



# Deburring floating unit with spindle motor

スピンドルモータ付きバリ取りフローティングユニット

Small articulated robot

## GR-N series

(Over 7kg payload ~)  
Applicable

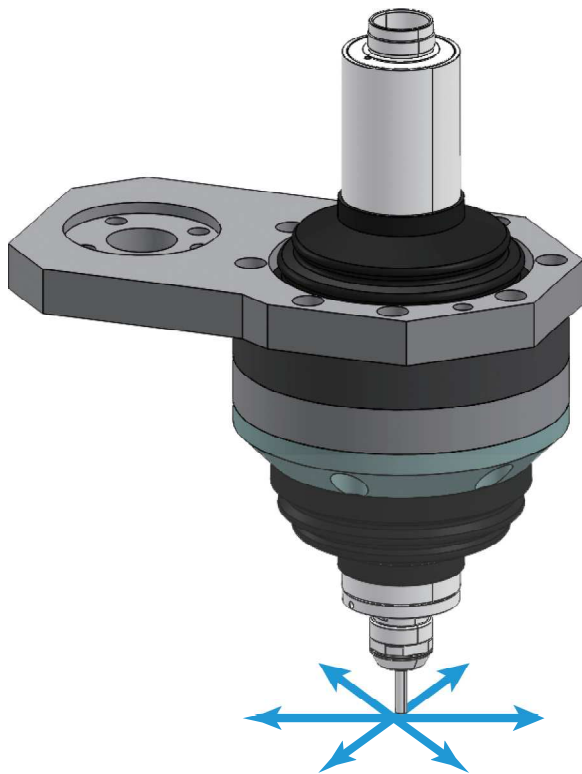


### KREUZ Co.,Ltd.

株式会社クロイツ



# GR-N SERIES Deburring floating unit with spindle motor



〈Operation image〉

**Small  
and  
lightweight**

The GR-N Standard is 64% lighter than our existing product (spindle motor + floating unit).

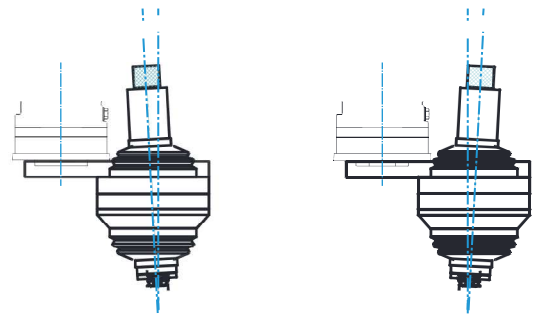
It is now possible to deburr using a small robot with low payload.

**Applicable  
with  
3D  
curved surfaces**

Since the spindle motor tilts in all directions, it is possible to deburr with various uneven burrs in all directions.

**Soft touch**

It is smaller size and lighter weight, possible to deburr with weaker floating force (pressing force).



〈Inclination angle up to 3 degrees in all directions〉

## Options

### Cutter setting gauge

When changing cutters in robot deburring, the cutter tip must be in the same position each time.

To use this setting gauge, it ensures reproducibility. And it allows for easy and reliable cutter replacement in the equipment.

\*Be sure to remove the gauge after using it.

### Spindle motor setting gauge

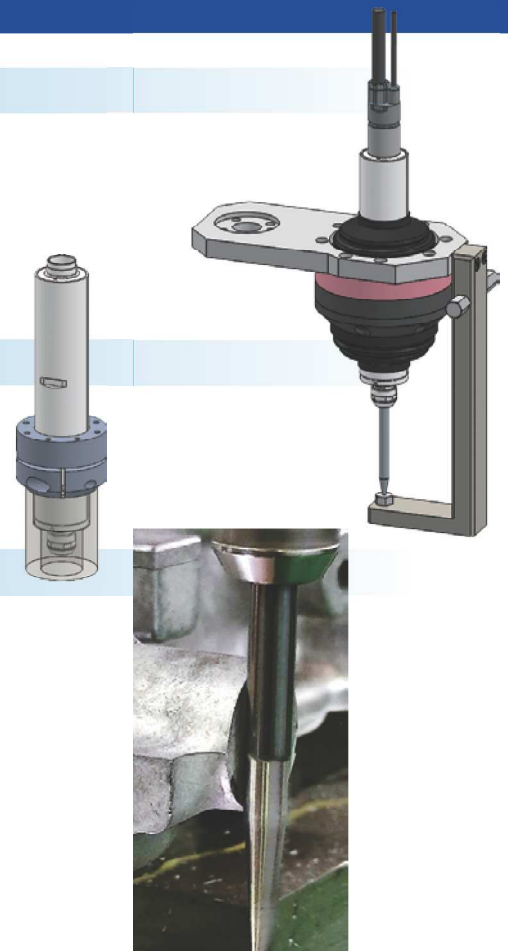
There is a recommended range of spindle clamp positions.

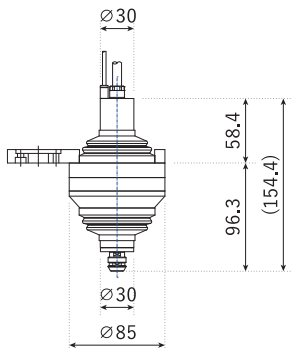
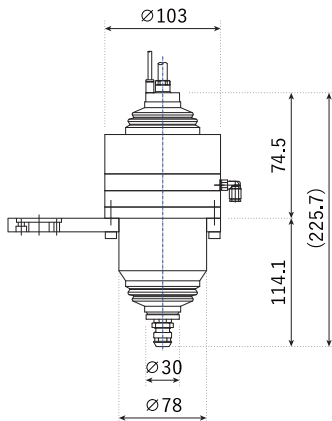
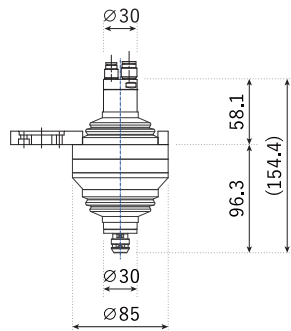
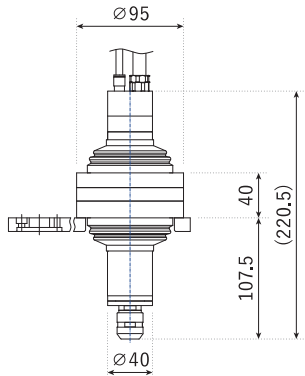
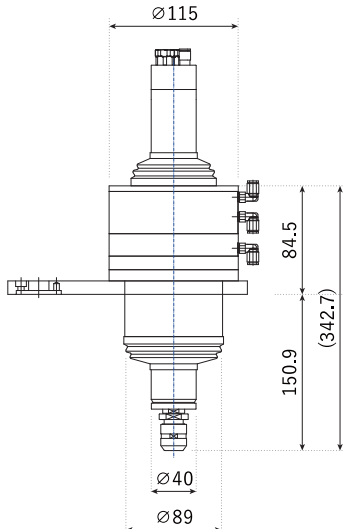
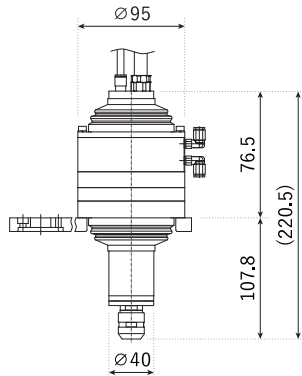
When user replace the spindle, by using a spindle motor setting gauge, it ensure clamping within this range.

### Deburring support

In order to introduce robot deburring equipment with assurance, we conduct in-house deburring processing tests using a small 7kg portable articulated robot equipped with a deburring floating unit GR-N series. Our customer can see the actual deburring process and check the usage conditions in advance.

We provide total support for deburring automation, including changing the floating force and selecting our deburring tools. Please contact our sales representative for details.



Dimensions/Specifications						
GR-N3000		GR-N3000ATC		GR-N AIR MOTOR		
						
GR-N4000		GR-N4000ATC		GR-N4000LOCK		
						
Main body						
Model	GR-N3000	GR-N3000ATC		GR-N4000	GR-N4000ATC	GR-N4000 LOCK
Recommended robot payload	7kg ~	7kg ~	7kg ~	7kg ~	12kg ~	7kg ~
Robot mounting flange	Designed and manufactured to suit each articulated robot.					
Weight	1.8kg	4.3kg	1.8kg	3.0kg	6.3kg	3.5kg
	Spindle motor included, motor cord not included					
Installation tool shank diameter	Φ6	Φ6	Φ6	Φ10	Φ10	Φ10
floating force	Protrusion 60mm measurement 10N	Protrusion 60mm measurement 15N	Protrusion 60mm measurement 20N	Protrusion 100mm measurement 25N	Protrusion 100mm measurement 25N	Protrusion 100mm measurement 20N
Recommended specifications for use (deburring)	aluminum die casting products	aluminum die casting products	aluminum die casting products	aluminum die casting products cast iron machining burr	aluminum die casting products cast iron machining burr	aluminum die casting products cast iron machining burr
spindle motor Nakanishi (KREUZ Custom)	Max. rpm. 60,000min <sup>-1</sup>	Max. rpm. 60,000min <sup>-1</sup>	Max. rpm. When using 0.5MPa 5,000min <sup>-1</sup>	Max. rpm. 20,000min <sup>-1</sup>	Max. rpm. 20,000min <sup>-1</sup>	Max. rpm. 20,000min <sup>-1</sup>
	Maximum output 350w	Maximum output 350w		Maximum output 1200w	Maximum output 1200w	Maximum output 1200w
accessories						
Spring	Collet nut, collet Φ6, Φ10), spanner, motor cord straight type), controller					
Spindle motor related	Floating force change spring strong/weak 1 set each)					
option						
deburring cutter	Custom designed and manufactured in KREUZ.					
cutter setting gauge						
Spindle motor setting gauge						
Deburring support	Possible test cut with custmor's workpiece at our place(Customer's workpiece test cut is possible at KREUZ.)					

**WWW.KREUZ.JP**



**KREUZ Co.,Ltd.**

**102-7 Jindoike, Noda-cho, Kariya-shi,  
Aichi 448-0803 JAPAN**

**TEL+81-566-22-5263FAX+81-566-25-3339**

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※Product specifications may change without notice  
for technical improvment.