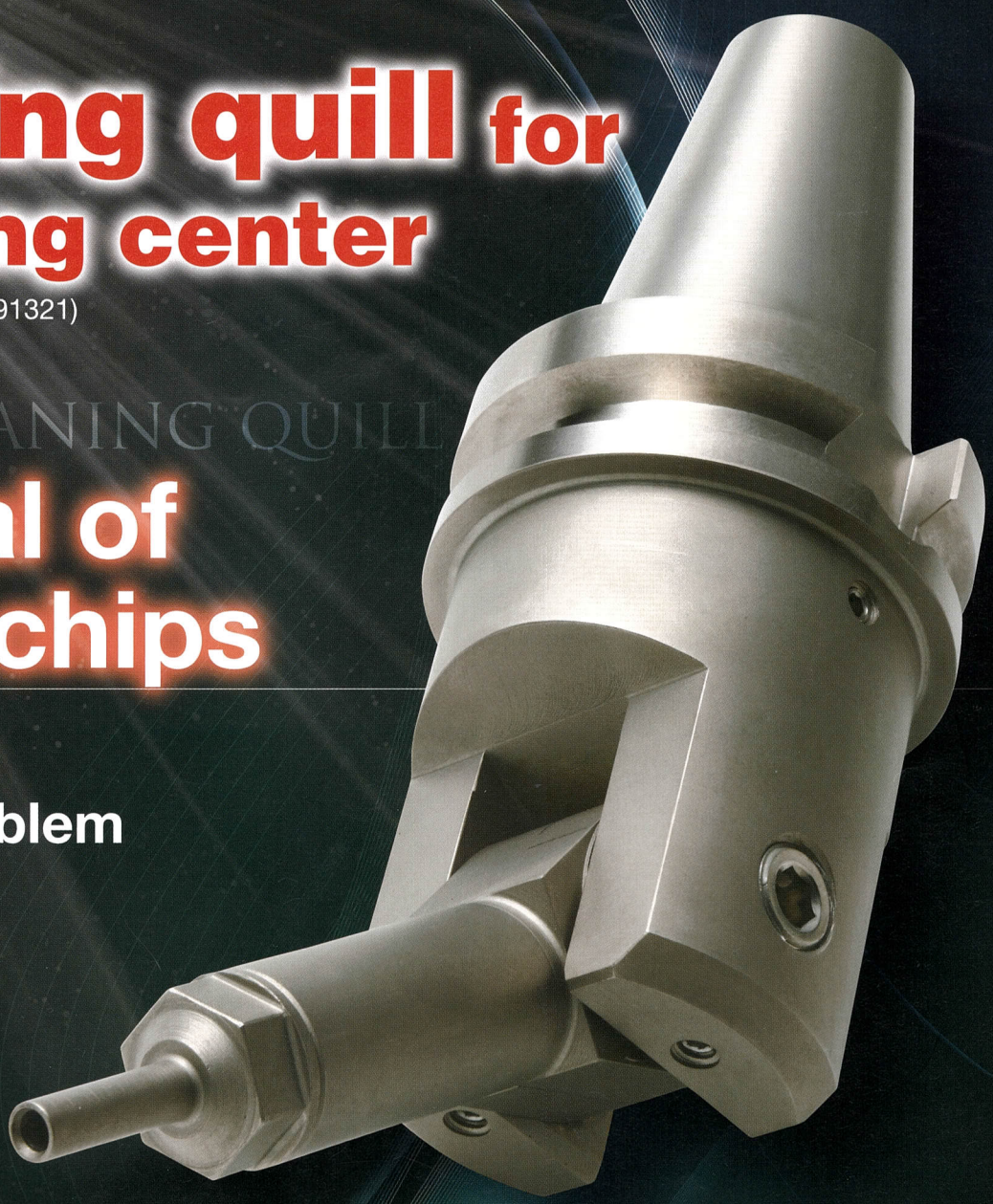
GiGA Selection

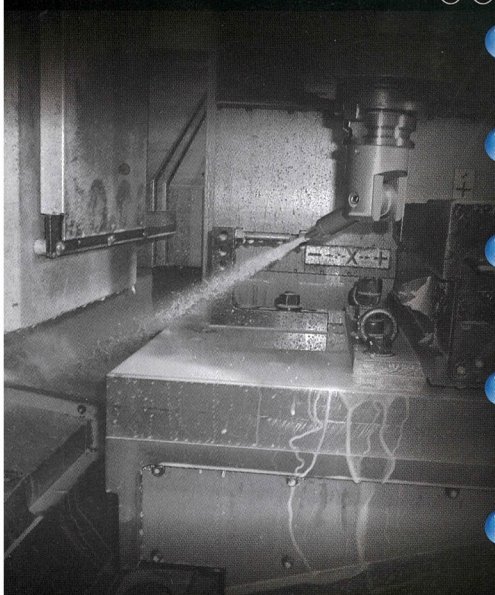
Cleaning quill for machining center

(Utility model registration No. 3191321)



Removal of cutting chips

Solutions to the eternal problem in the machine tools history!



Do you have problems such as:

- Cutting chips are accumulated intensively in some internal section or gaps of the jig.
- Existing machining centers do not have enough coolant to clean off cutting chips.
- In the horizontal machining center, cutting chips are accumulated between the standard pad and positioning pin of the horizontal installation jig.
- Cutting chips behind the jig cannot be cleaned off well. Cutting chips are attached to the inside of the cover of the machining center.
- Cleaning by hand is a hard task.

Voices from the fields. inspiration of design!

Removal of cutting chips is an eternal theme in the machine tool history.

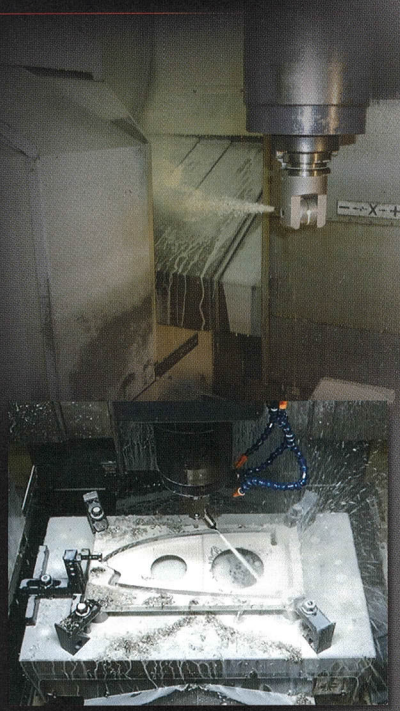
To overcome the problem, we have come up with the following thoughts.

- Removing 100% of chips may be difficult, but removing a few % of them is possible.
- Is it possible to remove the cutting chips attached to the inner cover of the machining center as much as possible?
- Removing more cutting chips accumulated in the space between each jig.
- Reducing cleaning work as much as possible.
- Reducing damage, corrosion, malfunction of the machine caused by cutting chips.
- Center through coolant used only for processing, could be used for more purposes.

This product was developed based on these thoughts.

Features

- The product can be installed on existing machining centers.(Model with through coolant function BT/HSK holder type)
- The product is stored in the magazine, and attached to the main spindle by ATC to be used.
- The angle of the head nozzle is variable between 0~±110°.(Steplessly fixed)
- A fixing bar for variable nozzle angle adjustments is installed in the machine.
  The arm angle can be changed automatically by applying the arm to the fixing bar with the main axis movement X·V·Z.
- The head nozzle swings maximum 110°on one side, and that enables coolant to reach even the forward side of the main axis.
- As directly mounted onto the spindle, the product rotates according to rotation of the main axis, and performs spraying repeatedly based on the movement on the X and Y axis.
- When a horizontal machining center is used, cutting chips can be removed orthogonally with the nozzle angle of 90°.
- The product can be used from the day it was installed, without modifying your machining center. (Set the nozzle angle manually)
- Coolant spray aimed at the flat sections, such as telescopic cover and machine cover in the machining center is highly effective in machine maintenance.
- Various shapes of cutting chips can be removed by changing the head nozzle to a straightforward/ diffusion nozzle (R1/8).



Solution

Use this product to solve the following problems.

Problem Cutting chips are accumulated intensively in some sections or gaps of the jig.

Solution **Direct the movable head nozzle to the accumulated area and remove cutting chips by spraying coolant intensively.**
(A better effect is obtained by doing this while the accumulation amount is small)

Problem The existing machining centers do not have enough coolant to wash away the cutting chips.

Solution **As coolant is sprayed to the required area with pinpoint accuracy, only less coolant will be OK.**

Problem In a horizontal machining center, cutting chips are accumulated between the standard pad and positioning pin of the horizontal installation jig.

Solution **Cutting chips are removed by changing the orientation of the movable head nozzle and spraying coolant to the accumulated area with pinpoint accuracy.**

Problem Cutting chips behind the jig cannot be cleaned off well.
Cutting chips are attached to the inside of the cover of the machining center.

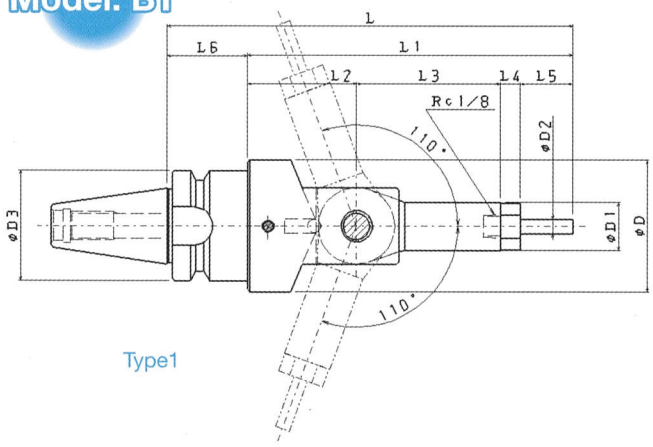
Solution **The product can spray hard-to-reach places.**

Problem Cleaning by hand is a hard task.

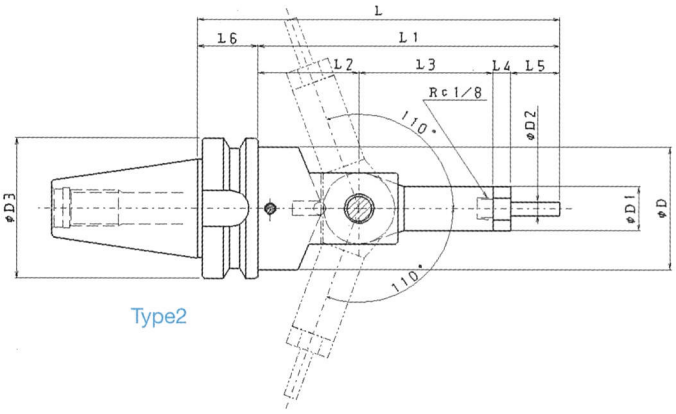
Solution **Set a cleaning cycle in out of working hours, such as break time or after work, and clean inside the machine regularly.**

Specifications

Model: BT

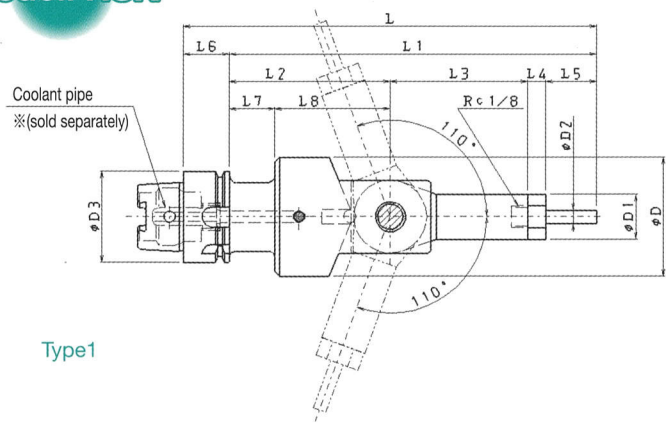


Type1

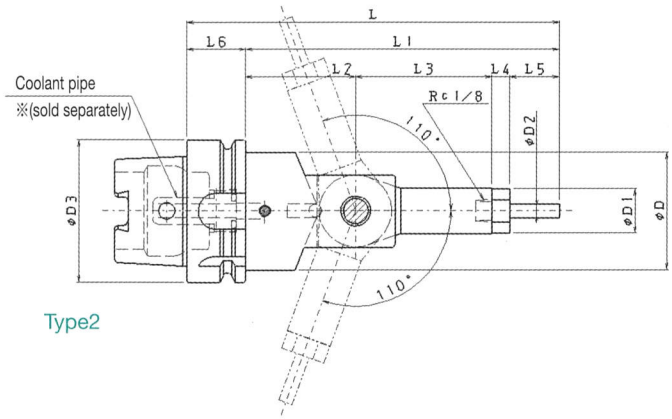


Type2

Model: HSK



Type1



Type2

Model: BT

unit : mm

Model		Type	φD	φD1	φD2	φD3	L	L1	L2	L3	L4	L5	L6	L7	L8	N.W.(kg)
BT30	CQB30-00	1	55	20	6	46	169	135.5	45.5	60	8	22	33.5	—	—	1.5
BT40	CQB40-00	2				63	162.5	135.5	45.5				27			1.9
BT50	CQB50-00					100	193.5	155.5	65.5				38			4.7

Model: HSK

unit : mm

Model		Type	φD	φD1	φD2	φD3	L	L1	L2	L3	L4	L5	L6	L7	L8	N.W.(kg)
HSK40	CQH40-00	1	52	20	6	40	180.5	160.5	70.5	60	8	22	20	20	50.5	1.3
HSK50	CQH50-00					50	186.5						26			1.6
HSK63	CQH63-00	2				63	164.5	138.5	48.5					—	—	1.6
HSK100	CQH10-00					100	182.5	153.5	63.5				29			3.3

Recommended operating pressure : 1.5 ~ 2.5MPa(Max. 3.5 MPa)

(Cautions)

1)Be sure to use the arm to change the coolant discharge angle.
When using a fixing device, that is not supplied, to change the angle, apply the arm to the fixing device.
2)The supplied nozzle is a straightforward nozzle. To diffuse coolant for some purpose, use a commercially available nozzle (R1/8).
3)Plunger is used to check the arbor and arm are in the straight line, or not.
4)When cutting chips, etc. enter the gap of the plunger, clean them off.
5)It is recommended to clean the coolant flow path regularly.
6)Use the pull studs that meet the specifications of your machining center.
7)If this product is disassembled, please note that the restoration is not guaranteed.
8)Check the adjacent tools when bending the arm at 90 degrees and storing it in the ATC magazine.
9)The coolant pipe is sold separately, which is also commercially available.

For inquiry about the products on this catalog, contact us below.

DAH JIN IND. CO.
多 珍 産 業
SIHWA TOOL CENTER #17-303, 1367-1,
JUNGWANG-DONG, SIHUNG-SHI,
KYUNGKI-DO, KOREA
TEL : (031) 4 3 0 - 2 8 2 0
FAX : (031) 4 3 0 - 3 2 9 4
E-mail : dahjinkim@hanmail.net
나는 주님의 축복의 통로다 http : //dahjin.kr

●All information in this catalog is as of March, 2016.
●Dimensions, specifications, prices, etc. are subject to change or production may be terminated without notice for improvement.
●The colors of the products in this catalog may slightly differ from those of the actual products due to the printing process.