

# Coolant Inducer

NT's fluid heads deliver coolant right to the tool tip on machines without coolant through the spindle capabilities to flush out chips and improve cutting performance.

## Collet chuck Type HDC-CS



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## Milling chuck Type CT-CS



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### Features

Delivers coolant right to the tool tip on machines without coolant through the spindle capabilities. Flushes out chips and improves cutting performance.

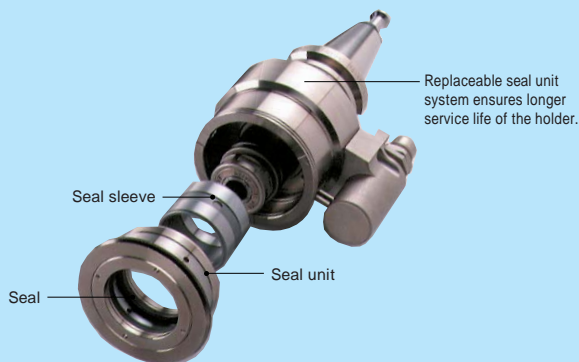
Coolant at the tool tip extends tool life. Prevents tool breakage and flushes out troublesome heat and chips.

NT uses multi-seal construction, sealed high speed roller bearings, and a tough corrosion resistant surface treatment for precise trouble-free operation and long life.

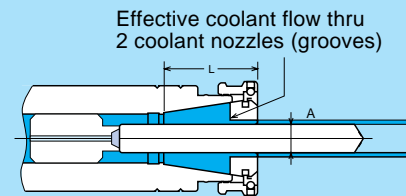
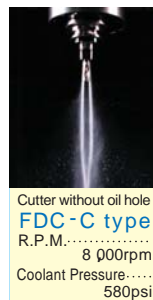
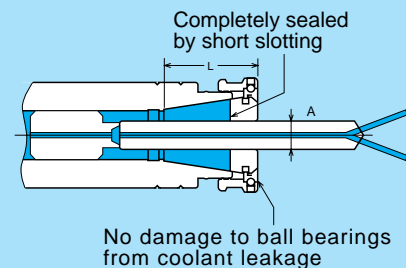
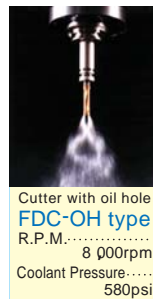
### Specifications

Type	MAX RPM	MAX Coolant	Weight lbs
HDC-CS	HDC07Type 8000	290psi	BT50-HDC22Type 17.9
CT-CS	CT16Type 6000	290psi	BT50-CT32 Type 22.1

Replaceable seal unit: The seal unit can be replaced easily for quick and low-cost maintenance of the holder.



### Collet chuck Type Coolant supply

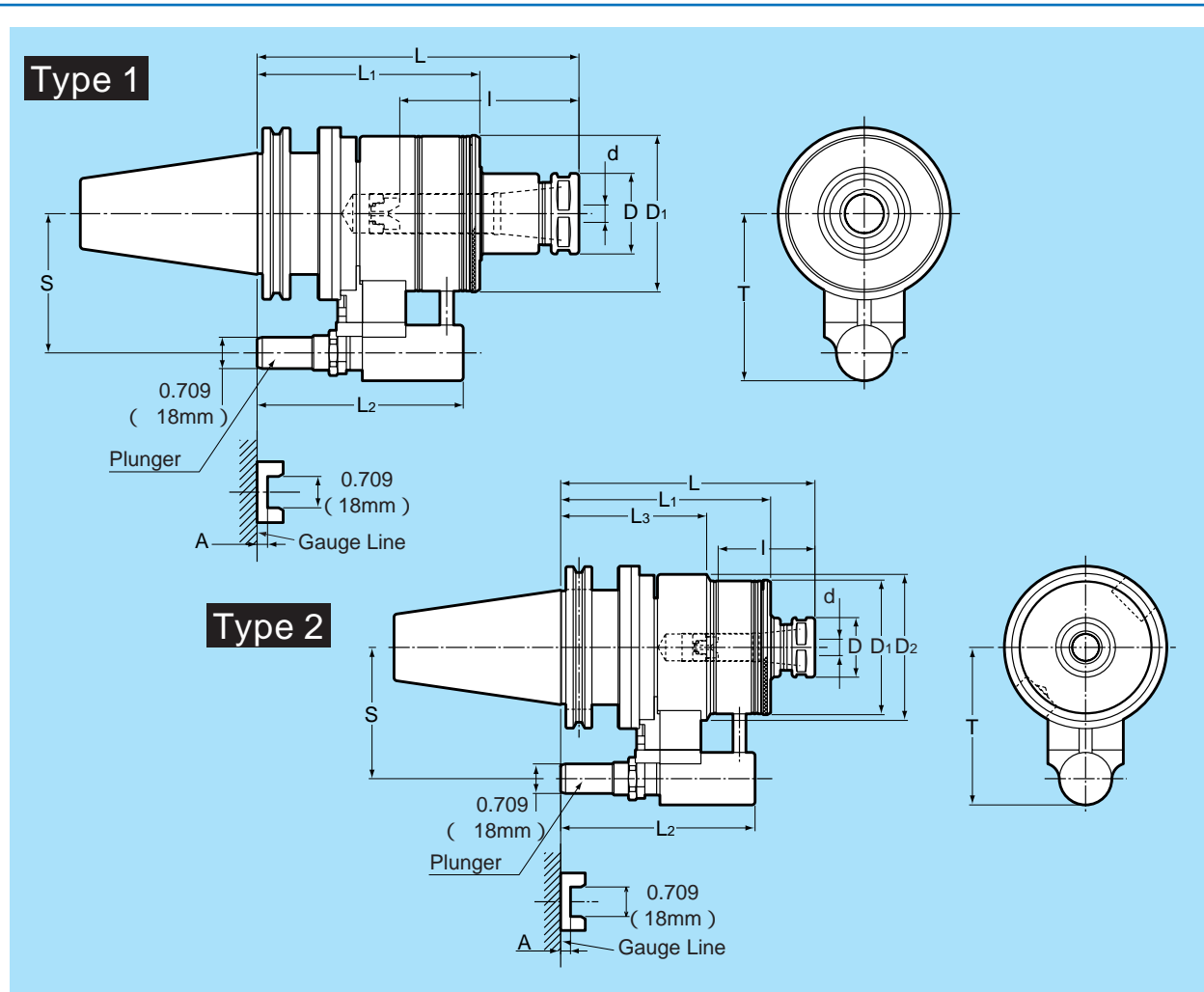


### Actual example at our user's

Holder	Cutting conditions		Service life (Length of use)	
	Revolutions	Coolant pressure	2 4 6 8 10 12 (months)	
New type BT40-HDC16-135CS	2,000rpm	145psi	10 months	
Old type BT40-CDC16-135			4 months	

Change of seal units  
Bearings will not seize.  
Seizure of bearings

# Coolant Inducer CAT / HDC - CS



Part Number	Type	d	L	B	I	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	D	D <sub>1</sub>	D <sub>2</sub>	T	S	MAX rpm
CAT40	-HDC16-150CS-*	2	0.236 ~ 0.630	5.910	0.0 ~ 1.496 ~ 0.236 2.559	5.079	4.704	3.543	1.417	3.228	3.504	3.189	2.559 (65mm)	6000
	-HDC22-165CS-*	1	0.236 ~ 0.866	6.500	0.0 ~ 1.860 ~ 0.315 4.055	-	-	-	1.811	3.543	-	-	-	5000
CAT50	-HDC16-155CS-*	2	0.236 ~ 1.630	6.100	0.0 ~ 1.496 ~ 0.236 2.559	5.039	4.665	3.504	1.417	3.228	3.504	3.780	3.150 (80mm)	6000
	-HDC22-185CS-*	1	0.236 ~ 0.866	7.280	0.0 ~ 1.860 ~ 0.315 4.055	-	-	-	1.811	3.543	-	-	-	5000

Maximum coolant pressure is 290 psi (2Mpa).

Seal Unit shown on page 150.

Type	Plunger				
	No.1	No.2	No.3	No.4	No.5
CAT40 HDC	A +0.398 ~ +0.787	A +0.004 ~ +0.394	A -0.390 ~ 0.0	A -0.783 ~ -0.394	A -1.177 ~ -0.787
CAT50 HDC	+0.713 ~ +1.102	+0.319 ~ +0.797	-0.075 ~ +0.315	-0.469 ~ +0.079	-0.862 ~ -0.472

NT standard A dimension is 0.236" (6mm).

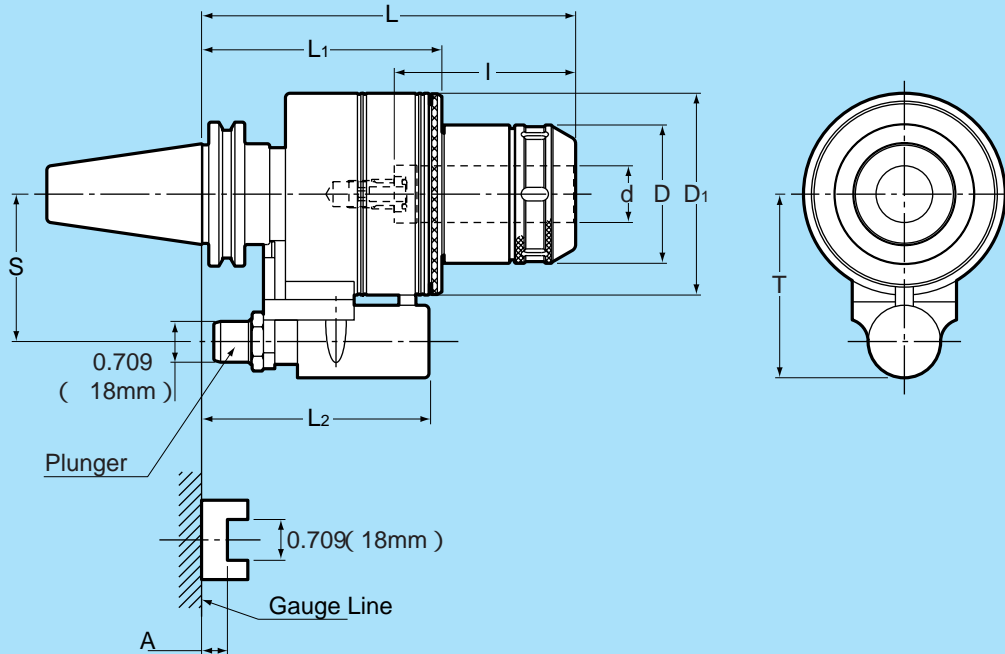
Positioning block shown on page 142.

**Ordering Example** CAT40-HDC22-165CS- \*  
\* : Plunger No.

Coolant collet and spanner wrench  
(page 46 ~ 50) are sold separately

Model	Nut	Collet	Spanner
HDC16	HDP-16	FDC-16 -OH,-C	S-4L
HDC22	HDP-22	FDC-22 -OH,-C	S-5L

# Coolant Inducer CAT / CT · S - CS



Part Number	d	L	L <sub>1</sub>	L <sub>2</sub>	D	D <sub>1</sub>	D <sub>2</sub>	T	S	MAX rpm	Spanner	
CAT40 -CT0750S-195CS-*	0.750	7.677	2.756	4.923	4.549	2.047	3.543	3.504	3.189	2.559	5000	HS-2-20
CAT40 -CT1250S-195CS-*	1.250	7.677	3.150	5.039	4.587	2.874	3.937	—	3.189	(65mm)	4000	HS-3-32
CAT50 -CT0750S-200CS-*	0.750	7.874	2.756	5.039	4.665	2.047	3.543	3.504	3.780	3.150	5000	HS-2-20
CAT50 -CT1250S-200CS-*	1.250	7.874	3.150	5.118	4.665	2.874	3.937	—	3.780	(80mm)	4000	HS-3-32

Maximum coolant pressure is 290 psi (2Mpa).

Type	Plunger				
	No.1	No.2	No.3	No.4	No.5
CAT40 CT	A	A	A	A	A
CAT50 CT	+0.909 ~ +1.299	+0.516 ~ +0.906	+0.122 ~ +0.512	-0.271 ~ +0.118	-0.665 ~ -0.276

NT standard A dimension is 0.236" (6mm).

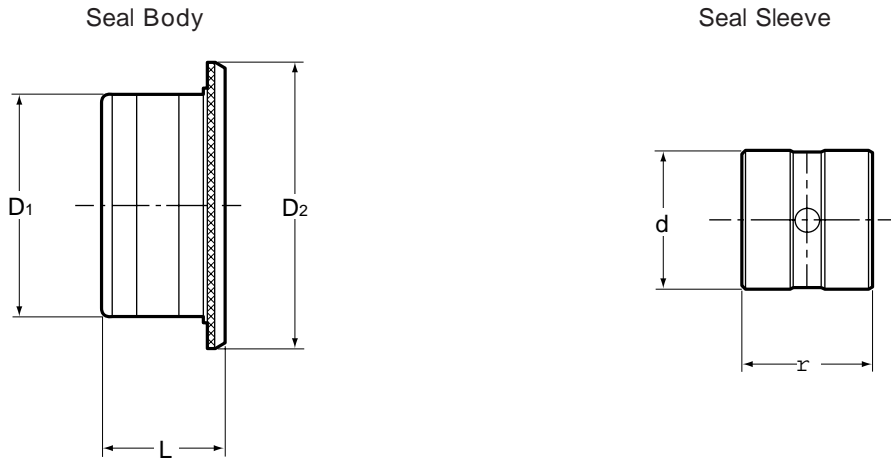
Positioning block shown on page 142.

**Ordering Example**    CAT40-CT1250S-195CS- \*    \* : Plunger No.

Coolant collet and spanner are not included.  
Accessories are shown on page 18 ~ 21.

# Coolant Inducer Seal Unit

1. When replacing the seal unit, you must purchase both the seal body and seal sleeve.



Part Number	Body			Seal Sleeve	
	D1	D2	L	d	r
CS-1	2.205	2.795	1.220	1.378	1.299
CS-2	2.638	3.228		1.772	
CS-3	2.953	3.543		2.165	

Note: Seal body and seal sleeve are made as one unit.

2. When you want to replace 2 seals only, we recommend you purchase a seal set below.



Part Number	Seal			Seal Sleeve		
	D	L	Qty	d	r	Qty
CS-1P	1.850	0.189	2	1.378	1.299	1
CS-2P	2.244			1.772		
CS-3P	2.638			2.165		

Note: A seal set consists of 2 seals and 1 seal sleeve made as 1 unit.

Note: CT·S-CS Coolant Inducers must be returned to NT USA for seal unit replacement.

## Coolant Inducer



Provides coolant through the tool capabilities on machining centers without coolant through the spindle.  
Flushes out chips and improves cutting performance.