

# IDF

## Self centering 2+2 Jaw Power Chuck

Performance and quality are much better than standard 3-jaw configurations.  
4-Jaw(2+2) Chuck requires dual-piston cylinder, but IDF is compatible with existing cylinder(100%)

Power Chuck

**STRUCTURE**

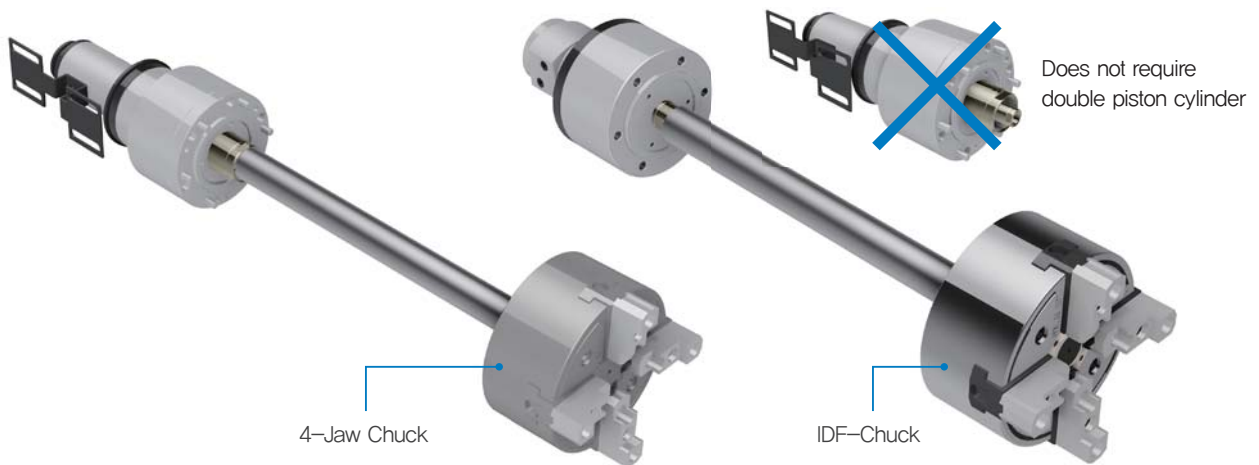
① Jaw Lever	④ Plunger
② Seesaw	⑤ Weight
③ Wedge Bar	⑥ Master jaw

**PRINCIPLE**

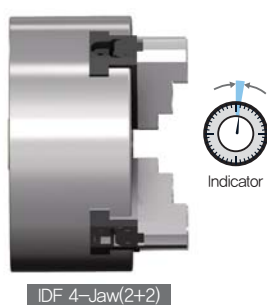
1. 2+2 Jaw  
: ①+③ & ②+④ Self-centering
2. 2+2 Jaw chuck with 2 independent self-centering jaws
3. Counter balancing weights provide centrifugal force compensation
4. Lever type

Patent 10-2014-0092073

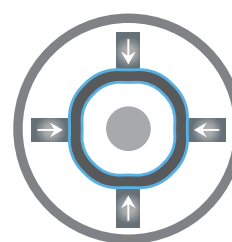
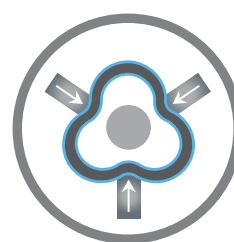
### 01/ Cost-saving compatibility with standard cylinders



## 02/ Better performance than standard 3-jaw

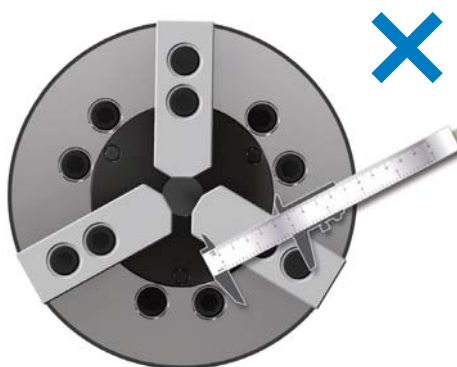


Decreased 1/10 For Floating Range



1/3 For Deformation Of Thin Work Piece

## 03/ Easy to measure the workpieces after jaw boring



## 04/ Use irregular workpieces without interchanging chuck



# IDF Self centering 2+2 Jaw Power Chuck



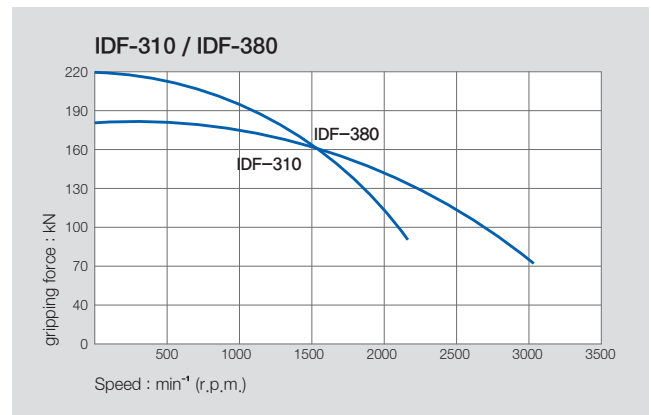
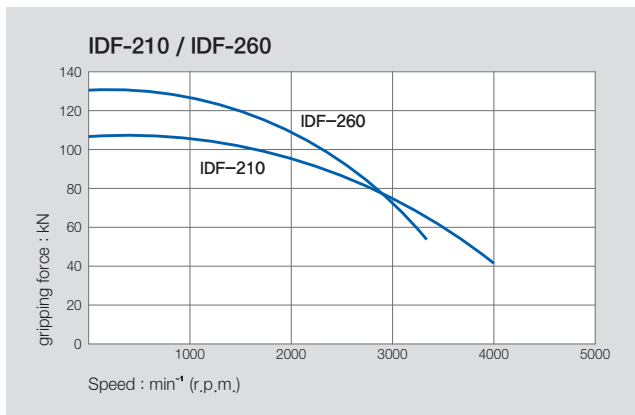
## Application / Benefits

High precision self-centering 4-Jaw power chuck(2+2 Jaw)

## Technical features

Self-centering in two axes  
Single wedge actuation does not require dual-piston cylinder  
2+2 Jaw chuck with 2 independent self-centering jaws

## ACTUAL GRIPPING FORCE DIAGRAM



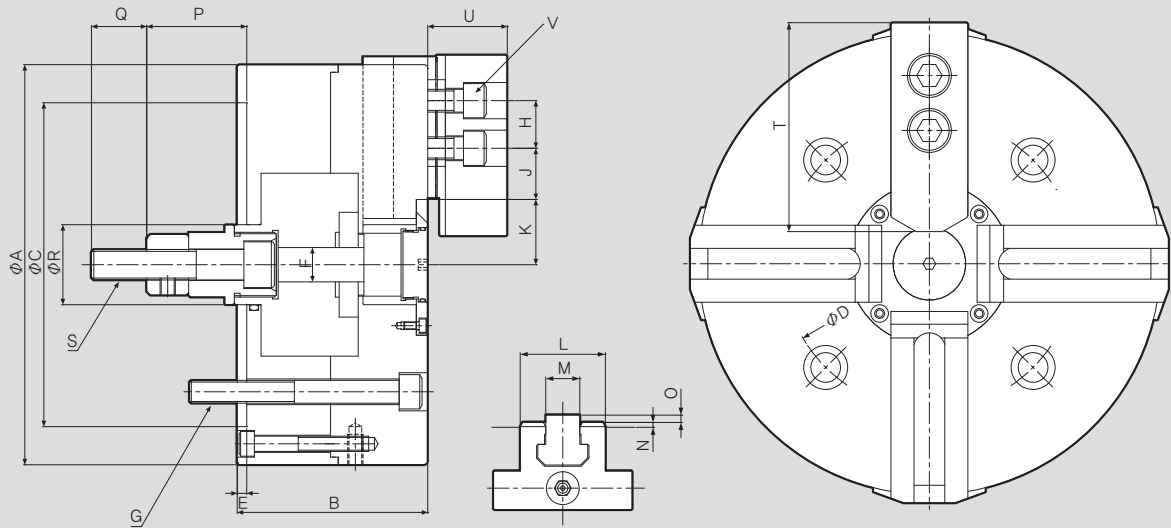
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

## SPECIFICATIONS

	IDF-210	IDF-260	IDF-310	IDF-380
Jaw Stroke Radial. [mm]	5.2	6.2	6.2	6.2
Compensation [mm]	± 2	± 2	± 2	± 2
Plunger Stroke [mm]	10	12	12	12
Max. Permissible Input Force [kN(kgf)]	40(4081)	50(5102)	70(7143)	80(8163)
Max. Static Gripping Force [kN(kgf)]	100(10204)	130(13265)	180(18367)	220(22448)
Max. r.p.m. [min <sup>-1</sup> ]	4000	3200	3000	2100
Operating Cylinder	Y-1225RE	Y-1530RE	Y-1530RE	Y-2035RE
Weight [kg]	24	43	68	110
Moment of inertia [kg · m <sup>2</sup> ]	0.14	0.39	0.88	2.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

## DIMENSIONS

	IDF-210	IDF-260	IDF-310	IDF-380
ΦA	210	260	310	380
B	100	120	127	135
ΦC (기준경)	170	220	220	300
ΦD	133.4	171.4	171.4	235
E	5	5	5	5
F	24	30	30	40
G	M12	M16	M16	M20
H	25	30	30	43
J (Max/Min)	39/10	45/13	58/13	53/18
K (Max/Min)	34.2/29	46.2/40	53.2/47	74.2/68
L	35	40	50	62
M	14	16	18	25.5
N	5	5	5	5
O	3	3	3	3
P (Max/Min)	52/62	53/65	53/65	93/81
Q	29	33	33	33
R	42	50	55	55
S	M16x80	M20x80	M20x80	M30x125
T	95	98	115	135
U	42	46	54	64
V	M12x30	M12x35	M14x45	M20x45

RELATED PRODUCT

