



**NEW!**

# Self-Adjusting Sleeve

optional tool for Xebec Brush™

- Completely automate your process
- Reduce machine down time
- Maintain optimal brush setting



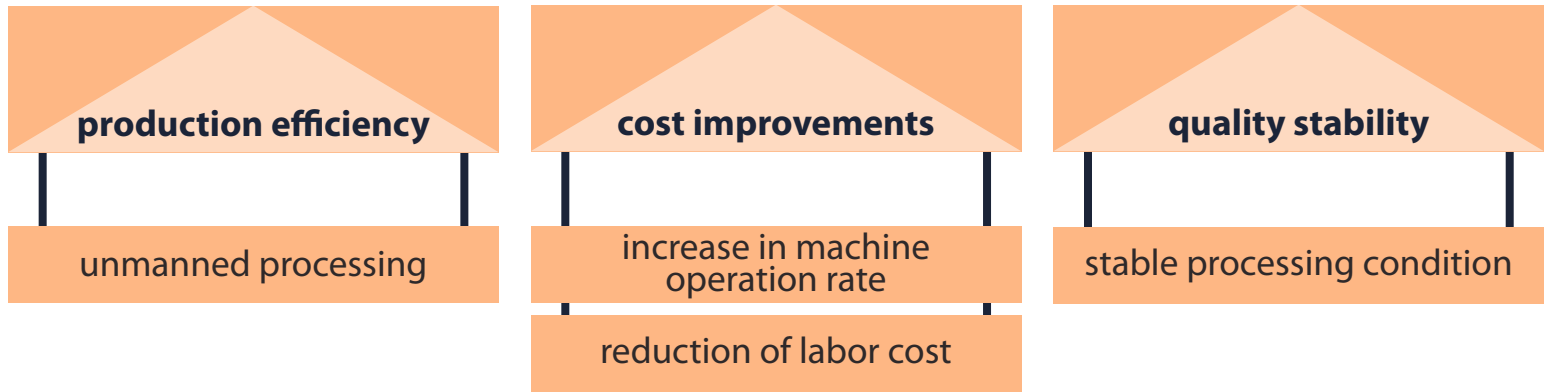
Use in place of Xebec Sleeve™



By using Self Adjusting Sleeve™, manual adjustment of projection no longer necessary

# Advantages

## Manual projection adjustment no longer necessary

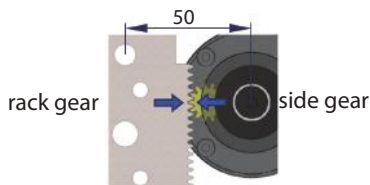


## How It Works

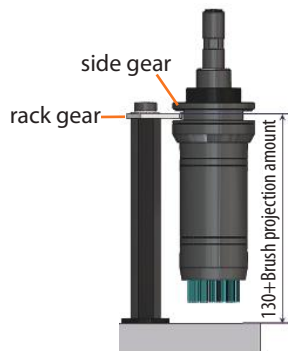
The side gear passing through the rack gear enables to adjust the desired amount of projection. Projection can be set to your preferred length (0.05 to 1 mm).

### 1 Operations of the Self Adjusting Sleeve™

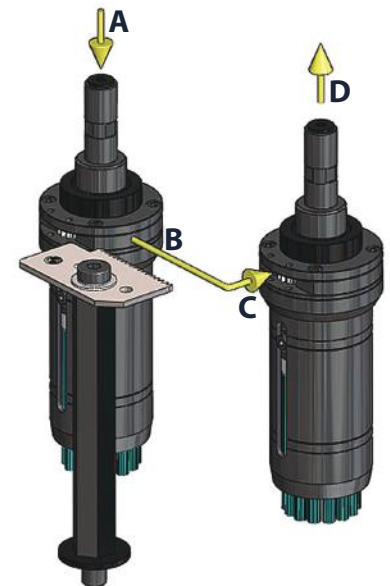
- 1 Always check that mating gears are in the engaging direction.



- 2 Adjust the positions and heights of the rack gear and the side gear.



- 3 As shown in the figure at right, move the sleeve in the following order: A-B-C-D.



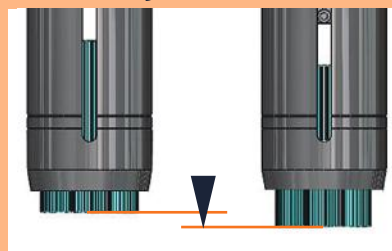
- 4 By adjusting the passing through distance of B, the amount of projection can be set.

\*Upper limit feeding speed for rack gear passing through time : F=10000 mm/min

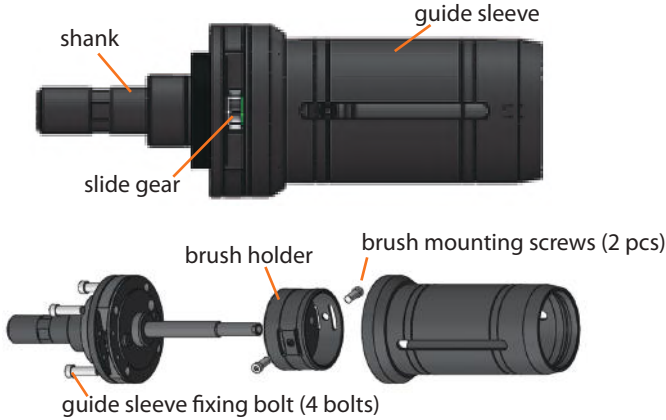
### Amount of projection adjustment

Projection amount of 0.05 mm to 1 mm per operation can be set. The amount of correction can be adjusted by increments of 50µm.

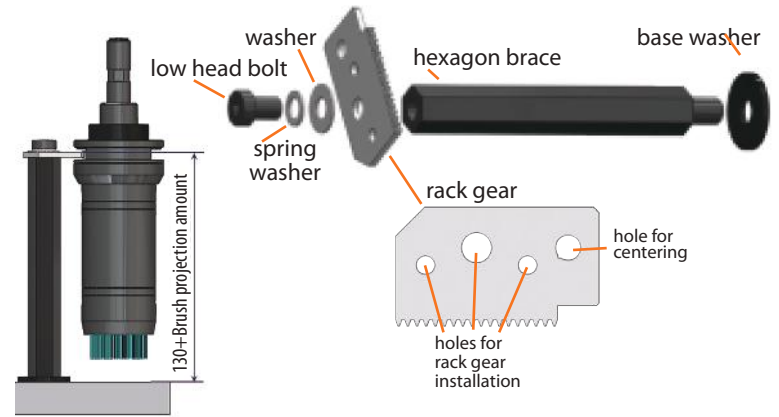
Refer to user manual for correlation between side gear and amount of projection



## Body



## Standard Accessory Kit

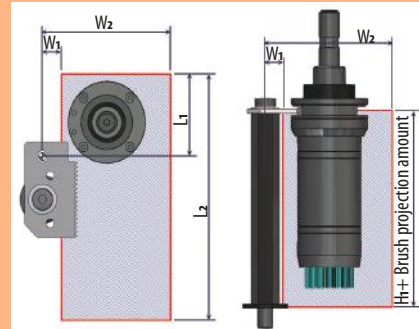


## 2 Check of the Self Adjusting Sleeve™ fixing, rack & operation range

- 1 Mount the rack gear to avoid interference (with fixtures, etc.) and in a position where the operation can be achieved (tool operations area) as shown in Figure 2.
- 2 Securely fix the rack gear. The inclination of the longitudinal direction of the rack gear to the slide axis has to be below 0.1mm.
- 3 With the main spindle at its normal orientation angle, mount the tool assembly on the main spindle so that the side gear of the sleeve main body is directed towards the rack gear.



### Operation range of Xebec Self-Adjusting Sleeve™



Operation range when the sleeve passes through the rack gear.

product code	W <sub>1</sub> (mm)	W <sub>2</sub> (mm)	L <sub>1</sub> (mm)	L <sub>2</sub> (mm)	H <sub>1</sub> (mm)
XP-AUT06M	10	75	50	155	85
XP-AUT15M	10	75	50	155	95
XP-AUT25M	15	100	60	180	130
XP-AUT40M	15	100	60	180	130

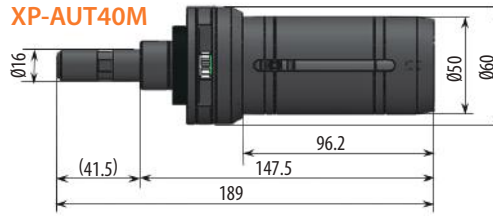
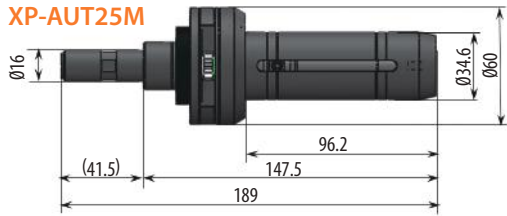
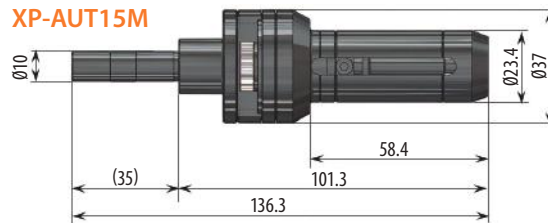
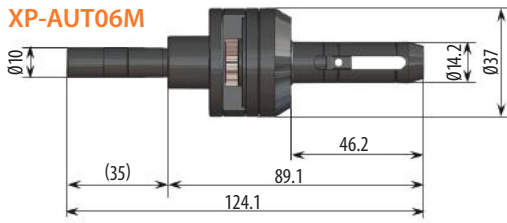
## 3 How to decide projection adjustment cycle

Find the smallest depth of cut. Check the amount of brush wear after one pass. Adjust the projection before deburring performance drops. (You do not have to adjust it every pass as long as burr can be removed.)

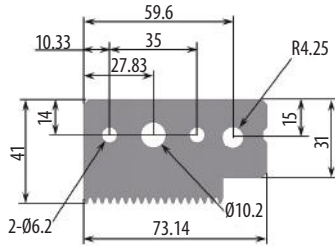
For example, when brush traveling distance is 2,000 mm and brush wears 50µm, you adjust the projection every 10 processes (0.5mm brush wear) or 40 processes (2mm brush wear). Depends on your cycle time.

# Product Dimensions

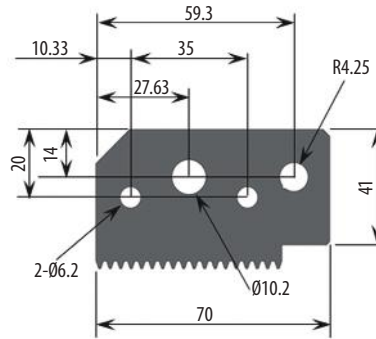
# Safety Warning



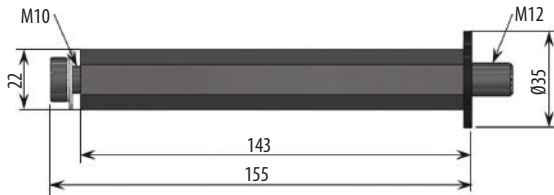
## Rack Gear XP-AUT06M/XP-AUT15M



## Rack Gear XP-AUT25M/XP-AUT40M



## Hexagonal Brace



Please make sure to read the user manual before use. In order to ensure safety, please observe the operator safety measures and operational precautions listed below. Please read XEBEC Brush™ Surface Instruction Manual for usage of XEBEC Brush™ Surface.

### Operator safety measures

If these safety measures are neglected, there are following risks.

- If the tool fragments and/or chip powder gets into the eyes, there is the risk of losing eyesight in the worst case.
- If the tool fragments and/or chip powder hit the skin, there is the risk of getting injured.
- Dust generated by machining process may cause skin irritation or allergy.

### Wear Protective Equipment

Always wear safety glasses, protective gloves and masks when operating the tool. In addition, wear long sleeves and have the cuffs/bottom of the jacket properly closed to minimize skin exposure.

### Beware of Grinding Powder

Grinding powder and burrs may scatter within an area around the work as the brush revolves; therefore, please collect dust using a dust collector and stay clear of this area.

### Caution to Your Surroundings

Because it could be dangerous if tool fragments and/or chip powder scatter while working, enclose the potentially dangerous work area to prevent other people from entering, or have those around the work area wear protective equipment.

# Product Lineup

EDP Number	Part Number	Overall Length		Shank Length		Outermost Diameter		Shank Diameter		Main Body Weight	Maximum Rotation Speed	Supporting Brush
		mm	in	mm	in	mm	in	mm	in			
50010	XP-AUT06M	124.1	4.886	35.0	1.378	37	1.457	10	0.394	220	10000	A13-CB06M, A11-CB06M, A21-CB06M, A31-CB06M
50011	XP-AUT15M	136.3	5.366	35.0	1.378	37	1.457	10	0.394	270	6000	A13-CB15M, A11-CB15M, A21-CB15M, A31-CB15M
50012	XP-AUT25M	189.0	7.441	41.5	1.634	60	2.362	16	0.630	795	5000	A11-CB25M, A21-CB25M, A31-CB25M
50013	XP-AUT40M	189.0	7.441	41.5	1.634	60	2.362	16	0.630	910	3000	A11-CB40M, A21-CB40M, A31-CB40M

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