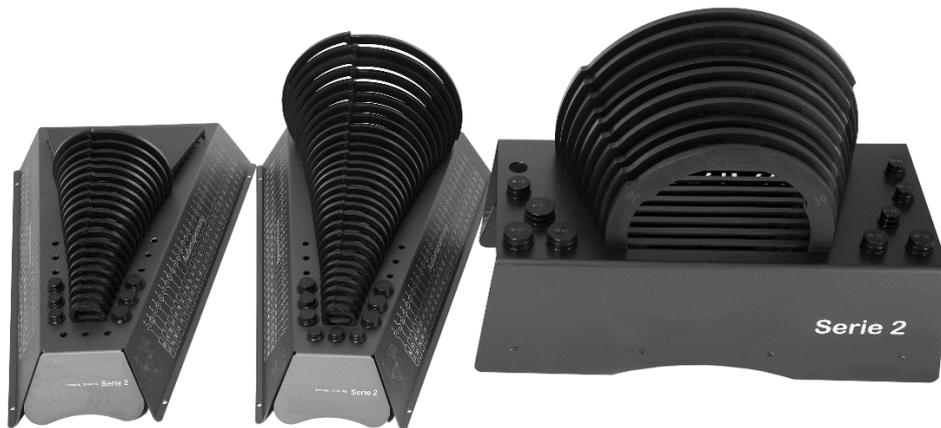


# OPERATING MANUAL

## Jaw turning rings

### Sizes S - L - XL



## Contents

1. Introduction
2. Safety
3. How to use jaw turning rings
4. Maintenance and storage

## 1. Introduction

Due to the special geometry of the turning rings, it is possible to obtain the desired diameter steplessly inside or outside. Each of the turning rings covers a certain diameter range.

<b>Chuck size in mm</b>	<b>Rings</b>
0 – 200	Size S
0 – 315	Size L
400 – 630	Size XL

## 2. Safety

Turning rings may only be used on 2-jaw or 3-jaw manual or power chucks.

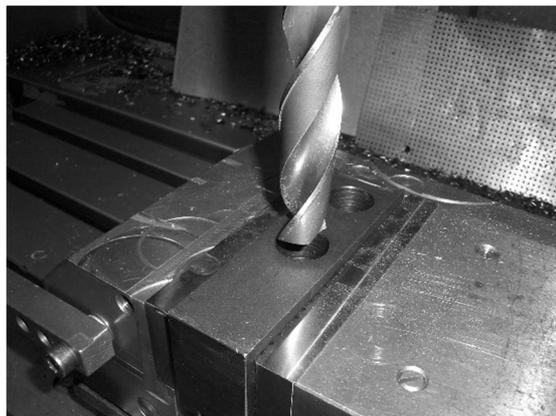
When using the clamping bolts, the maximum clamping force in the following table must not be exceeded.

<b>Type</b>	<b>Max. clamping force in daN</b>
S and L	7.000
XL	18.000

## 3. How to use jaw turning rings

### 3.1 Preparing the clamping jaws

The soft jaws of the chuck, each with two counterbores, have to be drilled and reamed to  $\varnothing$  H7. This process is mandatory.



## 3.2 Installing the clamping bolts

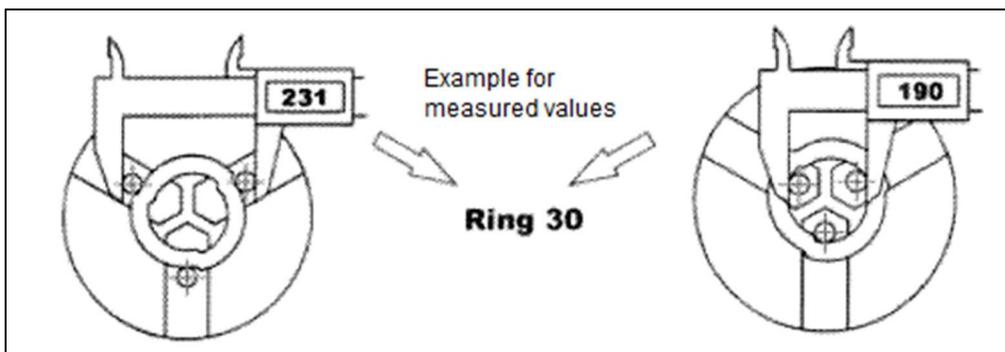
The diameter to be drilled out is then adjusted on the chuck. Insert one bolt into every bore of the jaws to the collar. The extension  $\varnothing 8 \times 6$  on the clamping bolt is used to hold the internal and external rings.

Clamping jaws without a counterbore may be equipped with a cylinder pin at any point.



## 3.3 Determine the size of the turning jaw

The tangential dimension of 2 clamping bolts gives the allocation in the following tables.



## *Jaw turning rings*

### 3.4 Allocation table for sizes S and L

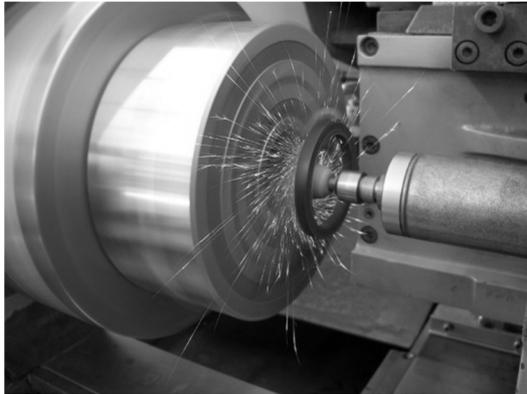
<b>External clamping</b>	<b>Ring</b>	<b>Internal clamping</b>
48,5 - 52,0	Ring 1	24,5 - 28,0
52,0 - 55,5	Ring 2	28,0 - 31,5
55,5 - 59,0	Ring 3	31,5 - 35,0
59,0 - 62,5	Ring 4	35,0 - 38,5
62,5 - 66,0	Ring 5	38,5 - 42,0
66,0 - 69,5	Ring 6	42,0 - 45,5
69,5 - 74,5	Ring 7	40,0 - 45,5
74,5 - 80,0	Ring 8	45,5 - 50,5
80,0 - 85,0	Ring 9	50,5 - 56,0
85,0 - 90,0	Ring 10	56,0 - 61,0
90,0 - 95,5	Ring 11	61,0 - 66,0
95,5 - 100,5	Ring 12	66,0 - 71,5
100,5 - 106,0	Ring 13	71,5 - 76,5
106,0 - 111,0	Ring 14	75,5 - 82,0
111,0 - 116,0	Ring 15	82,0 - 87,0
116,0 - 121,5	Ring 16	87,0 - 92,0
121,5 - 126,5	Ring 17	92,0 - 97,5
126,5 - 133,5	Ring 18	92,0 - 99,0
133,5 - 140,5	Ring 19	99,0 - 106,0
140,5 - 147,5	Ring 20	106,0 - 113,0
147,5 - 154,5	Ring 21	113,0 - 120,0
154,5 - 161,0	Ring 22	120,0 - 127,0
161,0 - 168,0	Ring 23	127,0 - 134,0
168,0 - 178,5	Ring 24	134,0 - 144,0
178,5 - 189,0	Ring 25	144,0 - 154,5
189,0 - 199,5	Ring 26	154,5 - 165,0
199,5 - 210,0	Ring 27	165,0 - 175,0
210,0 - 220,0	Ring 28	175,0 - 186,0
220,0 - 230,5	Ring 29	186,0 - 196,0

### 3.5 Allocation table for size XL

<b>External clamping</b>	<b>Ring</b>	<b>Internal clamping</b>
231 - 241	Ring 30	180 - 190
241 - 251	Ring 31	190 - 201
251 - 261	Ring 32	201 - 211
261 - 272	Ring 33	211 - 221
272 - 282	Ring 34	221 - 232
282 - 293	Ring 35	232 - 242
293 - 303	Ring 36	242 - 253
303 - 313	Ring 37	253 - 263
313 - 324	Ring 38	263 - 273
324 - 334	Ring 39	273 - 284

## 3.6 Use of the turning jaws

After the ring has been clamped, the basis for an accurate and optimal processing of the jaws has been created.



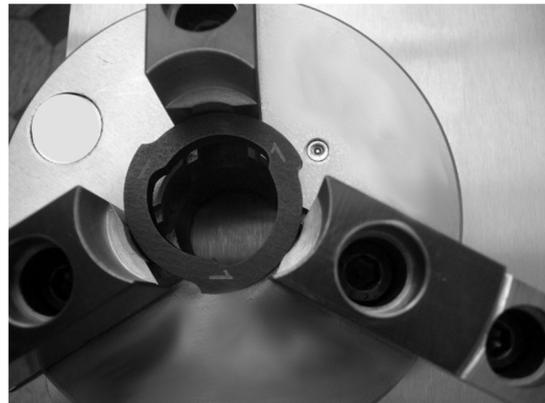
Grinding the clamping jaws



Turning the jaws (external clamping)



Turning the jaws (internal clamping)



The rings can also be clamped by the jaws

## 4. Maintenance and storage

If the jaw turning rings are not used for an extended period, the following has to be observed:

- Keep clean and dry
- Store in the racks provided for this purpose