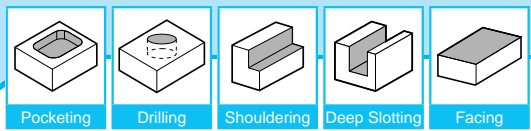

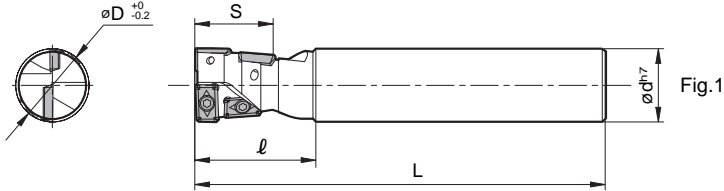
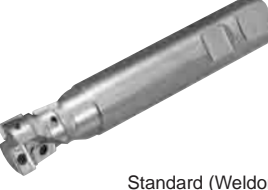


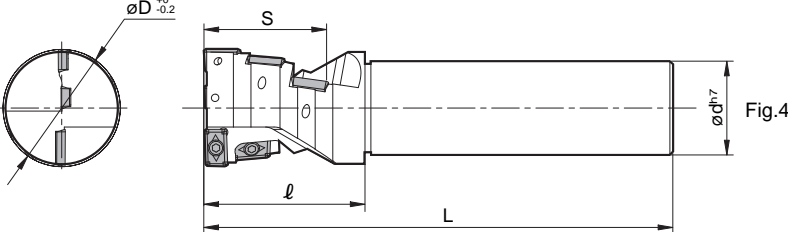

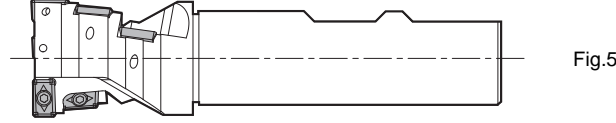

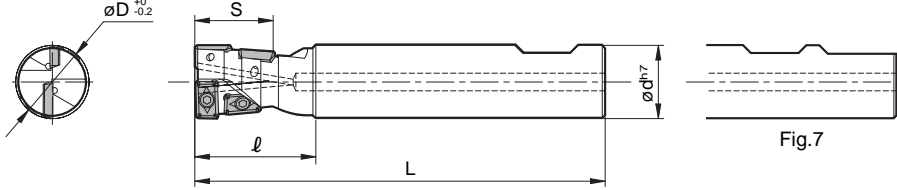


Multi-Function Cutting Endmill




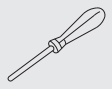
MEZ-G

 <p>Standard (Straight)</p>	 <p>Fig.1</p>
 <p>Standard (Weldon)</p>	 <p>Fig.2</p> <p>Fig.3</p>
 <p>Long Head (Straight)</p>	 <p>Fig.4</p>
 <p>Long Shank (Straight)</p>	 <p>Fig.5</p>
 <p>With Coolant Hole (Weldon)</p>	 <p>Fig.6</p> <p>Fig.7</p>




M

Milling

● Toolholder Dimensions

Description	Std.	No. of Inserts	No. of Flutes	Dimension (mm)					Rake Angle (°)		Drawing	Spare Parts		
				øD	ød	L	ℓ	S	A.R.	R.R.		Clamp Screw	Wrench	
														
Cylindrical	MEZ 16-S16G	●	4	2	16	16	120	31	16	+9°	Fig.1	-5°	SB-2040TRG	DTM-6
	20-S20G	●			20	20	130	33	21			-4°	SB-2555TRG	DT-8
	25-S25G	●			25	25	140	40	25			-5°	SB-3070TRG	DT-10
	32-S32G	●			32	32	150	50	33			-2°	SB-4070TRG	DT-15
	40-S32G	●			39	32	160	55	39			-3°	SB-3070TRG	DT-10
	50-S42G	●			49	42	170	70	51			-2°	SB-4070TRG	DT-15
Weldon	MEZ 16-S16-120GW	●	4	2	16	16	120	31	16	+9°	Fig.2	-5°	SB-2040TRG	DTM-6
	20-S20-130GW	●			20	20	130	33	21			-4°	SB-2555TRG	DT-8
	25-S25-140GW	●			25	25	140	40	25			-5°	SB-3070TRG	DT-10
	32-S32-150GW	●			32	32	150	50	33			-2°	SB-4070TRG	DT-15
	40-S32-160GW	●			39	32	160	55	39			-3°	SB-3070TRG	DT-10
	50-S40-170GW	●			49	40	170	70	51			-2°	SB-4070TRG	DT-15
Cylindrical Long Head	MEZ 16-S16-140HG	●	4	2	16	16	140	51	16	+9°	Fig.1	-5°	SB-2040TRG	DTM-6
	20-S20-150HG	●			20	20	150	53	21			-4°	SB-2555TRG	DT-8
	25-S25-170HG	●			25	25	170	70	25			-5°	SB-3070TRG	DT-10
	32-S32-180HG	●			32	32	180	80	33			-2°	SB-4070TRG	DT-15
Cylindrical Long Shank	MEZ 16-S16-190G	●	4	2	16	16	190	61	16	+9°	Fig.1	-5°	SB-2040TRG	DTM-6
	20-S20-200G	●			20	20	200	63	21			-4°	SB-2555TRG	DT-8
	25-S25-220G	●			25	25	220	80	25			-5°	SB-3070TRG	DT-10
	32-S32-230G	●			32	32	230	90	33			-2°	SB-4070TRG	DT-15
	40-S32-240G	●			39	32	240	55	39			-3°	SB-3070TRG	DT-10
	50-S42-250G	●			49	42	250	70	51			-2°	SB-4070TRG	DT-15
Weldon With Coolant Hole	MEZ 16-S16-80GW-H	●	4	2	16	16	80	31	16	+9°	Fig.6	-5°	SB-2040TRG	DTM-6
	20-S20-85GW-H	●			20	20	85	33	21			-4°	SB-2555TRG	DT-8
	25-S25-95GW-H	●			25	25	95	40	25			-5°	SB-3070TRG	DT-10
	32-S32-110GW-H	●			32	32	110	50	33			-2°	SB-4070TRG	DT-15

● Applicable Inserts

Description	Applicable Inserts  M19	
	 Tough Edge	
MEZ 16-S16(-...)	NDMT 080208ER-DH	NDMT 080208ER-D
20-S20(-...)	NDMT 10T208ER-DH	NDMT 10T208ER-D
25-S25(-...)	NEMT 120308ER-DH	NEMT 120308ER-D
32-S32(-...)	NEMT 16T308ER-DH	NEMT 16T308ER-D
40-S32(-...)	NEMT 120308ER-DH	NEMT 120308ER-D
50-S42(-...)	NEMT 16T308ER-DH	NEMT 16T308ER-D

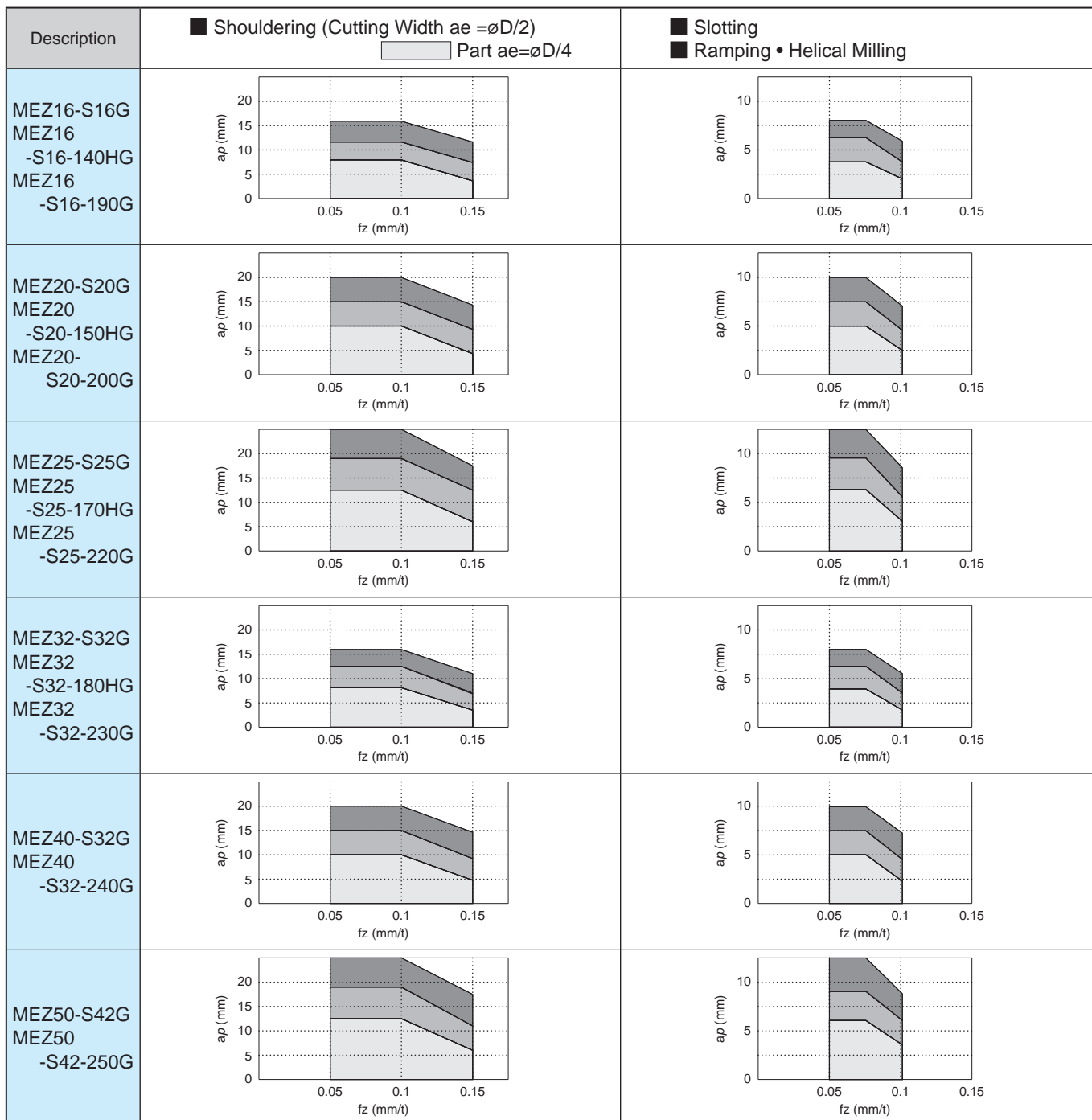
Multi-Function Cutting Endmill

◆ Cutting Performance of Silver Drill Mill / Drill Mill

[Workpiece Material: C50 (S50C)]

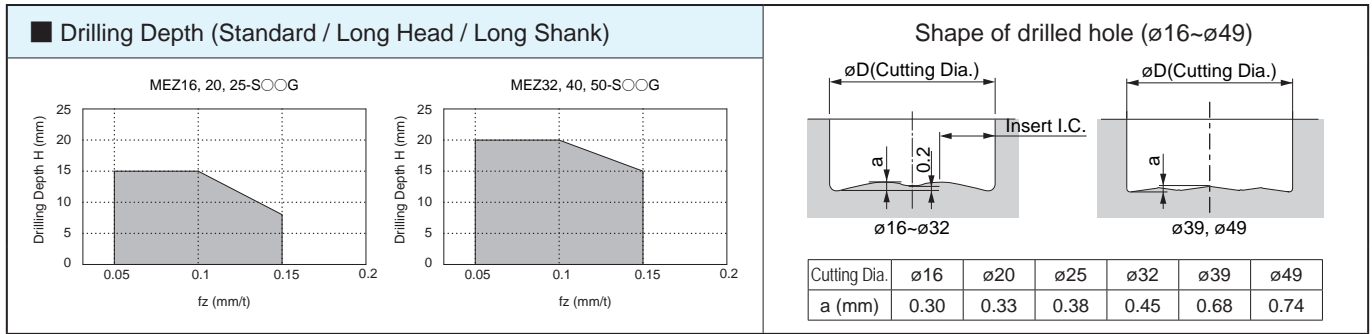
Cutting Dia.	Description	Overhang Length: A (mm)			Cutting Dia.	Description	Overhang Length: A (mm)			Shape
ø16	MEZ16-S16G	31	[~61]	(Not Recommended)	ø32	MEZ32-S32G	50	[~80]	(Not Recommended)	
	MEZ16-S16-140HG	-	~61	[~91]		MEZ32-S32-180HG	-	80	[~110]	
	MEZ16-S16-190G	-	61	~91		MEZ32-S32-230G	-	90	~110	
ø20	MEZ20-S20G	33	[~63]	(Not Recommended)	ø40	MEZ40-S32G	55	[~85]	[~115]	
	MEZ20-S20-150HG	-	~63	[~93]		-	-	-	-	
	MEZ20-S20-200G	-	63	~93		MEZ40-S32-240G	55	~85	~115	
ø25	MEZ25-S25G	40	[~70]	(Not Recommended)	ø50	MEZ50-S42G	70	[~100]	[~130]	
	MEZ25-S25-170HG	-	70	[~100]		-	-	-	-	
	MEZ25-S25-220G	-	80	~100		MEZ50-S42-250G	70	~100	~130	

• When using in [] dimension, be careful that the chucking length to the shank may get too short.



M

Milling



◆ How to use the Silver Drill Mill (MEZ-G) and Drill Mill (MEZ) effectively

Drilling

- Step feeding is recommended for good chip control (Depth approx. 1mm).
- Drill depth should be under 0.5D. (D: Drilling Dia.)
Use compressed air during drilling.
- PR660 is recommended for heavy drilling.

Endmilling

- Tough edge insert is recommended for high load endmilling. (High feed rate, large ap)
Use a low cutting force insert to prevent chattering.

N(D/E)MT...ER-DH
(Tough Edge)

N(D/E)MT...ER-D
(Low Cutting Force)

Ramping • Helical Milling

- Ramping angle is recommended to be under 6°.
- Plunge depth per revolution when helical milling should be under 1/2D. Use compressed air when drilling.

Others

- Down-Cut milling is recommended for the improvement of tool life and surface finish.
- Compressed air is recommended.

(Overview)
Up-Cut

(Overview)
Down-Cut

Whitish Surface
Chattering may occur
Rapid Wear

Better Surface
Less Chattering
Longer Life

◆ Recommended Cutting Conditions

Workpiece Material	fz (mm/t)		Recommended Insert Grade (Cutting Speed Vc : m/min)										
			Cermet			MEGACOAT		PVD Coated Carbide			Carbide		
	Drilling	Shouldering Slotting	TN60	TN100M	TC60	PR1225	PR1210	PR630	PR730	PR660	PR905	PW30	KW10
Stainless Steel	0.05~0.12	0.05~0.15		☆ 120~200		★ 120~220	-	☆ 120~200	☆ 120~200	☆ 100~180	-	-	-
Carbon Steel	0.05~0.2	0.05~0.2		★ 120~200		★ 120~250	-	☆ 120~200	☆ 120~200	☆ 100~180	-	-	-
Alloy Steel	0.05~0.2	0.05~0.2		★ 100~180		★ 100~220	-	☆ 100~180	☆ 100~180	☆ 80~150	-	-	-
Mold Steel	0.05~0.12	0.05~0.15		★ 100~180		★ 80~180	-	☆ 80~150	☆ 80~150	☆ 60~130	-	-	-
Cast Iron	0.05~0.2	0.05~0.2		-		-	★ 100~220	-	-	-	☆ 100~180	-	☆ 80~150
Non-ferrous Metals	0.05~0.2	0.05~0.2		-		-	-	-	-	-	-	-	★ 100~300

• Drilling conditions should be calculated as one flute line. Step feed (0.5-0.1mm) is recommended.
• Coolant is recommended when drilling stainless steel / cast iron.
• PR660 is recommended for heavy drilling.

★ : 1st Recommendation ☆ : 2nd Recommendation

