

# JOINT TOOLS

Various types of cutting tool heads and  
exchangeable, depending on applications

■ Joint Tools ■

JO-CES

JO-CDS

JO-PEQ

JO-CESV

JO-CDSV

JO-PEQV

JO-CDS

JO-CSQM

JO-NCSDV

**New**

JO-C-CDS

JO-C-PEQV



## Features

### 1. Increased fastening power

Special screw threads widen the contact face and strengthen the fastening power.



special screw threads



### 2. Severe run-out tolerance

Severe run-out tolerance requirements are achievable thanks to the cone shape at joining portion

Joining portion (mating with cone face)



### 3. High rigidity

Powerful tightening assures the high rigidity, and enables an even load transmission during cutting operations.

Joint tool



## Lineup



How to use: Refer to YouTube.



# Specification

**JO-CES**  
**JO-CESV**  
 High helix flute A type 60°

JO-CES	Size	Shank Dia. $D_s$	Overall length $L$	$l_2$	$l$	H	Applicable holder Shank Dia.	Code No.
JO-CES	4×60°	10	37.5	27.5	4.5	8	14	JCE4.0
	5×60°	12	43.5	32.5	5.5	10	16	JCE5.0
	6×60°	16	48.5	34.5	6.5	13	20	JCE6.0
JO-CESV	4×60°	10	37.5	27.5	4.5	8	14	JVCE4.0
	5×60°	12	43.5	32.5	5.5	10	16	JVCE5.0
	6×60°	16	48.5	34.5	6.5	13	20	JVCE6.0

**JO-CDS**  
**JO-CDSV**  
 Low helix flute A type 60°

JO-CDS	Size	Shank Dia. $D_s$	Overall length $L$	$l_2$	$l$	H	Applicable holder Shank Dia.	Code No.
JO-CDS	4×60°	10	37.5	27.5	4.5	8	14	JCY4.0
	5×60°	12	43.5	32.5	5.5	10	16	JCY5.0
	6×60°	16	48.5	34.5	6.5	13	20	JCY6.0
JO-CDSV	4×60°	10	37.5	27.5	4.5	8	14	JVCY4.0
	5×60°	12	43.5	32.5	5.5	10	16	JVCY5.0
	6×60°	16	48.5	34.5	6.5	13	20	JVCY6.0

**JO-CDS**  
 Low helix flute B type 60°

JO-CDS	Size	Shank Dia. $D_s$	$D_2$	Overall length $L$	$l_2$	$l$	H	Applicable holder Shank Dia.	Code No.
JO-CDS	2 × 60°	10	5	37.5	27.5	3	8	14	JC22.0
	2.5 × 60°	12	6.5	43.5	32.5	3.5	10	16	JC22.5
	3 × 60°	16	8	48.5	34.5	4	13	20	JC23.0

**JO-CSQM**  
 Countersinks (90°, for boring machine)

JO-CSQM	Size	Shank Dia. $D_s$	$D_c$	Overall length $L$	$l_2$	$l$	H	No. of cutting edges	Applicable holder Shank Dia.	Code No.
JO-CSQM	16 × 90°	10	3.2	37.5	27.5	20	8	5	14	JCS016QM9
	20 × 90°	12	4	43.5	32.5	24	10	5	16	JCS020QM9

**JO-PEQ**  
**JO-PEQV**  
 Point drills

JO-PEQ	Size	Shank Dia. $D_s$	$(D_c)$	Overall length $L$	$l_2$	H	Applicable holder Shank Dia.	Code No.
JO-PEQ	10×3	10	3	37.5	27.5	8	14	JPE010Q
	12×3.5	12	3.5	43.5	32.5	10	16	JPE012Q
	16×4	16	4	48.5	34.5	13	20	JPE016Q
JO-PEQV	10×3	10	3	37.5	27.5	8	14	JVPE010Q
	12×3.5	12	3.5	43.5	32.5	10	16	JVPE012Q
	16×4	16	4	48.5	34.5	13	20	JVPE016Q

**JO-NCSDV**  
 Starting drills

JO-NCSDV	Size	Shank Dia. $D_s$	Overall length $L$	$l_2$	H	Applicable holder Shank Dia.	Code No.
JO-NCSDV	10×90°	10	37.5	27.5	8	14	JVCS-D010Q
	12×90°	12	43.5	32.5	10	16	JVCS-D012Q
	16×90°	16	48.5	34.5	13	20	JVCS-D016Q

## Carbide Series

**JO-C-CDS**  
 Low helix flute A type 60°

JO-C-CDS	Size	Shank Dia. $D_s$	Overall length $L$	$l_2$	$l$	H	Applicable holder Shank Dia.	Code No.
JO-C-CDS	4×60°	10	37.5	27.5	4.5	8	14	JCCY4.0
	5×60°	12	43.5	32.5	5.5	10	16	JCCY5.0
	6×60°	16	48.5	34.5	6.5	13	20	JCCY6.0

**JO-C-PEQV**  
 Point drills

JO-C-PEQV	Size	Shank Dia. $D_s$	$(D_c)$	Overall length $L$	$l_2$	H	Applicable holder Shank Dia.	Code No.
JO-C-PEQV	10×3	10	3	37.5	27.5	8	14	JVCPE010Q
	12×3.5	12	3.5	43.5	32.5	10	16	JVCPE012Q
	16×4	16	4	48.5	34.5	13	20	JVCPE016Q

# Specifications

**Holder**

Type $l_2$	Shank Dia. $D_s$	Overall length $L$	$l$	H	Applicable cutting edge Shank Dia.	Code No.
150mm	14	122.5	36	12	10	JH1014M
	16	117.5	37	14	12	JH1216M
	20	115.5	41	17	16	JH1620M

  

Type $l_2$	Shank Dia. $D_s$	Overall length $L$	$l$	H	Applicable cutting edge Shank Dia.	Code No.
200mm	14	172.5	36	12	10	JH1014N
	16	167.5	37	14	12	JH1216N
	20	165.5	41	17	16	JH1620N

\*1 After connecting the cutting edge with holder, overall length will be 150 mm long and 200 mm long.  
 \*2 When attaching these tools to milling chucks, never hold the tools at  $l$  portion.  
 \*3 Screw threads change depending on size. Please select the holder of adaptable shank dia.

## Remarks

- ① To avoid injuries, do not touch the cutting edge with bare hand. Wear gloves when exchanging the cutting edges.



- ② Use special tools to remove/replace the cutting edge. Use spanners (JIS B4630) for removing/exchanging the cutting edges. For spanner's width size, refer to the H size (shown in back page). Tightening torque: Take special care, otherwise excessive tightening may cause breakage on cutting edge.



(reference) Tightening torque [N-m]

Adaptable holder Shank dia (mm)	Tightening torque
14	5
16	10
20	30

- ③ Fix the holder firmly when removing/replacing cutting edges. Do not exchange while the holder is not fixed firmly. The spanner can get loose from the tool notch and Do not remove/replace cutting edges while the holder is not firmly held in position. Otherwise the spanner may get loose from the tool notch and thus can cause injury.

## Warning

- ◆ Tools may shatter if broken. The wearing of eye protection glass is strongly advised in the vicinity of their use.
- ◆ The correct using conditions and handling of our tools are essential in securing maximum useful tool life and hazard free operation.
- ◆ The wearing of gloves is forbidden as the gloves may entangle with turning tools.
- ◆ Tools may hurt the users' feet when falling off. The safety shoes should be put on at all times.
- ◆ While fitting the tools to machine spindles and/or sleeves, care should be taken to avoid subjecting them to shock or impact.
- ◆ Check that the workpieces are properly seated and securely held in the chuck before switching on machine power.
- ◆ Do not use a tool whose cutting edges are worn-out or chipped severely.
- ◆ Tools may generate extreme heat during use. Fire protection is strongly recommended.

Changes may occur without advance notice.