CAT.SUMIREAMER.8/18

SUMITOMO
CARBIDE - CBN - DIAMOND

Indexable Reamers

SumiReamer SR Series

Ultra High-Efficiency and High-Precision Machining.
Maximum Feed Rate of 7,500mm/min.

Overhang lengths can be adjusted according to the extension arbor and shank in combination.

P K M N S H

SUMITOMO ELECTRIC GROUP

■ Characteristics

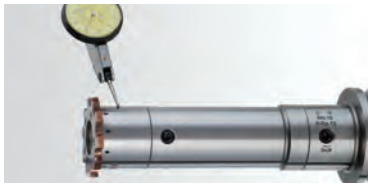
- Achieves efficiency through high speed, high feeding ability (v_c=50~500m/min, f=0.4~1.2mm/rev)
- Compatibility with a wide range of cutting conditions allows less strict cutting conditions and coolant control
- Minimal cut edge length design eliminates biting and tearing for improved quality and reliability
- Adoption of indexable cutting edge design improves reliability of quality and tool life, eliminating variability in tool life among regrind inserts.
- Cut edge diameters available from ø7.6 to ø140.6mm.
- Easy insert replacement
- Flexible tool overhang lengths possible by combining the modular extension/ arbor and holder with correction mechanism

A. Simplified measurement method (for measuring the short taper of the head)

The short taper on the head where the inserts are attached provides the easiest and most accurate measurement before attaching the inserts.

B. High-accuracy cutting edge runout measurement method
(for measuring the arc land on the inserts)

Measuring the lands immediately after the outer diameter of the insert has been chamfered eliminates all attachment errors. This allows for the most accurate runout measurement.



C. Simplified measurement method (for measuring the outer diameter of the head)

The high precision machined outer diameter of the shank holder provides a good estimate of the runout measurement.

- Can be used as a self-guiding tool by attaching guide pads to the holder

■ Application Examples

Work	 Cylinder Barrel	 Connection Rod	 Sliding Yoke	 Front Axle	 Special holder with guide pads Control Valve
Work Material	FCD600	Forged S55C	S45C	Forged S58C	Forged S55C
Holder Identification Insert Identification	SRD19-12-115 SRG17.0H7-A01-T1212R1	SRD36-25-170 SRG29.0H7-A01-F0512R1	SRD19-12-115 SRG16.02Q+3-3-C01-F0512R1	SRD29-20-240 SRL28.0H7-B01-F0512R1	Special holder with guide pads SRL14.0H7-B01-F0512R1
Hole (mm)	ø17.0	ø29.0	ø16.02	ø28.0	ø14.0
Hole Diameter Tolerance	H7	H7	H7	H7	H7
Surface Roughness (µm)	Rz10.0	Ra0.8	Ra3.2	Ra3.2	Ra1.6
Circularity (µm)	5	2	–	5	5
Cylindricity (µm)	5	4	–	5	5
No. of Teeth	6	8	6	8	6
v_C (m/min)	148	120	150	60	100
n (min^{-1})	2,772	1,318	2,982	682	2,230
f_Z (mm/t)	0.20	0.15	0.10	0.075	0.10
v_f (m/min)	3,326	1,582	1,789	409	1,368
a_p (mm)	0.10	0.15	0.15	0.15	0.15
Wet / Dry	Wet	Wet	Wet	Wet	Wet
Life, etc	57.9m	30.52m	–	15.8m	–