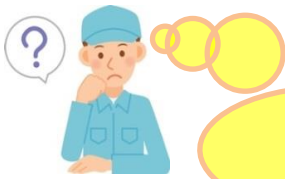
Think threads with YAMAWA

No. 100

Recommendation of HFICT

Cutting tap

【Consultation】



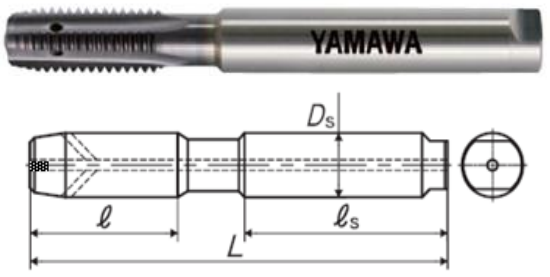
We are in mass production tapping FC250 cast iron with a carbide tap on a machining center. The carbide taps we are using in cast iron are a M10 × 1.5 N-CT FC with a 5 thread chamfer for through holes and a M10 × 1.5 N-CT FC with a 1.5 thread chamfer for blind holes. We have introduced a high-performance machining center with a new internal lubrication system into our mass production line. I would like to further improve the processing efficiency. Other than N-CT FC, are there any coolant through taps you can recommend ?

【Answer】

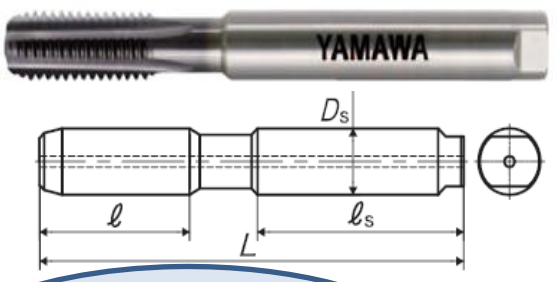
If you are using a synchronous feed + an internal lubrication device and you are expecting much higher performance on your new machining center, I think the Yamawa HFICT-P tap and the HFICT-B tap can help your productivity in ultra high-speed tapping in cast iron using a carbide tap. The HFICT-P is for through holes and has side coolant ports for lubrication distribution. The HFICT-B is for blind holes and has a center through coolant hole in the center of the tap for lubrication distribution. Chips are forcibly discharged by oil pressure from the coolant holes and tapping speed can be processed at 25 to 50 m/min. Please try the HFICT-P and the HFICT-B for your application.

【Description】

Carbide hand tap for through hole tapping with ultra high speeds in cast iron: HFICT-P.



Carbide hand tap for blind hole tapping with ultra high speeds in cast iron: HFICT-B.



The HFICT-P and HFICT-B taps are cemented carbide that can tap cast irons at super high speeds. They are compatible with internal lubrication and by using a mist method to lower the temperature by a cool dry processing method. The HFICT-P utilizes side coolant ports for through hole tapping and it is suitable for cast iron. The HFICT-B utilizes a center through coolant hole shape and is suitable for blind hole tapping of cast iron.

The shank does not have a square end, so please use it in a milling chuck.

Recommended machining conditions;

- **Machine used: complete synchronous feed.**
- **Holder: Ridgid holder.**
- **Tapping length: 2 times or less the threads major diameter.**
- **Tapping speed: For FC cast iron and hard cast iron 25 ~ 50 m/min.**

Dimensions of cemented carbide hand tap for tapping cast iron at super high speeds.

Unit mm

Size	Grade	L	ℓ	ℓs	Ds	Flutes	Chamfer Length	
							HFICT-P	HFICT-B
M6X1	P3	62	19	(40)	6	4	4P	2.5P
M8X1.25	P3	70	22	36	8	4	4P	2.5P
M10X1.5	P3	75	24	37	10	4	4P	2.5P
M10X1.25	P3	75	24	37	10	4	4P	2.5P
M12X1.75	P3	82	29	40	12	4	4P	2.5P
M12X1.5	P3	82	29	40	12	4	4P	2.5P
M12X1.25	P3	82	29	40	12	4	4P	2.5P