



*High-pressure cleaning tool for machining center* **PAT.P**

# **Boost *Master* BMA**

**NEW**

**CHANGING THE STANDARD  
IN THE MACHINING PROCESS.**

Increased pressure and spray of coolant.  
ATC compatible high pressure cleaning tool.

MAX  
**15MPa**

Increased pressure and spray of coolant. ATC compatible high pressure cleaning tool.

## Remove chips with precision aim.

Remove chips in 0.5 sec (Dia.7, depth 100 mm).

## Consolidate operations and improve work.

No need for high pressure washing machines, Machines are not left idle.

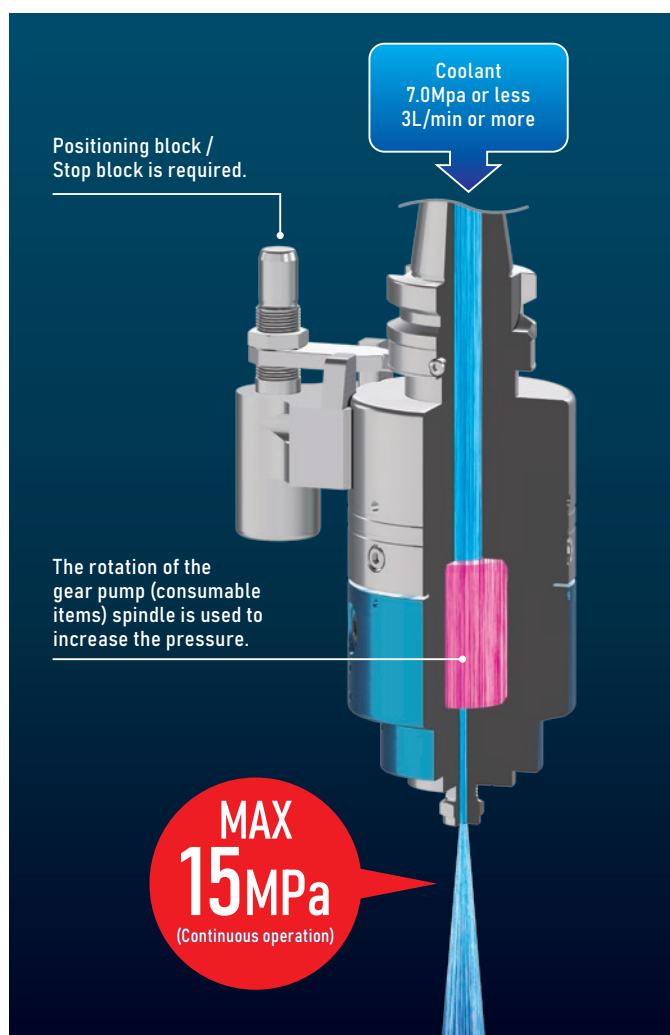
## Implement energy and space saving.

There is no requirement for an extra high-pressure pump or cooling device.

## Improvement of equipment operation.

Reduction of stop loss due to failure, setup performance equivalent to cutting tools.

## Mechanisms



## Specifications

### Recommended Application Environment

Input (M/C output)	Recommended Rotation Speed *1	6,000min <sup>-1</sup>
	Coolant filtration filter	10μm or less is recommended.

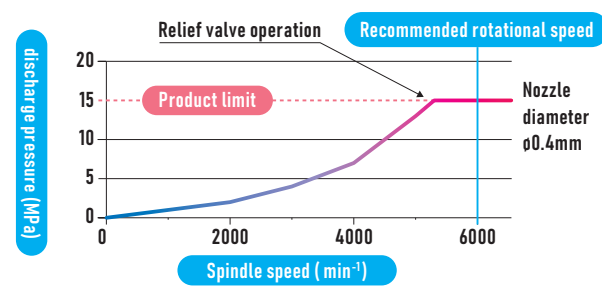
Oil skimmer or other oil removal equipment is recommended.

Do not use this product on machines that process castings. Casting powder in the coolant may significantly reduce the product life.

### Specifications (standard specifications)

Input (M/C output)	Coolant input pressure	7.0MPa or less
	Coolant inflow rate	3L/min or more
	Coolant temperature	40°C or less
Output	Max. coolant discharge pressure	15MPa
	Discharge flow rate (at 15MPa)	1.23L/min
	Standard nozzle hole diameter	0.4 mm
Other	Coolant used	Water-soluble only (Dilution density 10 % or less)

### Spindle speed and discharge pressure

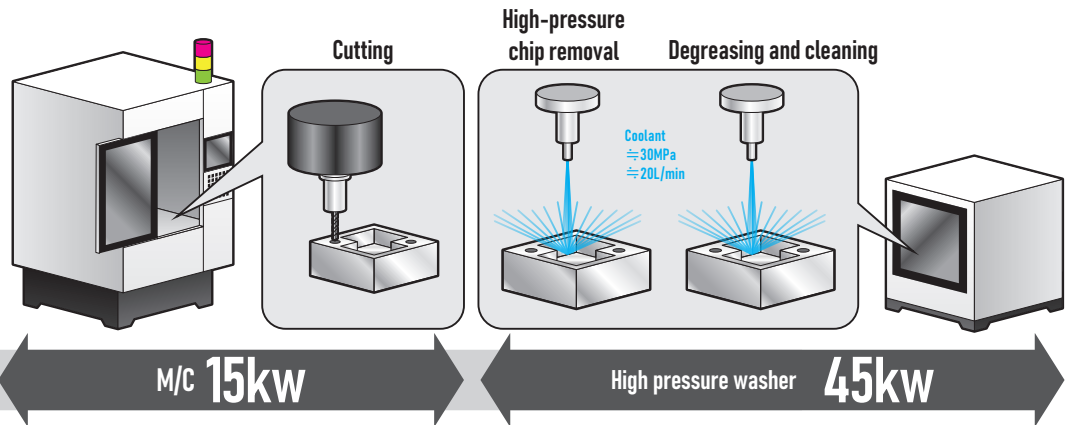


## Example

### Before

Machining and chip removal are performed on separate machines

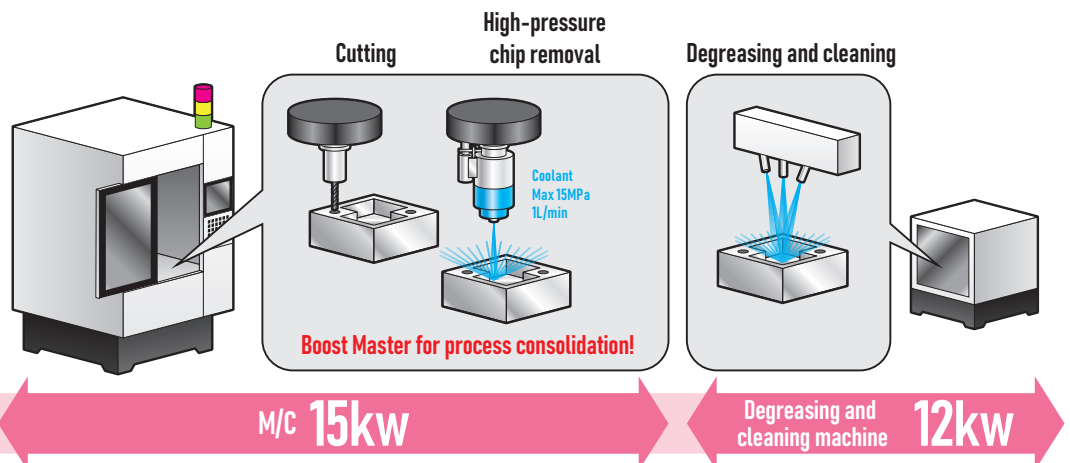
Total **60kw**



### After

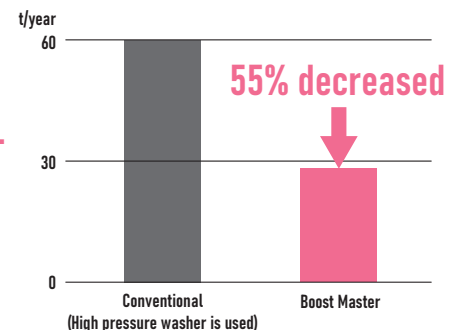
Machining and chip removal are done by one machine

Total **27kw**

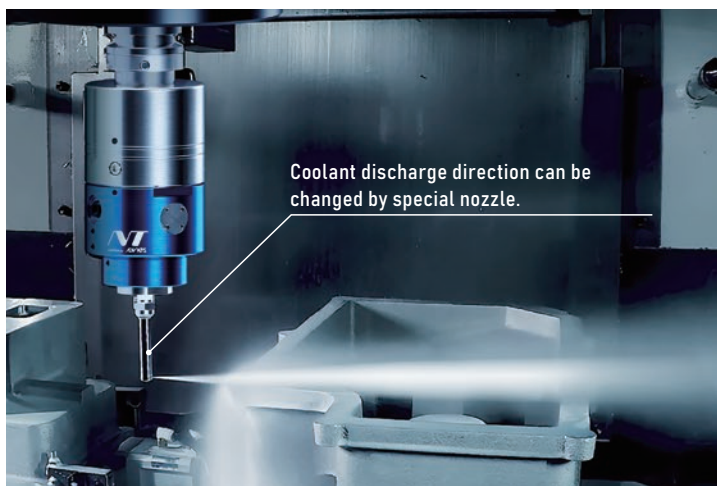


CO2 emissions are decreased as a result of minimizing power use during the cleaning process.

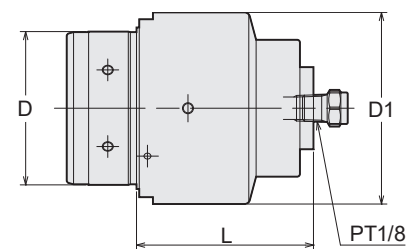
CO2 reduction amount : 33.0t - CO2/year  
Estimated effect amount : 1388,000 yen/year



## Example of special products



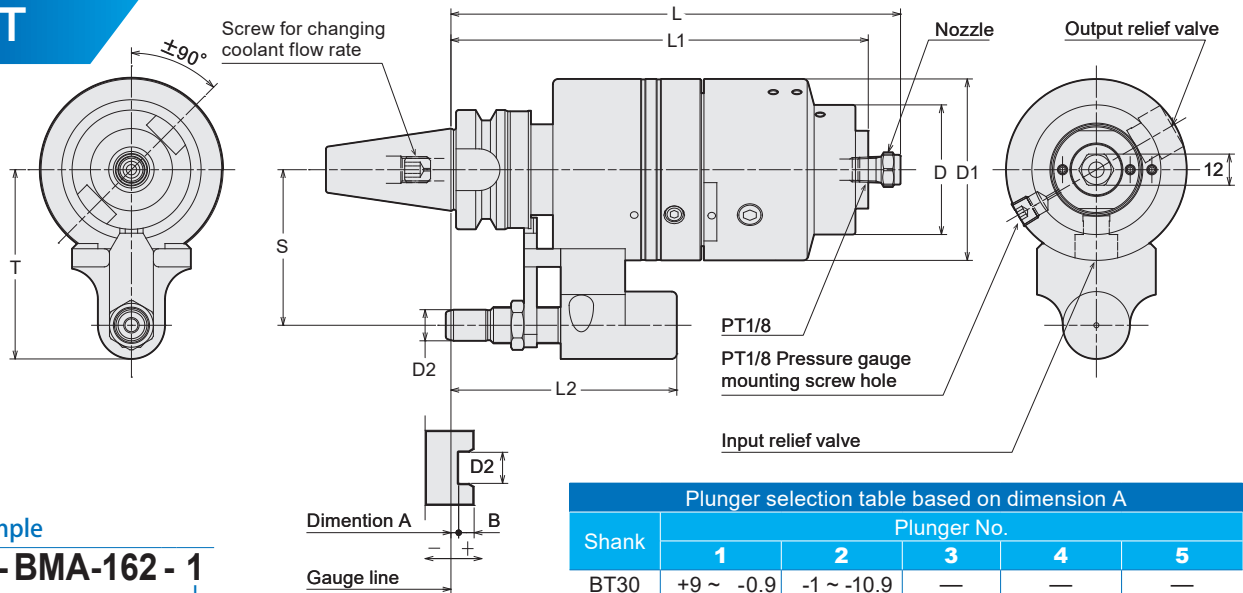
## Replacement pump unit



Code	Model	D	D1	L	Nozzle diameter
2974 00101001	BMA-GP-1	56	70	64.5	0.4

The pump unit is a consumable item. Use a replacement pump unit as needed.

# BT



## Order Example

**BT30 - BMA-162 - 1**

Shank size

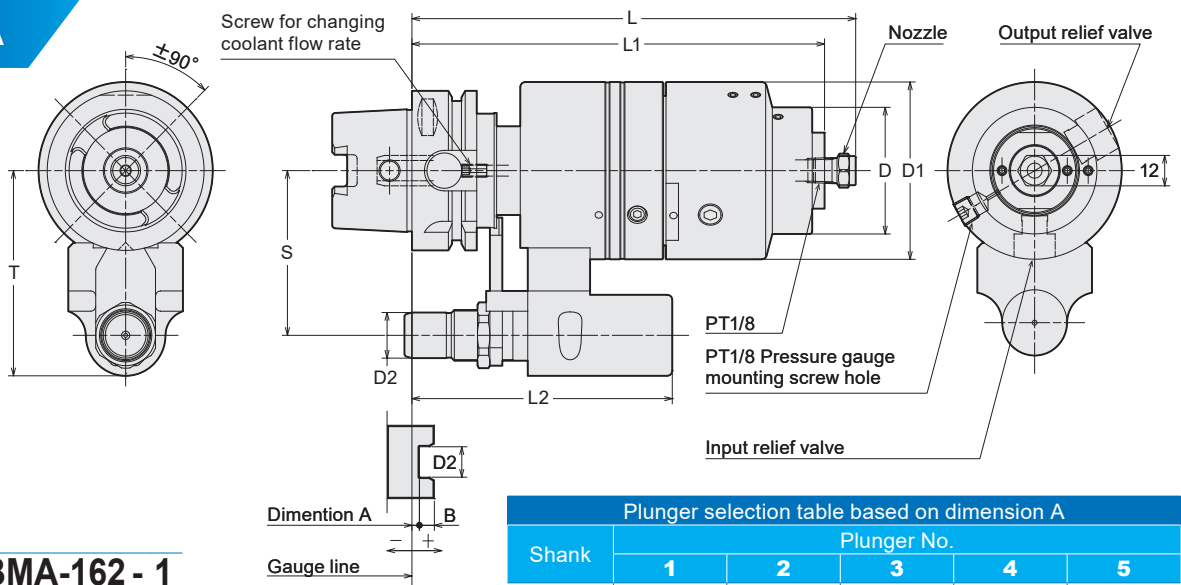
Plunger No.

Plunger selection table based on dimension A					
Shank	Plunger No.				
	1	2	3	4	5
BT30	+9 ~ -0.9	-1 ~ -10.9	—	—	—
BT40	+20 ~ +10.1	+10 ~ +0.1	0 ~ -9.9	-10 ~ -19.9	-20 ~ -29.9
BT50	+28 ~ +18.1	+18 ~ +8.1	+8 ~ -1.9	-2 ~ -11.9	-12 ~ -21.9

Code	Model	D	D1	D2	L	L1	L2	S	T	B	Standard nozzle diameter	kg
2970 0011162*	<b>BT30-BMA-162-*</b>	50	70	12	(174)	162	88	60	73	6	0.4	2.5
2970 0013168*	<b>BT40-BMA-168-*</b>	50	70	18	(179)	168	106	65	81	9	0.4	3.1
2970 0015177*	<b>BT50-BMA-177-*</b>	50	70	18	(188)	177	115	80	96	9	0.4	5.5

1. The pump unit is a consumable item. Use a replacement pump unit as needed.
2. When ordering, enter the product code and the plunger No. in the \* section of the model number.

# HSK-A



## Order Example

**HSK50A - BMA-162 - 1**

Shank size

Plunger No.

Plunger selection table based on dimension A					
Shank	Plunger No.				
	1	2	3	4	5
HSK50A	+12 ~ +2.1	+2 ~ -7.9	—	—	—
HSK63A	+19 ~ +9.1	+9 ~ -0.9	-1 ~ -10.9	-11 ~ -20.9	-21 ~ -30.9
HSK100A	+22 ~ +12.1	+12 ~ +2.1	+2 ~ -7.9	-8 ~ -17.9	-18 ~ -27.9

Code	Model	D	D1	D2	L	L1	L2	S	T	B	Standard nozzle diameter	kg
5940 1410165*	<b>HSK 50A - BMA - 165 - *</b>	50	70	12	(177)	165	91	50	63	6	0.4	2.5
5940 7510166*	<b>HSK 63A - BMA - 166 - *</b>	50	70	18	(178)	166	105	65	81	9	0.4	2.7
5940 7710167*	<b>HSK100A - BMA - 167 - *</b>	50	70	18	(178)	167	105	80	96	9	0.4	4.1

1. The pump unit is a consumable item. Use a replacement pump unit as needed.
2. When ordering, enter the product code and the plunger No. in the \* section of the model number.
3. HSK63A, HSK100A have manual clamp holes in the shank.