0.3	2	0.14	0.22
CCMT09T304-PM-SC6020	0.14	0.22	120	210	0.3	2	0.14	0.22

STAINLESS STEEL					CAST IRON					
DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	
Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	
140	220	0.4	2.5	0.14	0.24	140	230	0.4	2.5	
160	230	0.3	1.5	0.08	0.30	140	250	0.3	1.5	
160	230	0.4	1.5	0.08	0.30	140	250	0.4	1.5	
140	240	0.2	1.5	0.10	0.40	160	270	0.2	1.5	
140	230	0.4	1.5	0.10	0.40	150	250	0.4	1.5	
140	240	0.4	1.5	0.10	0.40	160	270	0.4	1.5	
140	230	0.3	1.5	0.10	0.40	150	250	0.3	1.5	
140	240	0.3	1.5	0.10	0.40	160	270	0.3	1.5	
140	210	0.5	7.0	0.18	0.45	140	220	0.5	7.0	
140	210	0.5	7.0	0.18	0.45	140	220	0.5	7.0	
140	210	0.5	7.0	0.18	0.45	140	230	0.5	7.0	
140	230	0.4	1.5	0.10	0.40	150	250	0.4	1.5	
140	240	0.4	1.5	0.10	0.40	160	270	0.4	1.5	
140	250	0.4	5.5	0.12	0.30	150	290	0.4	5.5	
140	240	0.4	5.5	0.12	0.30	160	270	0.4	5.5	
140	230	0.4	5.5	0.12	0.30	150	250	0.4	5.5	
140	210	0.7	7.0	0.20	0.50	140	220	0.7	7.0	
140	210	0.7	7.0	0.20	0.50	140	220	0.7	7.0	
120	210	0.7	7.0	0.20	0.50	120	200	0.7	7.0	
140	210	0.8	7.0	0.18	0.45	140	220	0.8	7.0	
140	210	0.8	7.0	0.18	0.45	140	220	0.8	7.0	
140	210	0.1	7.0	0.20	0.50	140	220	0.1	7.0	
140	210	0.1	7.0	0.20	0.50	140	220	0.1	7.0	
120	210	0.1	7.0	0.20	0.50	120	200	0.1	7.0	
				0.15	0.60	140	300	0.2	8.0	
				0.15	0.60	140	300	0.4	8.0	
				0.15	0.60	150	230	0.2	7.0	
				0.15	0.60	150	230	0.4	7.0	
				0.15	0.60	150	230	0.6	7.0	
				0.15	0.60	140	300	0.2	8.0	
				0.15	0.60	140	300	0.4	8.0	
170	270	0.3	1.8	0.12	0.18	160	230	0.3	2.1	
170	270	0.3	1.8	0.12	0.18	160	230	0.3	2.1	
170	270	0.3	2.5	0.14	0.22	160	230	0.3	3	
170	270	0.3	2.5	0.14	0.22	160	230	0.3	3	

CVD FOR TURNING APPLICATION

BASE INFORMATION	STEEL							
	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc
DESCRIPTION ISO	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max
CCMT09T308-PM-SC110	0.14	0.22	120	210	0.5	3.2	0.14	0.22
CCMT09T308-PM-SC6020	0.14	0.22	120	210	0.5	3.2	0.14	0.22
CCMT120408-PM-SC110	0.18	0.3	120	210	0.5	4	0.18	0.3
CCMT120408-PM-SC6020	0.18	0.3	120	210	0.5	4	0.18	0.3
DCMT070204-PM-SC110	0.08	0.15	120	210	0.3	1.4	0.06	0.15
DCMT070204-PM-SC6020	0.08	0.15	120	210	0.3	1.4	0.06	0.15
DCM T11T304-PM-SC110	0.1	0.18	120	210	0.3	2	0.08	0.18
DCMT11T304-PM-SC6020	0.1	0.18	120	210	0.3	2	0.08	0.18
DCMT11T308-PM-SC110	0.18	0.4	120	210	0.5	3.2	0.2	0.4
DCMT11T308-PM-SC6020	0.18	0.4	120	210	0.5	3.2	0.2	0.4
KNUX160405L11-SC110	0.1	0.18	120	210	0.3	3.3	0.08	0.18
KNUX160405R11-SC110	0.1	0.18	120	210	0.3	3.3	0.08	0.18
TCMT110204-PM-SC110	0.08	0.15	120	210	0.3	1.4	0.06	0.15
TCMT110204-PM-SC6020	0.08	0.15	120	210	0.3	1.4	0.06	0.15
TCMT16T304-PM-SC110	0.1	0.18	120	210	0.3	2	0.08	0.18
TCMT16T304-PM-SC6020	0.1	0.18	120	210	0.3	2	0.08	0.18
TCMT16T308-PM-SC110	0.18	0.34	120	210	0.5	4	0.2	0.34
TCMT16T308-PM-SC6020	0.18	0.34	120	210	0.5	4	0.2	0.34
VBMT160404-PM-SC110	0.1	0.18	120	210	0.3	2	0.08	0.18
VBMT160404-PM-SC6020	0.1	0.18	120	210	0.3	2	0.08	0.18
VBMT160408-PM-SC110	0.16	0.32	120	210	0.5	2.8	0.18	0.32
VBMT160408-PM-SC6020	0.16	0.32	120	210	0.5	2.8	0.18	0.32

STAINLESS STEEL					CAST IRON					
)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)	FEED (Fz)	SPEED (Vc)	DEPTH (Ap)
	Vc-Min	Vc-Max	Ap-Min	Ap-Max	Fz-Min	Fz-Max	Vc-Min	Vc-Max	Ap-Min	Ap-Max
	170	270	0.5	4	0.14	0.22	160	230	0.5	4
	170	270	0.5	4	0.14	0.22	160	230	0.5	4
	170	270	0.5	5	0.18	0.3	160	230	0.5	5
	170	270	0.5	5	0.18	0.3	160	230	0.5	5
	170	270	0.3	1.8	0.06	0.17	160	230	0.3	2.1
	170	270	0.3	1.8	0.06	0.17	160	230	0.3	2.1
	170	270	0.3	2.5	0.08	0.02	160	230	0.3	3
	170	270	0.3	2.5	0.08	0.02	160	230	0.3	3
	170	270	0.5	4	0.15	0.6	160	230	0.5	4
	170	270	0.5	4	0.15	0.6	160	230	0.5	4
	170	270	0.3	4.2	0.08	0.2	160	230	0.3	5
	170	270	0.3	4.2	0.08	0.2	160	230	0.3	5
	170	270	0.3	1.8	0.06	0.17	160	230	0.3	2.1
	170	270	0.3	1.8	0.06	0.17	160	230	0.3	2.1
	170	270	0.3	2.5	0.08	0.02	160	230	0.3	3
	170	270	0.3	2.5	0.08	0.02	160	230	0.3	3
	170	270	0.5	5	0.15	0.51	160	230	0.5	5
	170	270	0.5	5	0.15	0.51	160	230	0.5	5
	170	270	0.3	2.5	0.08	0.2	160	230	0.3	3
	170	270	0.3	2.5	0.08	0.2	160	230	0.3	3
	170	270	0.5	3.5	0.14	0.48	160	230	0.5	3.5
	170	270	0.5	3.5	0.14	0.48	160	230	0.5	3.5

Turning Inserts Designation System-ISO

1. Insert Shape

			
a	b	C	D
			
e	H	K	L
			
O	P	R	S
		SPeCIaL	
T	W	X	

2. Clearance Angle

5°	7°	15°	20°
b	C	D	e
25°	30°	0°	11°
f	g	n	P

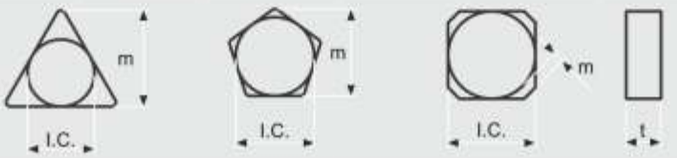
4. Cross Section

		
a	f	g
		
M	n	R
 C'Sink40°– 60°	 C'Sink40°– 60°	SPeCIaL
T	W	X

C	N	M	G
1	2	3	4

3. Tolerance olerance (mm)

	T			I.C. Size (mm)					
	m	t	I.C.	6.35	9.525	12.7	15.875	19.05	25.4
A	± 0.005	± 0.025	± 0.025	•	•	•	•	•	•
C	± 0.013	± 0.025	± 0.025	•	•	•	•	•	•
E	± 0.025	± 0.025	± 0.025	•	•	•	•	•	•
F	± 0.005	± 0.025	± 0.013	•	•	•	•	•	•
G	± 0.025	± 0.13	± 0.025	•	•	•	•	•	•
H	± 0.013	± 0.025	± 0.013	•	•	•	•	•	•
K	± 0.013	± 0.025	± 0.05	•	•				
			± 0.08			•			
			± 0.10				•	•	
			± 0.13						•
M	± 0.08	± 0.13	± 0.05	•	•				
	± 0.13		± 0.08			•			
	± 0.15		± 0.10				•	•	
	± 0.18		± 0.13						•

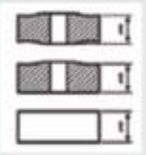


Turning Inserts Designation System-ISO

5. Cutting E dge Length (mm)

I.C.	C	S	R	S	T	V	W	K	H
L									
3.97	03	04		03	06		02		
4.76	04	05		04	08	08			
5.56	05	06		05	09	09	03		
6.35	06	07		06	11	11	04		
7.94	08	09		07	13	13	05		
9.525	09	11	09	09	16	16	06	16	
12.7	12	15		12	22	22	08		05
15.875	16	19	15	15	27	27	10		
19.05	19	23	19	19	33	33	13		10
25.4	25	31	25	25	44	44	17		

6. Thickness (mm)



t	mm
02	2.38
03	3.18
T3	3.97
04	4.76
06	6.35
07	7.94
09	9.52

8. Chip Breaker

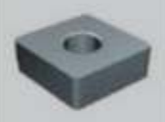
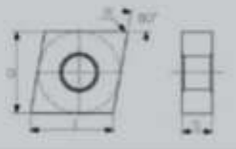
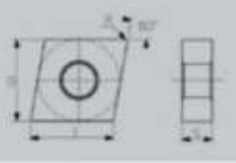
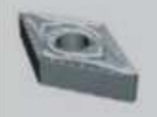
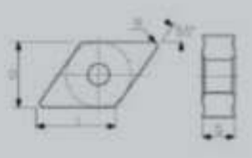
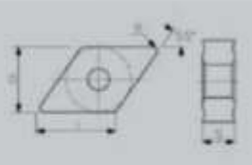
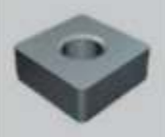
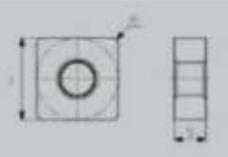
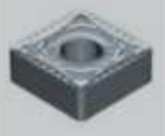
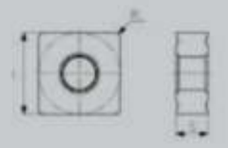
For Application

12	04	08	CHIP bReaKeR
5	6	7	8

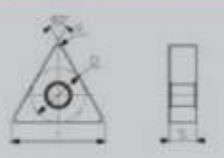
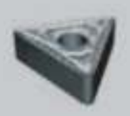
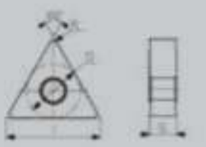
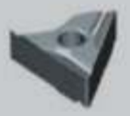
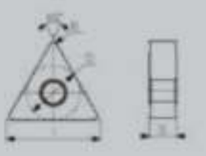
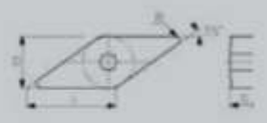
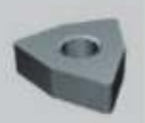
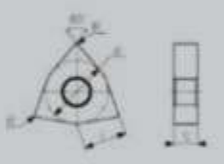
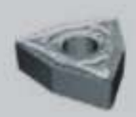
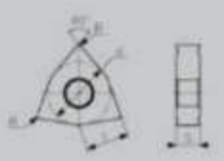
7. Nose Radius (mm)

r	mm
02	0.2
04	0.4
08	0.8
10	1.0
12	1.2
16	1.6
20	2.0

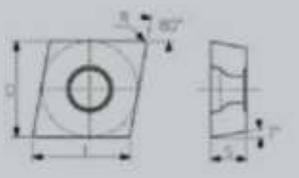
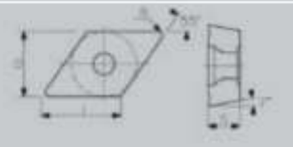
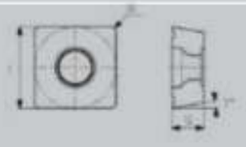
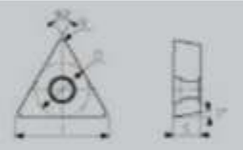
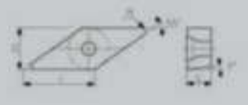
TURNING INSERTS (NEGATIVE)

Cutter Shape	Designation	Dimensions				Geometry & Related Cutter
		l	D	S	R	
	CNMA 120408-BC	12.90	12.70		0.8	
	CNMA 120412-BC	12.90	12.70		1.2	
	CNMA 160612-BC	16.10	15.88		1.2	
	CNMG 120404-BF	12.90	12.70		0.4	
	CNMG 120408-BG	12.90	12.70		0.8	
	CNMG 120412-BR	12.90	12.70		1.2	
	DNMG 150404-BF	15.50	12.70		0.4	
	DNMG 150408-BG	15.50	12.70		0.8	
	DNMG 150604-BF	15.50	12.70		0.4	
	DNMG 150608-BG	15.50	12.70		0.8	
	DNMG 150612-BR	15.50	12.70		1.2	
	DNUX 150608R	15.00	12.70		0.5	
	KNUX 160405 L	16.00	9.52		0.5	
	KNUX 160405 R	16.00	9.52		0.5	
	SNMA 120408-BC	12.70	12.70		0.8	
	SNMA 120412-BC	12.70	12.70		1.2	
	SNMG 120404-BF	12.70	12.70		0.4	
	SNMG 120408-BG	12.70	12.70			
	SNMG 120412-BR	12.70	12.70		1.2	

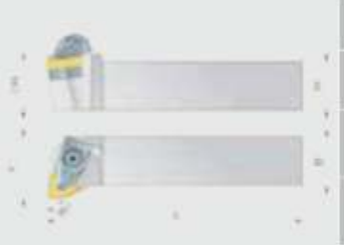
TURNING INSERTS (NEGATIVE)

Cutter Shape	Designation	Dimensions				Geometry & Related Cutter
		l	D	S	R	
	TNMA 160408-BC	16.50	9.52	4.76	0.8	
	TNMA 160412-BC	16.50	9.52	4.76	1.2	
	TNMG 160404-BF	16.50	9.52	4.76	0.4	
	TNMG 160408-BG	16.50	9.52	4.76	0.8	
	TNMG 160412-BR	16.50	9.52	4.76	1.2	
	TNMG 220404-BF	22.00	12.70	4.76	0.4	
	TNMG 220408-BG	22.00	12.70	4.76	0.8	
	TNMG 220412-BR	22.00	12.70	4.76	1.2	
	TNUX 160404 L	16.50	9.52	4.76	0.4	
	TNUX 160408 L	16.50	9.52	4.76	0.8	
	TNUX 160404 R	16.50	9.52	4.76	0.4	
	TNUX 160408 R	16.50	9.52	4.76	0.8	
	VNMG 160404-BF	16.50	9.52	4.76	0.4	
	VNMG 160408-BG	16.50	9.52	4.76	0.8	
	VNMG 160412-BR	16.50	9.52	4.76	1.2	
	VNMG 220408-BG	22.00	12.70	4.76	0.8	
	WNMA 080404-BC	8.14	12.70	4.76	0.4	
	WNMA 080408-BC	8.14	12.70	4.76	0.8	
	WNMA 080412-BC	8.14	12.70	4.76	1.2	
	WNMG 060404-BF	6.45	9.52	4.76	0.4	
	WNMG 060408-BG	6.45	9.52	4.76	0.8	
	WNMG 080404-BF	8.14	12.70	4.76	0.4	
	WNMG 080408-BG	8.14	12.70	4.76	0.8	
	WNMG 080412-BR	8.14	12.70	4.76	1.2	

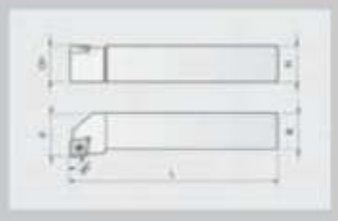
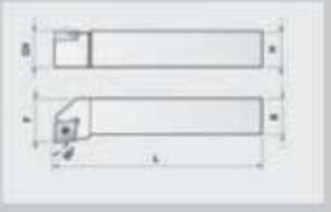
TURNING INSERTS (POSITIVE)

Cutter Shape	Designation	Dimensions				Geometry & Related Cutter
		l	D	S	R	
	CCMT 060204-BF	6.45	6.35	2.38	0.4	
	CCMT 060208-BG	6.45	6.35	2.38	0.8	
	CCMT 09T304-BF	9.65	9.52	3.97	0.4	
	CCMT 09T308-BG	9.65	9.52	3.97	0.8	
	CCMT 120408-BG	12.9	12.7	4.76	0.8	
	DCMT 070204-BF	7.75	6.35	23.8	0.4	
	DCMT 11T304-BF	11.6	9.52	3.97	0.4	
	DCMT 11T308-BG	11.6	9.52	3.97	0.8	
	RCMT 0602M0	-	6.00	2.38	-	
	RCMT 0803M0	-	8.00	3.18	-	
	RCMT 10T3M0	-	10.00	3.97	-	
	RCMT 1204M0	-	12.00	4.76	-	
	SCMT 09T304-BF	9.52	9.52	3.97	0.4	
	SCMT 09T308-BG	9.52	9.52	3.97	0.8	
	SCMT 120408-BG	12.70	12.70	4.76	0.8	
	TCMT 110204-BF	11.00	6.35	2.38	0.4	
	TCMT 16T304-BF	16.50	9.52	3.97	0.4	
	TCMT 16T308-BG	16.50	9.52	3.97	0.8	
	VBMT 110304-BF	11.00	6.35	3.18	0.4	
	VBMT 160404-BF	16.50	9.52	4.76	0.4	
	VBMT 160408-BG	16.50	9.52	4.76	0.8	
	VCMT 110304-BF	11.00	6.35	3.18	0.4	
	VCMT 160404-BF	16.50	9.52	4.76	0.4	
	VCMT 160408-BG	16.50	9.52	4.76	0.8	

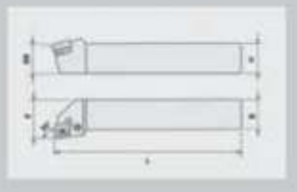
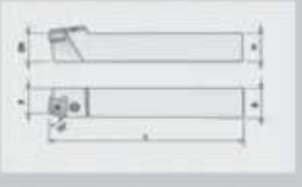
"D" CLAMPING TURNING HOLDERS

Insert Shape	Description	Dimensions in mm h	b	ch	f	l	Spare Details
	DCLNR 2020 K12	20	20	20	25	125	
	DCLNL 2020 K12	20	20	20	25	125	
	DCLNR 2525 M12	25	25	25	32	150	
	DCLNL 2525 M12	25	25	25	32	150	
	DCLNR 3232 P12	32	32	32	40	170	
	DCLNL 3232 P12	32	32	32	40	170	
	DDJNR 2020 K15	20	20	20	25	125	
	DDJNL 2020 K15	20	20	20	25	125	
	DDJNR 2525 M15	25	25	25	32	150	
	DDJNL 2525 M15	25	25	25	32	150	
	DDJNR 3232 P15	32	32	32	40	170	
	DDJNL 3232 P15	32	32	32	40	170	
	DWLNR 2020 K08	20	20	20	25	125	
	DWLNL 2020 K08	20	20	20	25	125	
	DWLNR 2525 M08	25	25	25	32	150	
	DWLNL 2525 M08	25	25	25	32	150	
	DWLNR 3232 P08	32	32	32	40	170	
	DWLNL 3232 P08	32	32	32	40	170	

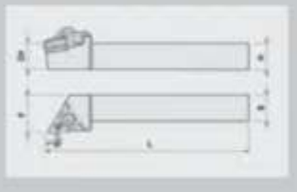
"S" CLAMPING TURNING HOLDERS

Insert Shape	Description	Dimension in mm h	b	ch	f	l	Spare Details
	SCLCR 1212 F06	12	12	12	16	80	
	SCLCL 1212 F06	12	12	12	16	80	
	SCLCR 1616 H06	16	16	16	20	100	
	SCLCL 1616 H06	16	16	16	20	100	
	SCLCR 1212 F09	12	12	12	16	80	
	SCLCL 1212 F09	12	12	12	16	80	
	SCLCR 1616 H09	16	16	16	20	100	
	SCLCL 1616 H09	16	16	16	20	100	
	SCLCR 2020 K09	20	20	20	25	125	
	SCLCL 2020 K09	20	20	20	25	125	
	SCLCR 2525 M09	25	25	25	32	150	
	SCLCL 2525 M09	25	25	25	32	150	

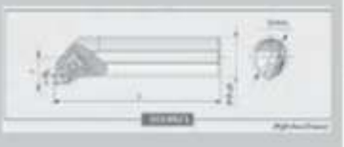
"P" CLAMPING TURNING HOLDERS

Insert Shape	Description	Dimension in mm h	b	ch	f	l	Spare Details
	PCLNR 1616 H12	16	16	16	20	100	
	PCLNL 1616 H12	16	16	16	20	100	
	PCLNR 2020 K12	20	20	20	25	125	
	PCLNL 2020 K12	20	20	20	25	125	
	PCLNR 2525 M12	25	25	25	32	150	
	PCLNL 2525 M12	25	25	25	32	150	
	PCLNR 3225 P12	32	25	32	32	170	
	PCLNL 3225 P12	32	25	32	32	170	
	PCBNR 2020 K12	20	20	20	17	125	
	PCBNL 2020 K12	20	20	20	17	125	
	PCBNR 2525 M12	25	25	25	22	150	
	PCBNL 2525 M12	25	25	25	22	150	
	PWLNL 2020 M08	20	20	20	25	150	
	PWLNR 2020 M08	20	20	20	25	150	
	PWLNR 2525 M08	25	25	25	32	150	
	PWLNL 2525 M08	25	25	25	32	150	

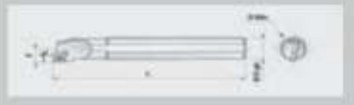
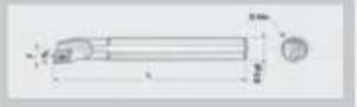
"M" CLAMPING TURNING HOLDERS

Insert Shape	Description	Dimension in mm h	b	ch	f	l	Spare Details
	MTJNR 2020 K16	20	20	20	25	125	
	MTJNL 2020 K16	20	20	20	25	125	
	MTJNR 2525 M16	25	25	25	32	150	
	MTJNL 2525 M16	25	25	25	32	150	
	MTJNR 3225 P16	32	25	32	32	170	
	MTJNL 3225 P16	32	25	32	32	170	

"S" CLAMPING BORING BARS

Insert Shape	Description	Dimension in mm ØD g6	D Min.	f	l	Spare Details
	S25T GCLNR 12	25	32	17	300	
	S25T GCLNL 12	25	32	17	300	
	S25T GDUNR 15	25	32	17	300	
	S25T GDUNL 15	25	32	17	300	
	S25T GWLNR 08	25	32	17	300	
	S25T GWLNL 08	25	32	17	300	

"S" CLAMPING BORING BARS

Insert Shape	Description	Dimension in mm Ø D g6	D Min.	f	l	Spare Details
	S08H SCLCR 06	8	11	6	100	
	S08H SCLCL 06	8	11	6	100	
	S10K SCLCR 06	10	13	7	125	
	S10K SCLCL 06	10	13	7	125	
	S12M SCLCR 06	12	16	9	150	
	S12M SCLCL 06	12	16	9	150	
	S16R SCLCR 09	16	20	11	200	
	S16R SCLCL 09	16	20	11	200	
	S20S SCLCR 09	20	25	13	250	
	S20S SCLCL 09	20	25	13	250	

"S" CLAMPING THROUGH COOLANT BORING BARS

Insert Shape	Description	Dimension in mm Ø D g6	D Min.	f	l	Spare Details
	A06F SCLCR 06	6	9	4.5	80	
	A06F SCLCL 06	6	9	4.5	80	
	A08H SCLCR 06	8	11	6	100	
	A08H SCLCL 06	8	11	6	100	
	A10J SCLCR 06	10	13	7	110	
	A10J SCLCL 06	10	13	7	110	
	A12K SCLCR 06	12	16	9	125	
	A12K SCLCL 06	12	16	9	125	
	A16M SCLCR 06	16	20	11	150	
	A16M SCLCL 06	16	20	11	150	
	A12K SCLCR 09	12	16	9	125	
	A12K SCLCL 09	12	16	9	125	
	A16M SCLCR 09	16	20	11	150	
	A16M SCLCL 09	16	20	11	150	
	A20Q SCLCR 09	20	25	13	180	
	A20Q SCLCL 09	20	25	13	180	
	A25R SCLCR 09	25	32	17	200	
	A25R SCLCL 09	25	32	17	200	

Parting Inserts

Application	Clan	Family	Item	Chip-Breakers		Fits to
	MGMN - Type 	MGMN	MGMN 2002	BN	BP	KOROLOY
			MGMN 3004	BN	BP	KOROLOY
			MGMN 4004	BN	BP	KOROLOY
			MGMN 5008	BN	BP	KOROLOY
	TDC - Type 	TDC / TDJ	TDC /TDJ 2002	BN	BP	TAEGUTEC
			TDC /TDJ 3004	BN	BP	TAEGUTEC
			TDC /TDJ 4004	BN	BP	TAEGUTEC
			TDC /TDJ 5008	BN	BP	TAEGUTEC

Threading Inserts

Application	Clan	Family	Item	Chip-Breakers	Fits to
	SEMI - PROFILE 	16 ER	16ER AG55 16ER AG60		VARGUS / ISCAR VARGUS / ISCAR
		16 EL	16EL AG55 16EL AG60		VARGUS / ISCAR VARGUS / ISCAR
		16 IR	16IR AG55 16IR AG60		VARGUS / ISCAR VARGUS / ISCAR
		16 IL	16IL AG55 16IL AG60		VARGUS / ISCAR VARGUS / ISCAR
	FULL - PROFILE 	16 ERM	16ERM 1.25 ISO 16ERM 1.5 ISO 16ERM 1.75 ISO 16ERM 2.00 ISO		VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR
		16 ERM	16IRM 1.25 ISO 16IRM 1.5 ISO 16IRM 1.75 ISO 16IRM 2.00 ISO		VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR
		16 ELM	16ELM 1.25 ISO 16ELM 1.5 ISO 16ELM 1.75 ISO 16ELM 2.00 ISO		VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR
		16 ILM	16ILM 1.25 ISO 16ILM 1.5 ISO 16ILM 1.75 ISO 16ILM 2.00 ISO		VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR
		16 ERM - UN	16ERM 16 UN 16ERM 14 UN 16ERM 12 UN		VARGUS / ISCAR VARGUS / ISCAR VARGUS / ISCAR

Health, Safety and Environment Plan

We ensure that all tools, materials and equipment used in the performance/delivery of the works are in good condition and are capable of performance of their intended functions without any detrimental [harmful] effect to safety, health or the environment as well as complying with all applicable statutory [fixed] requirements.

We take responsibility for the discipline of our employees, sub-contractors and agents to ensure that they perform their duties in a safe, orderly, clean and environmental-friendly manner.

We maintain highest standards of environmental care recognizing the impact of plant site activities.

We follow and comply with the environmental policy at site by: Complying with legislation [laws collectively] and whatsoever possible exceeding minimum legal requirements.

We comply with general rules as prevailing at the site like hygiene and safety environment, permit to work, personal protective equipment etc.

We carry out basic health screening of our staff deployed and keep copy of reports. Apart from statutory needs, additional precautions are taken by us as directed by plant health center.

We provide to our workmen [as and when necessary] protective clothing and safety aids such as helmets, gumboots, safety shoes, hand gloves, earplugs, nose muffs, first aid box with kit etc.