IMG21-01
EN version

MODULAR CLAMPING SYSTEMS

IMG

IMAGINATION HAS NO LIMIT

www.omlspa.it

IMG

Vice

Self-centering | Double Clamping | Fixed

IMG

IMAGINATION HAS NO LIMIT

Vice

Self-centering | Double Clamping | Fixed

Page 4

IMG
Vice
- Self-centering
- Double Clamping
- Fixed

Page 12

IMG
Self-centering | Double Clamping | Fixed
- IMG 88 - 130

Page 14

IMG
Self-centering | Double Clamping | Fixed
- IMG 125 - 220

Page 16

IMG
Self-centering | Double Clamping | Fixed
- IMG 125 - 320

Page 18

IMG
Self-centering | Double Clamping | Fixed
- IMG 160 - 270

Page 20

IMG
Self-centering | Double Clamping | Fixed
- IMG 160 - 420

Page 22

IMG
Accessories

Page 24

IMG
Accessories
- Riser
- Alu Pyramid
- Triangular tombstone
- Tombstone

Page 34

Clamping Pins
Accessories
- For APS 140 and APS 190

Page 36

CLAK System
Accessories

Page 38

IMG
- Spare parts

Self-centering vice | Doub

Wide clamping range
Maximum flexibility
For external and internal clamping

SinterGrip jaws:
Reversible jaws for minimum clamping depth and without pre-machining

Mechanical clamping
Totally protected with patented telescopic system.
The large power transmission allows high performance in the manufacturing process

Interface
For Zero Point clamping systems and mounting holes as standard

Find out more

le Clamping | Fixed

Totally protected
With patented telescopic system

Nitreg® treatment

Through holes
For frontal clamping

Ideal
For automation and palletizing systems

Flexible mounting
on machine tool pallet using clamps (optional)

Double clamping jaw (for double clamping)

Retainer plate (for fixed clamping)

Very large drainage slots
for coolant and chips

Treated and precision ground guides
for maximum accuracy and repeatability

Parallels
with quick change Clak System

Vice

Self-centering | Double Clamping | Fixed

PATENTED PROTECTED SCREW

IMG vices have a fully protected operating screw with a patented telescopic system.

This innovation makes it possible to avoid having to remove the jaws in order to find the clamping position. In fact, normally, vices with protected screws use the slide-way as a protection.

This type of solution forces continuous displacement of the jaws in the appropriate seat.
IMG, on the contrary, while keeping the screw completely protected, allows the continuous movement of opening and closing of the vice.

Patented protected screw

Open

Closing

Close

Opening

Vice

Self-centering | Double Clamping | Fixed

MODULAR

The IMG self-centering vices can be easily transformed into fixed vices or double clamping vices.

Self-centering

Double Clamping

Fixed

The double clamping vices have a completely compensating mechanism (until zero), therefore it is possible to clamp 2 pieces of different sizes.

Modular

Self-centering

Double Clamping

Fixed

Vice

Self-centering | Double Clamping | Fixed

HIGH CLAMPING PERFORMANCE

IMG vices clamp up to 55 kN.
The clamping force combined with the patented SinterGrip system guarantees high performance.

1 OP.

2 OP.

SinterGrip

Our new patented product **SinterGrip** is born to satisfy the current need to clamp a workpiece for very few millimeters (with SinterGrip 3,5 mm clamping surface), and this for the following reasons:

1) In order to machine the workpiece completely in a single operation (especially for 5 axis machines);

2) In order to save money for the raw materials,
especially when they have a big impact on the price (aluminum, titanium, etc.)

Indirectly to these reasons, and in order to improve the performance of the machine tool and the tools

higher cutting speed +
higher feed rate =
bigger volume of metal removed =
less time to machine the workpiece

the market requires safe clamping, which could at the same time possibly avoid the deformations of the piece itself.

Only 3,5 mm clamping surface, no need of pre-machining the workpiece, clamping stability, higher cutting rate: **SinterGrip** brings only advantages compared to the traditional systems.

On the contrary, traditional systems need, for the clamping of the workpiece, a bigger clamping surface, with the result of waste of raw materials and greater possibility of deformation of the workpiece.

IMG 88 - 130

Self-centering vice | Double Clamping | Fixed

■ Patented protected screw

Applications / Customer Benefits

- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 17 kN (20 Nm)
- Jaw width 87,5 mm
- Interface for zero point systems APS / TDM and Lang 52 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.

Type	Id. No.	Weight
IMG 88 - 130 with SinterGrip jaws **STD**	77583411	4,5 Kg
IMG 88 - 130 with SinterGrip jaws **ALU**	77583412	4,5 Kg
IMG 88 - 130 with SinterGrip jaws **HRC**	77583413	4,5 Kg

IMG 88 - 130

■ Patented protected screw

Self-centering

Double Clamping

Fixed

* Opening with smooth jaws

IMG 125 - 220

Self-centering vice | Double Clamping | Fixed

■ Patented protected screw

Applications / Customer Benefits

- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / TDM and Lang 52 / 96 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.

Type	Id. No.	Weight
IMG 125 - 220 with SinterGrip jaws **STD**	77583511	15 Kg
IMG 125 - 220 with SinterGrip jaws **ALU**	77583512	15 Kg
IMG 125 - 220 with SinterGrip jaws **HRC**	77583513	15 Kg

IMG 125 - 220

■ Patented protected screw

Self-centering

Double Clamping

Fixed

* Opening with smooth jaws

IMG 125 - 320

Self-centering vice | Double Clamping | Fixed

■ Patented protected screw

Applications / Customer Benefits

- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / TDM and Lang 96 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.

Type	Id. No.	Weight
IMG 125 - 320 with SinterGrip jaws **STD**	77583521	20 Kg
IMG 125 - 320 with SinterGrip jaws **ALU**	77583522	20 Kg
IMG 125 - 320 with SinterGrip jaws **HRC**	77583523	20 Kg

IMG 125 - 320

■ Patented protected screw

Self-centering

Double Clamping

Fixed

* Opening with smooth jaws

IMG 160 - 270

Self-centering vice | Double Clamping | Fixed

■ Patented protected screw

Applications / Customer Benefits

- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / TDM and Lang 96 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.

Type	Id. No.	Weight
IMG 160 - 270 with SinterGrip jaws **STD**	77583611	22 Kg
IMG 160 - 270 with SinterGrip jaws **ALU**	77583612	22 Kg
IMG 160 - 270 with SinterGrip jaws **HRC**	77583613	22 Kg

IMG 160 - 270

■ Patented protected screw

Self-centering

Double Clamping

Fixed

* Opening with smooth jaws

IMG 160 - 420

Self-centering vice | Double Clamping | Fixed

■ Patented protected screw

Applications / Customer Benefits

- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / TDM and Lang 96 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.

Type	Id. No.	Weight
IMG 160 - 420 with SinterGrip jaws **STD**	77583621	32 Kg
IMG 160 - 420 with SinterGrip jaws **ALU**	77583622	32 Kg
IMG 160 - 420 with SinterGrip jaws **HRC**	77583623	32 Kg

IMG 160 - 420

■ Patented protected screw

Self-centering

Double Clamping

Fixed

* Opening with smooth jaws

Double clamping jaw
SinterGrip not included, to be specified when ordering

Type	Id. No.
IMG 88	58341719
IMG 125	58351719
IMG 160	58361719

Double clamping smooth jaw

Type	Id. No.
IMG 88	58341739
IMG 125	58351739
IMG 160	58361739

Retainer plate

Type	Id. No.
IMG 88	58341019
IMG 125	58351019
IMG 160	58361019

Pair of smooth jaws

Type	Id. No.	A	B	C	D	min-max
IMG 88	58341819	41	28,5	87,5	75,5	see page 13
IMG 125	58351819	49	33,5	123,5	100,5	see page 15 / 17
IMG 160	58361819	73	43,5	158,5	110,5	see page 19 / 21

Pair of reduced jaws - SinterGrip not included, to be specified when ordering

Type	Id. No.	A	B	C	E	D	p1	p2	min.	max.
IMG 125x220	58351519	49	33.5	80	100.5	123.5	22.25	17.5	0-7	99-105
IMG 125x320		49	33.5	80	100.5	123.5	22.25	17.5	0-7	159-165
IMG 160x270	58361519	73	43.5	90	110.5	158.5	18	18	0-7	129-135
IMG 160x420		73	43.5	90	110.5	158.5	18	18	0-7	209-215

Pair of soft jaws (soft steel – ALU)

Type		Id. No.	A	B	C	D	E	F	min.	max.
IMG 88	ALU	58341619	45	40	87.5	87	23	36	0	54
IMG 88	Fe	58341629	45	40	87.5	87	23	36	0	54
IMG 125	ALU	58351619	65	40	123,5	107	20	44	0	86 (125x220) / 186 (125x320)
IMG 125	Fe	58351629	65	40	123,5	107	20	44	0	86 (125x220) / 186 (125x320)
IMG 160	ALU	58361619	85	50	158.5	117	25	52	0	141-147 (160x270) / 221-227 (160x420)
IMG 160	Fe	58361629	85	50	158.5	117	25	52	0	141-147 (160x270) / 221-227 (160x420)

Set of soft jaws for double clamping

Type		Id. No.	A	B	C	D	E	F	G	H	I	L	M
IMG 125	ALU	58359519	65	40	123,5	107	20	44	10	15	60	25	11
IMG 125	Fe	58359619	65	40	123,5	107	20	44	10	15	60	25	11
IMG 160	ALU	58369519	85	50	158.5	117	25	52	16.5	15	60	35	28
IMG 160	Fe	58369619	85	50	158.5	117	25	52	16.5	15	60	35	28

Application example

IMG

ACCESSORIES

Riser

Applications / Customer Benefits

- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with T slots
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

Technical features

- Material: steel

Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool

For IMG 88

For IMG 125

For IMG 160

Type	Id. No.	H1	H2	A	Weight
For IMG 88	58342011	60	107	130	10 Kg
For IMG 88	58342012	100	207	130	15 Kg
For IMG 125	58352018	60	127	220	10 Kg
For IMG 125	58352028	100	167	220	15 Kg
For IMG 125	58352019	60	127	320	15 Kg
For IMG 125	58352029	100	167	320	21 Kg
For IMG 160	58362018	60	127	270	17 Kg
For IMG 160	58362028	100	167	270	25 Kg
For IMG 160	58362019	60	127	420	26 Kg
For IMG 160	58362029	100	167	420	38 Kg

Application example

Floating jaw gripper

Type	Id. No.	A (mm)	B (mm)	D (mm)	N	C (mm)	Weight (Kg)
IMG 125	58352520	180	110	M8	10	22	3,100
IMG 160	58362520	200	120	M10	10	22	2,700

Fixed/movable jaw gripper

Type	Id. No.	A (mm)	B (mm)	D (mm)	N	C (mm)	Weight (Kg)
IMG 125	58352510	180	80	M10	8	22	2,300
IMG 160	58362510	200	90	M10	8	22	3,700

Fixed jaw for double clamping gripper

Type	Id. No.	A (mm)	B (mm)	D (mm)	N	C (mm)	Weight (Kg)
IMG 125	58352530	180	80	M8	8	22	2,300
IMG 160	58362530	200	120	M10	10	22	2,900

Application example

Pair of supports with pull down jaws

Type	Id. No.	Weight (Kg)
IMG 125	58351419	4,100
IMG 160	58361419	8,300

Pair of grooved jaws

Type	Id. No.	Weight (Kg)
IMG 125	58351425	0,600
IMG 160	58361425	1,400

Pair of smooth jaws

Type	Id. No.	Weight (Kg)
IMG 125	58351415	0,600
IMG 160	58361415	1,450

Application example

Floating jaws dimensions

	A	B	C	D	E	K	N	X	Y	J1	J2	J3	J4	J5
IMG 125-220	247	220	27	124	180	22	12	54	67	215	200	230	65,5	X
IMG 125-320	349	320	29	124	180	22	12	115	67	335	349	350	125,5	140,5
IMG 160-270	299	270	29	159	200	22	12	59,5	67	290	290	290	105,5	105,5
IMG 160-420	449	420	29	160	200	22	12	150	67	448	448	448	184,5	184,5

Pull down jaws dimensions

	K1	O1	X1	J6
IMG 125-220	35	74,4	59,5	119
IMG 125-320	35	74,4	119,5	239
IMG 160-270	45	91,5	76	152
IMG 160-420	45	91,5	155	310

Maximum diameters of floating jaws

	Ø J1	Ø J2	Ø J3	Ø J4	Ø J5
IMG 125-220	252	239	265	122	X
IMG 125-320	360	347	375	179	190
IMG 160-270	327	327	327	180	180
IMG 160-420	441	441	441	224	224

Set of 4 grippers h11 smooth

Id. No.
58906114

Set of 4 grippers h11 serrated

Id. No.
58906124

Set of 4 grippers h19 smooth

Id. No.
58906214

Set of 4 grippers h19 serrated

Id. No.
58906224

Set of 4 grippers h24 smooth

Id. No.
58906314

Set of 4 grippers h24 serrated

Id. No.
58906324

Working examples

Alu pyramid for IMG 120-220

Applications / Customer Benefits

- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with radial slots at 45 / 60 degrees
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

Technical features

- Material: ALU

Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool

Type	Id. No.	Weight
Alu Pyramid for IMG 125-220	58353210	55 Kg

Application example

Triangular tombstone for IMG 125-320

Applications / Customer Benefits

- Ideal for 5 axis machines
- Ideal for horizonal machines
- Compact design
- Wide clamping range

Technical features

- Material: steel

Standard equipment

Steel tombstone

Type	Id. No.	Weight
Triangular tombstone for IMG 125-320	58353010	74 Kg

Application example

Tombstone for IMG 160-420

Applications / Customer Benefits

- Ideal for horizonal machines
- Compact design
- Wide clamping range

Technical features

- Material: steel

Standard equipment

Steel tombstone

Type	Id. No.	Weight
Tombstone for IMG 160-420	58363120	140 Kg

Application example

Clamping pins APS 140

Tipo A
centering pin

Tipo B
reference pin

Application/customer benefits
- Fixation and positioning on the clamping systems APS 140
- Wear-resistant due to an extra hard protective coating
- Large entry radii of the clamping pins for easy and safe loading

Technical features
- Centering pin Type A (Standard)
- Sword pin Type B (Positioning pin)

Standard equipment
Clamping pin with mounting screw M10x45

	Thread	Type A	Type B	Weight
Clamping pins APS 140	M12	46162355	46162356	0.3 Kg

Clamping pins APS 190

Application/customer benefits
- Fixation and positioning on the clamping systems APS 190
- Large entry radii of the clamping pins for easy and safe loading

Technical features
- Centering pin Type A (Standard)

Standard equipment
Clamping pin with mounting screw M8x40 (6 pieces)

Id. No.	Type		Weight
46 16 26 35	A	Ø 25 = at pin APS-140 M12	0,85Kg

Application examples

Quick change modular parallels

Type	Id. No.	B	A	C
For IMG 88	58343510	10	87	4
For IMG 88	58343515	15	87	4
For IMG 88	58343520	20	87	4

Type	Id. No.	B	A	C
For IMG 125	58455115	15	124	4
For IMG 125	58455120	20	124	4
For IMG 125	58455125	25	124	4
For IMG 160	58455315	15	159	4
For IMG 160	58455325	25	159	4
For IMG 160	58455335	35	159	4

Application example

Torque Wrench

Type	Id. No.
IMG 88	51501026
IMG 125	51501021
IMG 160	51501022

Workstop

Type	Id. No.
IMG 88	58415030
IMG 125-160	58315020

Key for APS for single use (APS side)

Type	Id. No.
APS 140 / 190	46162333

Pair of positioning keys for T Slot

IMG 125 - 160	mm 12 - h6
mm 12 - h6	58351392
mm 14 - h6	58351393
mm 16 - h6	58351394
mm 18 - h6	58351395
mm 20 - h6	58351396
mm 22 - h6	58351397

IMG 88 - 130	A	B	H	D
58341393	12	14	17	10
58341395	16	18	17	10

Key for single use on APS 140 for IMG 125 (vice body side)

Type	Id. No.
IMG 88	58351312
IMG 125	

Key for single use on APS 160 for IMG 160 (vice body side)

Type	Id. No.
IMG 160	58361312

Pair of Clamps

Type	mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
IMG 88	58012792	58012793	58012794	58012795	58012796	58012797
IMG 125 / 160	58022792	58022793	58022794	58022795	58022796	58022797

SinterGrip

	Id. No.	Description
	58 45 01 19	Set of 10 SinterGrip inserts **STD** for steel
	58 45 01 29	set of 10 SinterGrip inserts **HRC** for hardened steel / titanium until 50-54 HRC
	58 45 01 39	Set of 10 SinterGrip inserts for **ALU**
	58 45 02 19	Kit 10VTX30 for inserts SINTERGRIP
	58 45 05 19	Kit 10 protection inserts in aluminum

Find out more

Pair of SINTERGRIP jaws

Type	Id. No.
IMG 88	58341219
IMG 125	58351219
IMG 160	58361219

Wrench

Type	Id. No.
IMG 125	58351910
IMG 160	58361910

Wrench

Type	Id. No.
IMG 88	58341910

Spindel group

Type	Id. No.
IMG 88-130	58349010
IMG 125-220	58359010
IMG 125-320	58359020
IMG 160-270	58369010
IMG 160-420	58369020

Magnetic extractor for IMG protection plug

Id. No.	71290755

Exploded

	Description
27	UNI 5923 M8x10
26	TCEIBAS screw
25	SINTERGRIP insert
24	SINTERGRIP screw
23	SINTERGRIP jaw
22	ALU plug for support
21	TCEI screw
20	TCEI screw
19	TCEI screw

	Description
18	Key
17	Rubber
16	Plug
15	Stop ring
14	Seeger ring
13	Upper support
12	Screw STEI
11	Screw stop
10	Snap ring

	Description
9	Snap ring
8	o-ring
7	o-ring
6	Right bushing
5	Left bushing
4	Operating screw
3	Right slide way
2	Left slide way
1	IMG base

NOTES

NOTES

IMAGINATION HAS NO LIMIT

Technical characteristics and dimensions are not obliged. OML S.r.l. may give in every time some modifications