

Catalogue STN

GENERAL ENDMILL 2/4 FLUTES / เ็นมิล หัวตัด 2/4 ฟัน

SHEET 1

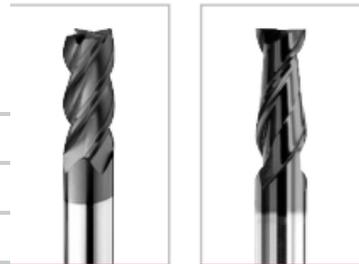
Features

- The flutes are designed for large chip evacuation
- Suitable for Key slots (P9 Tolerance)
- Versatile Geometry and Carbide grade
- Eccentric relief design for extra stability
- Four fluted end mills are suitable for shoulder milling.
- end mills are suitable for machining 50-55 Hrc

SHEET 2

Tolerance

| |
|-----------------|
| Diameter |
| Range |
| $1 \leq d < 8$ |
| $0 / -0.02$ |
| $8 \leq d < 18$ |
| $0 / -0.03$ |
| $18 \leq d$ |
| $0 / -0.04$ |



| | | |
|----------------------|--|--------------|
| MG 0.6µm | | |
| AT COATING | | λ 35° |

GENERAL ENDMILL LONG SHANK 2/4 FLUTES / เ็นมิล 2/4 ฟัน หัวตัดแบบก้านยาว

Features

- For deep reach in mold and dies.
- Excellent for machining P20 and die steel materials.
- Versatile geometry and carbide grade.
- Eccentric relief design for extra stability.
- Prime choice for high feed side milling strategies with the help of cad cam software's from (Eg. Vollumill, Mastercam , Solid Works and Dell Cam).

Tolerance

| |
|-----------------|
| Diameter |
| Range |
| $3 \leq d < 8$ |
| $0 / -0.02$ |
| $8 \leq d < 18$ |
| $0 / -0.03$ |
| $18 \leq d$ |
| $0 / -0.04$ |



| | | | |
|----------------------|--|--------------|---------------------|
| MG 0.6µm | | | LS SERIES |
| AT COATING | | λ 35° | |

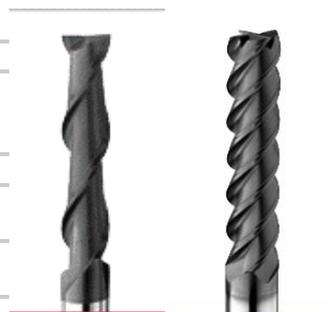
GENERAL ENDMILL LONG FLUTES LENGHT 2/4 FLUTES / เ็นมิล 2/4 ฟัน หัวตัดแบบคมก้นยาว

Features

- Specially designed long fluted end mills for machining deep walls and cavities on various old and dies used in the Aerospace and Automobile industry.
- Unique geometry for uninterrupted cuts.
- Low co-efficient PVD coatings desired for longer tool life.
- Vibration free machining is possible using the right feeds and speeds.

Tolerance

| |
|-----------------|
| Diameter |
| Range |
| $3 \leq d < 8$ |
| $0 / -0.02$ |
| $8 \leq d < 18$ |
| $0 / -0.03$ |
| $18 \leq d$ |
| $0 / -0.04$ |



| | | |
|----------------------|--|--------------|
| MG 0.6µm | | |
| AT COATING | | λ 35° |

ENDMILL LONG FLUTES LENGHT 6/8 FLUTES / เ็นมิล หัวตัด 6/8 ฟัน

Features

Tolerance



Excellent choice for finishing and super finishing in shoulder milling operations.
 Can be used in roughing operations with low radial engagements. If higher feed rates are required we can also use trochoidal strategy.
 Multi teeth design in 6 Flutes and 8 Flutes for super finishing of walls.
 Eccentric relief design for extra stability.

AT coated end mills are suitable for machining up to 55 Hrc.

| | | |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Diameter |  |  |
| Range | | |
| 1≤d<8 | | |
| 0 / -0.02 | | |
| 8≤d<18 | | |
| 0 / -0.03 |  |  |
| 18≤d |  |  |
| 0 / -0.04 | |  |

GENERAL BALL ENDMILL 2/4 FLUTES / เ็นมิล หัวบอล 2/4 ฟัน

Features

Ideal surface finished achieved by using precision geometry and superior coating technology.
 High resistance to wear and heat due to superior coating film hardness and helps resistance to oxidation.
 High welding resistance due to reduced co-efficient of friction during cutting.
 Ideal for high efficiency machining of moulds.
 end mills are suitable for machining 50-55 Hrc

Application : Standard end mills for slot milling and form copying.

For milling of Cast iron, malleable cast iron, steel, steel casting, heat-resisting steel and plastics in design and profile manufacturing.

| | | |
|------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SHEET 2 | | |
| Tolerance | | |
| Diameter |  |  |
| Range | | |
| 1≤d<8 | | |
| 0 / -0.02 | | |
| 8≤d<18 | | |
| 0 / -0.03 | | |
| 20≤d | | |
| 0 / -0.04 |  |  |
| |  |  |
| | |  |

GENERAL Ball Nose End Mills - Long Shank 2/4 FLUTES / เ็นมิล หัวบอล 2/4 ฟัน แบบก้านยาว

Features

Solid Carbide ball nose end mills used with AT coating and micro grain cemented carbide with optimized geometry.
 Extremely suitable for deep milling applications like cavities or wall milling.
 Longer tool life without chipping compared to competitor end mills.
 Excellent fracture resistant even with long over hang.
 Higher productivity even for roughing and semi roughing operations.

| | | |
|------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Tolerance | | |
| Diameter |  |  |
| Range | | |
| 1≤d<8 | | |
| 0 / -0.02 | | |
| 8≤d<18 | | |
| 0 / -0.03 | | |
| 20≤d | | |
| 0 / -0.04 |  |  |
| |  |  |
| | |  |
| | |  |

Corner Radius End Mills 2/4 FLUTES / เ็นมิลแบบมีมุม R

Features

Increased feed rates and larger depth of cuts are possible with Corn star end mills giving higher cutting efficiency while cutting .
 Innovative geometry designed to suit maximum wear resistance.
 Accurate ball and corner radius finish enables right cutting efficiency and longer tool life.

| | | |
|------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Tolerance | | |
| Diameter |  |  |
| Range | | |
| 1≤d<8 | | |
| 0 / -0.02 | | |
| 8≤d<18 | | |

0 / -0.03



Corner Radius End Mills - Long Shank 2/4 FLUTES/ เ็นมิลแบบมีมุม R ก้านยาว

Features

Increased feed rates and larger depth of cuts are possible with Corn star end mills giving higher cutting efficiency while cutting.
 Innovative geometry designed to suit maximum wear resistance.
 Accurate ball and corner radius finish enables right cutting efficiency and longer tool life.

Tolerance

Diameter

Range

1≤d<8

0 / -0.02

8≤d<18

0 / -0.03



LS
SERIES

Flat Tapered End Mills 2 FLUTES / เ็นมิลเทเปอร์ 2 ฟัน

Features

Various cutting angles are offered as per customers request or after referring to special customer drawings.
 These tools are widely used in automobile industry, Turbine blade manufacturing, wood industry and furniture industry too.
 Taper end mills are manufactured in Ball and Corner radius forms too.

Tolerance

Diameter

Range

1≤d<8

0 / -0.02



A STAR FOR ALUMINUM

A Star 45°

End Mills For Aluminum - Regular Series 2/3 Flutes / เ็นมิลสำหรับอลูมิเนียม 2/3 ฟัน

Features

Unique Flute geometry for excellent chip disposal.
 Improved vibration resistance due to unique cutting edge geometry.
 Can be used under a wide range of conditions without vibrations.
 High productivity machining for aluminium alloys.

Tolerance

Diameter

Range

1d<8

0 / -0.02

8≤d<18

0 / -0.03

20≤d

0 / -0.04



A Star 55°

End Mills For Aluminum - Regular Series 2-3 Flutes / เ็นมิลสำหรับอลูมิเนียม 2/3 ฟัน แบบก้านยาว

Features

- Unique Flute geometry for excellent chip disposal.
- Improved vibration resistance due to unique cutting edge geometry.
- Can be used under a wide range of conditions without vibrations.
- High productivity machining for aluminium alloys.

Tolerance

| |
|-----------|
| Diameter |
| Range |
| 1d<8 |
| 0 / -0.02 |
| 8≤d<18 |
| 0 / -0.03 |
| 20≤d |
| 0 / -0.04 |



X SERIRES FOR HARDNESS ≤60 HRC GERERAL PERPOSE X SERIES FOR HARDNESS 60 HRC / รุ่น X SERIRES

| ISO code | USA code | Grain Size | Cobalt Percentage | | Density | | | Hardness | |
|----------|----------|------------|-------------------|--|---------|------|------|----------|--|
| | | | Co(%) | | g/cm3 | HV10 | HV30 | HRA | |
| K20-K30 | C-2 | 0.4µm | 12.0 | | 14.1 | 1760 | 1730 | 92.7 | |

GENERAL ENDMILL 2/4 FLUTES / เ็นมิล หัวตัด 2/4 ฟัน

Features

- The flutes are designed for large chip evacuation
- Suitable for Key slots (P9 Tolerance)
- Versatile Geometry and Carbide grade
- Eccentric relief design for extra stability

Tolerance

| |
|-----------|
| Diameter |
| Range |
| 1≤d<8 |
| 0 / -0.02 |



Four fluted end mills are suitable for shoulder milling.

AT coated end mills are suitable for machining up to 55 Hrc

| | | | |
|-----------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8≤d<18 | SMG 0.4μm |  |  |
| 0 / -0.03 | AT COATING |  | λ 35° |
| 18≤d | | | |
| 0 / -0.04 | | | |

Flat End Mills - Long Shank Series 2/4 Flutes / เส้นมิลหัวตัด 2/4 ฟัน แบบก้านยาว

Features

For deep reach in mold and dies.

Excellent for machining P20 and die steel materials.

Versatile geometry and carbide grade.

Eccentric relief design for extra stability.

Prime choice for high feed side milling strategies with the help of cad cam software's from (Eg. Vollumill, Mastercam , Solid Works and Dell Cam).

Tolerance

| |
|-----------|
| Diameter |
| Range |
| 3≤d<8 |
| 0 / -0.02 |
| 8≤d<18 |
| 0 / -0.03 |
| 18≤d |
| 0 / -0.04 |



| | | | |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|
| SMG 0.4μm |  |  | LS SERIES |
| AT COATING |  | λ 35° | |

Flat End Mills - Long Shank Series 2/4 Flutes / เส้นมิลหัวตัด 2/4 ฟัน แบบคมกัดยาว

Features

Specially designed long fluted end mills for machining deep walls and cavities on various old and dies used in the

Unique geometry for uninterrupted cuts.

Low co-efficient PVD coatings desired for longer tool life.

Vibration free machining is possible using the right feeds and speeds.

Tolerance

| |
|-----------|
| Diameter |
| Range |
| 3≤d<8 |
| 0 / -0.02 |
| 8≤d<18 |
| 0 / -0.03 |
| 18≤d |
| 0 / -0.04 |



| | | |
|---------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SMG 0.4μm |  |  |
| AT COATING |  | λ 35° |

Multi Fluted End Mills - Regular Series 6/8 Flutes / เส้นมิลหัวตัด 6/8 ฟัน

Features

Excellent choice for finishing and super finishing in shoulder milling operations.

Can be used in roughing operations with low radial engagements. If higher feed rates are required we can also Multi teeth design in 6 Flutes and 8 Flutes for super finishing of walls.

Tolerance

| |
|----------|
| Diameter |
| Range |
| 1≤d<8 |



Eccentric relief design for extra stability.

AT coated end mills are suitable for machining up to 55 Hrc.

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| 0 / -0.02 |  |
| 8≤d<18 | SMG 0.4μm  |
| 0 / -0.03 |  |
| 18≤d | AT COATING  |
| 0 / -0.04 | |

Varistar (≤60 HRC)

Unequal Helix and Pitch - HPC 35°/42° / เ็นมิล 4 ฟันสำหรับ Helix 35°/42°

Features

The main benefit is prevention of Vibration with irregular helix end mills.
Excellent vibration resistance for machining difficult to cut materials and applications with long overhang.
High productivity and efficiency.
Eccentric relief design for extra stability

| Tolerance | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 3≤d<8 | |
| 0 / -0.02 | |
| 8≤d<18 | |
| 0 / -0.03 | SMG 0.4μm  |
| 18≤d | AT COATING  |
| 0 / -0.04 |  |

GENERAL BALL ENDMILL 2/4 FLUTES / เ็นมิล หัวบอล 2/4 ฟัน

Features

Ideal surface finished achieved by using precision geometry and superior coating technology.
High resistance to wear and heat due to superior coating film hardness and helps resistance to oxidation.
High welding resistance due to reduced co-efficient of friction during cutting.
Ideal for high efficiency machining of moulds

| Tolerance | |
|-----------|-----------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 1≤d<8 | |
| 0 / -0.02 | |
| 8≤d<18 | |
| 0 / -0.03 | SMG 0.4μm  |
| 20≤d |  |
| 0 / -0.04 | AT COATING  |

GENERAL Ball Nose End Mills - Long Shank 2/4 FLUTES / เ็นมิล หัวบอล 2/4 ฟัน แบบก้านยาว

Features

Solid Carbide ball nose end mills used with AT coating and micro grain cemented carbide with optimized geometry.
Extremely suitable for deep milling applications like cavities or wall milling.
Longer tool life without chipping compared to competitor end mills.
Excellent fracture resistant even with long over hang.
Higher productivity even for roughing and semi roughing operations

| Tolerance | |
|-----------|---------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 1≤d<8 | |
| 0 / -0.02 | |
| 8≤d<18 | |
| 0 / -0.03 | |
| 20≤d | |

| | | | | |
|-----------|----------------------|--|--|---------------------|
| 0 / -0.04 | SMG 0.4µm | | | LS SERIES |
| | AT COATING | | | |

CONER RADIUS (BULL NOSE) 2/4 FLUTES / เอ็นมิลมี R 2/4 ฟัน

Features

Increased feed rates and larger depth of cuts are possible with Corn star end mills giving higher cutting efficiency while cutting .

Innovative geometry designed to suit maximum wear resistance.

Accurate ball and corner radius finish enables right cutting efficiency and longer tool life.

| Tolerance |
|-----------|
| Diameter |
| Range |
| 1≤d<8 |
| 0 / -0.02 |
| 8≤d<18 |
| 0 / -0.03 |



| | | |
|----------------------|--|--|
| SMG 0.4µm | | |
| AT COATING | | |

CONER RADIUS (BULL NOSE) LONG SHANK 2/4 FLUTES / เอ็นมิลมี R 2/4 ฟัน แบบก้านยาว

Features

Increased feed rates and larger depth of cuts are possible with Corn star end mills giving higher cutting efficiency while cutting.

Innovative geometry designed to suit maximum wear resistance.

Accurate ball and corner radius finish enables right cutting efficiency and longer tool life.

| Tolerance |
|-----------|
| Diameter |
| Range |
| 1≤d<8 |
| 0 / -0.02 |
| 8≤d<18 |
| 0 / -0.03 |



| | | | |
|----------------------|--|--|---------------------|
| SMG 0.4µm | | | LS SERIES |
| AT COATING | | | |

Microstar FM (≤60 HRC)

Features

Tolerance

Superbly designed micro end mills are manufactured under controlled temperatures to ensure correct angles and radius are maintained from 0.2mm onwards.

These micro end mills are suitable for PCB Boards, micro machining in mold and dies, watches and other various industries.

Even at higher speeds and feeds, they are very stable in quality due to very stable PVD coatings.

| Tolerance | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 1≤d<8 | |
| 0 / -0.02 | |
| 8≤d<18 |    |
| 0 / -0.03 | |
| 18≤d |    |
| 0 / -0.04 | |

Microstar BM (≤60 HRC)

Features

Superbly designed micro end mills are manufactured under controlled temperatures to ensure correct angles and radius are maintained from 0.2mm onwards.

These micro end mills are suitable for PCB Boards, micro machining in mold and dies, watches and other various industries.

Even at higher speeds and feeds, they are very stable in quality due to very stable PVD coatings.

| Tolerance | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 1≤d<8 | |
| 0 / -0.02 | |
| |   |
| |    |

Hulkstar (≤60 HRC)

Features

New innovative cutting edge geometry design improves fracture resistance and ensures high efficiency machining enabling longer tool life when machining difficult to cut materials.

Cross sectional geometry for improved chip disposal and a 35-degree helix angle contributes to a massive reduction of cutting resistance.

SF and AT coating contributes good resistance to heat and excellent machining performance with HULKSTAR end mills.

| Tolerance | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 6≤d<18 | |
| 0 / -0.03 |     |
| 20≤d | |
| 0 / -0.04 |    |

Superstar (≤ 60 HRC)

Slotting & Pocketing End Mills – Regular Series

Features

Type : N, right hand cutting, straight shank according to DIN 6535 HA

Design Features : 3 fluted Centre high cutting, helix angle 45°

CNC grinding.

Applications : Solid carbide high performance end mills for efficient machining of titanium, inconel, stainless steel. Recommended for plunge milling. Excellent for slotting & pocketing in stainless steel

| Tolerance | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diameter |  |
| Range | |
| 1≤d<8 | |
| 0 / -0.02 | |
| 8≤d<18 | |
| 0 / -0.03 | |
| 18≤d | |
| 0 / -0.04 |    |

material.



Micro Ball Nose End Mills - Regular Series 2 Flutes / มอลเส้นมิลเขียนตัวหนังสือ 2 ฟัน

Features

Superbly designed micro end mills are manufactured under controlled temperatures to ensure correct angles and radius are maintained from 0.2mm onwards.

These micro end mills are suitable for PCB Boards, micro machining in mold and dies, watches and other various industries.

Even at higher speeds and feeds, they are very stable in quality due to very stable PVD coatings

Tolerance

Diameter

Range

$1 \leq d < 8$

0 / -0.02



SMG
0.4 μ m



AT
COATING

λ 30°

