

ATC chains

High storage capacity in the tightest of spaces

WIPPERMANN ATC chains have been developed as tool storage and organizing devices for NC/CNC machining centres as well as for storage chains used to construct e.g. reamers or milling tools. The chains are manufactured individually to customers' requirements. The two standard types No. 320 and No. 340 are the basic chains, which can be customised for most applications with tool holding attachments such as SK, HSK and Capto®*.

For small tool attachment systems and other applications ATC chains can be individually developed based on standard roller chains or on a combination of roller chains and double pitch chains respectively.

The chains are designed for holding tools and are used when constructions with e.g. discs are insufficient. Depending on the respective construction (e.g. in case of a meander-shaped design) the chain has a storage capacity of more than 100 tools in one system. ATC chains thus allow for higher storage capacity under the same limited spatial conditions.

Design advantages

- The holding devices in the taper area are fitted with swell-resistant, low-wear plastic inserts ensuring a smooth mounting of the conical surface.
- The axial fixtures have been developed in a way that various dimensions are possible in one chain, e.g. DIN, ISO, ANSI as well as BT. Merely the ball holders must be exchanged respectively.
- By means of several position threads tool orientation may be selected (90° or 75°). Depending on the customers' requirements the axial force can be 100N - 500N.

* registered trademark of Sandvik Coromant

Application examples









Tool securing

The simplest axial securing of tool holding attachments is achieved by means of ball locking devices with pre-stressed springs. With SK attachments the ball holders can be exchanged in the chain depending on the clamping spigot e.g. when changing from DIN to ANSI spigots.

However, this kind of axial securing is only advisable for standing or hanging arrangements with lightweight tools. Depending on customers' requests pulling forces can be adjusted between 100N and 500N according to the respective system.

It is recommended to secure the tool holding attachments with locking pins, which are unlocked by means of pneumatic or hydraulic cylinders from the rear.



Locking pin with ball locking device

Tool holding device directly mounted without plastic bushing

Locking pin with ball locking device

Swell-resistant, low-wear plastic insert

* registered trademark of Sandvik Coromant







Chain		Pitch	Inner width	Inner link	Bushing Ø	Plate height	Width over	Projec- tion over	Taper design	Pulling taper			Bearing area	Breaking load	Weight per tool holding	
				width			bushing	connec- ting link	DIN 69871	ISO 7388	DIN 69872	MAST BT	ANSI Norm 45°		ø	attachment
۲		р	b ₁	b ₂	d ₁	g	l ₁	k						g	FB	
		min.	min.	max.	max.	max.	max.	max.							min.	
No.	Ind.	mm	mm	mm	mm	mm	mm	mm						cm ²	N	kg
320	28	95	60,00	69,00	60,00	82,00	103,00	21,6	SK 40		Х	Х	Х	4,74	90 000	2,0
340	28	120	80,00	93,00	90,00	120,00	146,00	25,0	SK 50	Х	Х	Х	Х	9,60	190 000	5,3

 $^{\mbox{\tiny 28}}$ larger pitch available on request

Can also be supplied for tool holding attachments HSK, HSZ and HSEZ!