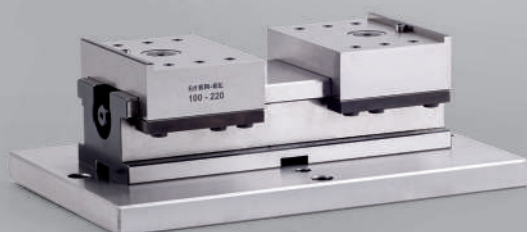
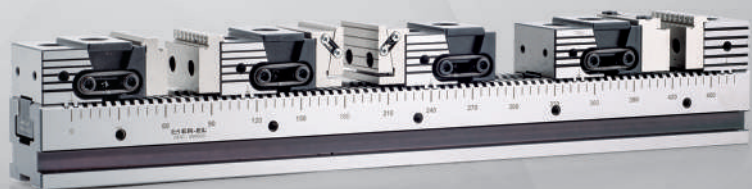
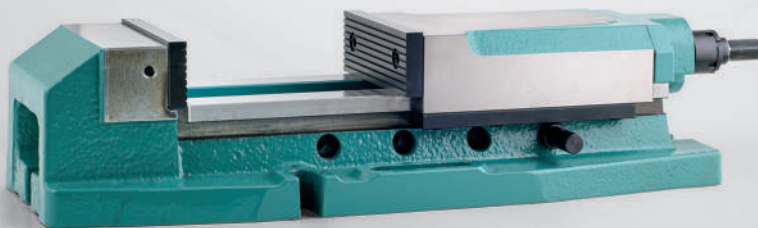


MENGENELER

VICES



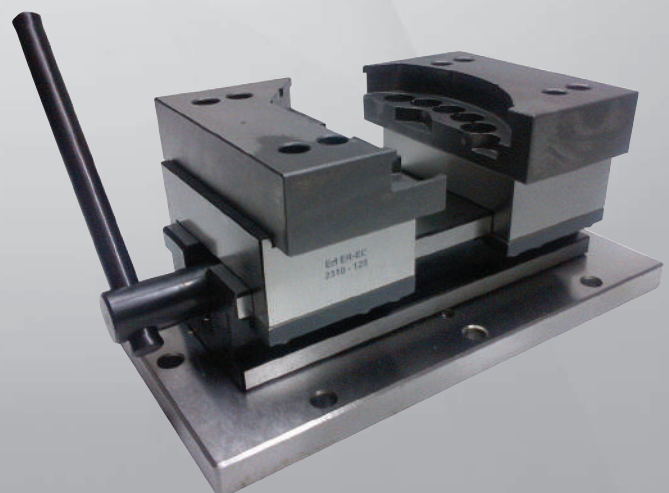
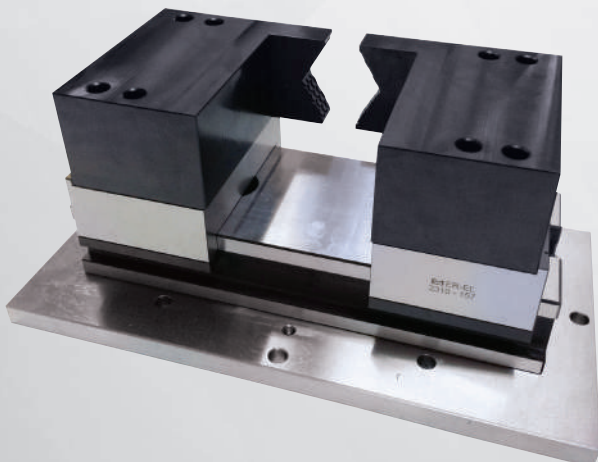
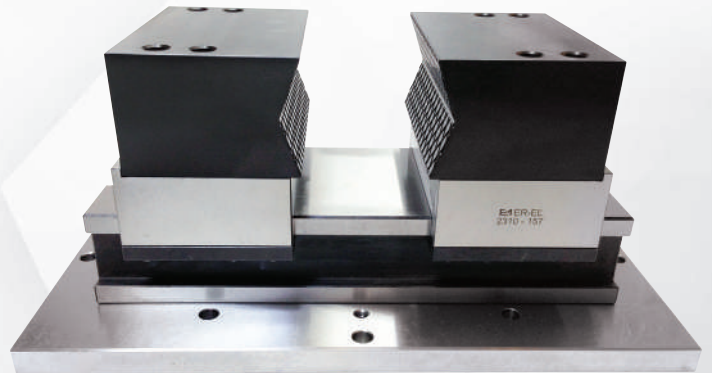
MEKANİK ÇELİK MENGENE UYGULAMASI

MECHANICAL STEEL
VICE APPLICATION

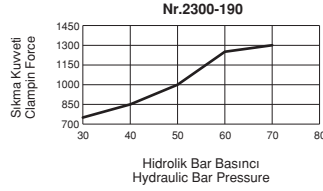
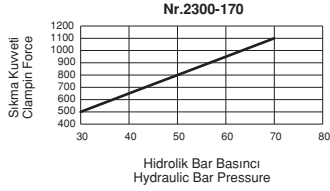
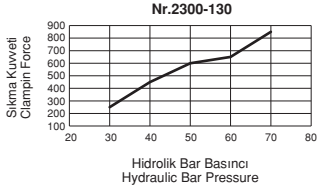


MENGENE UYGULAMALARI

VICE APPLICATIONS



Referans Nr.	A min-max	Strok	B	C	D	E	F	ØG	H	K	K1	N	N1	S	S1	M	Q1	Q2	
2300-130	142-162	10x2	90	83	60	130	10	86	143	9	22	76	64	106	60	M8	11	6	8.50
2300-170	170-210	20x2	100	96	78	170	12	98	174	11	30	136	74	106	80	M10	11	8	14
2300-190	202-242	20x2	125	101	80	190	16	121	181	11	36	144	96	110	100	M12	13	8	21

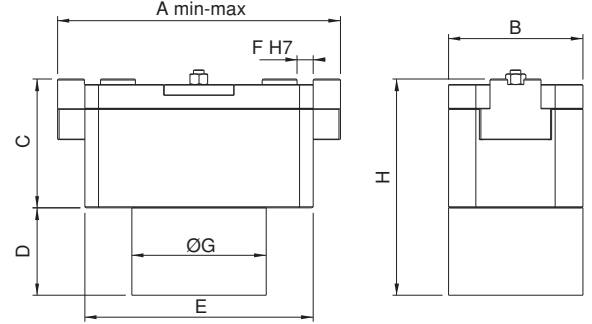
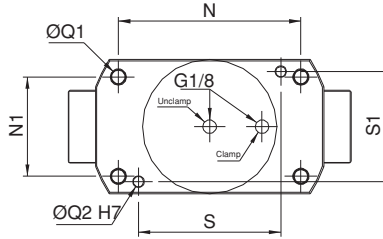
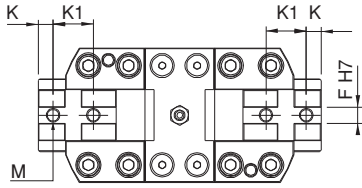


Ürün Nr. 2300 Hidrolik Çift Açılır Mengene

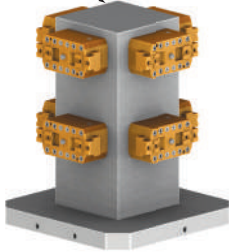
- Ürün işlem yapılacak malzemeyi sabitlerken aynı zamanda da merkezleme yapmaktadır. Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir. Diğer özelliği ise yumuşak çenelere işlenecek parçanın formu uygulanabilir. (1-2-3 şekillerde görüldüğü gibi.)
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Sistem hidrolik çalışır
- Yağ girişi - Yağ dönüş
- Siyah Kaplama

Product Nr. 2300 Hydraulic Centering Vice

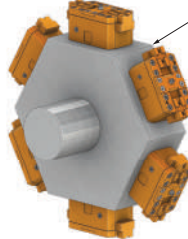
- This product fixes the material to be processes and at the same time it makes centering. The advantage of this system specially shows itself when making machinings of the materials having different outer diameter measurements as it implements this process without changing the center. It's other characteristic is to apply the form of the piece to be machined with soft claws (as seen in Figures: 1-2 and 3).
- Entire moving surface is sensitively grinded and hardened.
- Hydraulic system works
- Oil inlet - Oil outlet
- Black coating



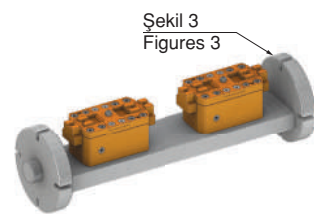
Şekil 1
Figures 1



Şekil 2
Figures 2



Şekil 3
Figures 3



Referans Nr.	A min-max	Strok	Pneumatic Bar	Sıkma Kuvveti Clamping Force kgf	
2307-0188	0-188	8.5x2	6	750	18.5

Pnömatik Çift Açılır Mengene

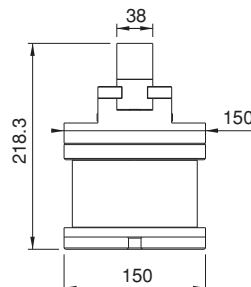
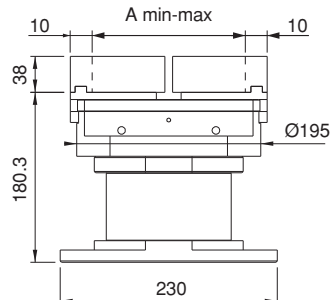
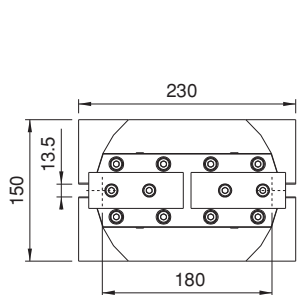
Pneumatic Centering Vice

Ürün Nr. 2307 Pnömatik Çift Açılır Mengene

- Sistem pnömatik çalışır.

Product Nr. 2307 Pneumatic Centering Vice

- Pneumatic system works



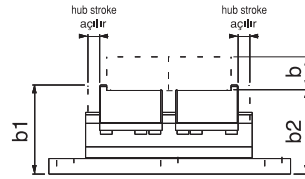
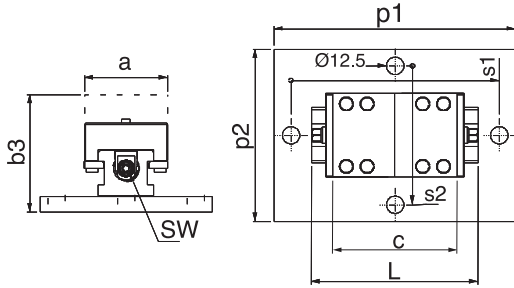
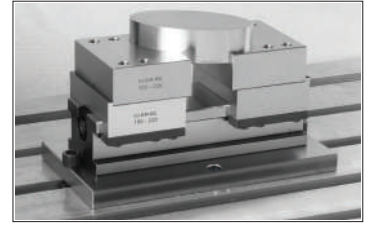
Referans Nr.	a	L	c	açılır opens 2 x mm	iş bağlama kapasitesi Work Piece Coupling Capacity (mm)	b	b1	b2 ±0,02	b3	p1	p2	s1	s2	Sıkma Kuvveti Clamping Force kgf	Tork Değeri Allowable Screw Torque (N-m)	sw	(kg)
2310-060	60	120	90	20	120	23.5	70.5	67.5	91	174	124	150	100	800	45	9	7
2310-078	78	180	130	30	180	33	97	93	126	224	124	200	100	1500	110	12	14
2310-100	100	220	154	38	220	35	99	95	130	274	174	250	150	1500	110	12	22
2310-125	125	260	174	47	260	38	108	103	141	324	174	300	150	2000	190	14	35
2310-157	157	350	208	75	350	46	123	118	164	424	224	400	200	2200	210	17	65


Ürün Nr. 2310 Çift Açılır Çelik Mengene

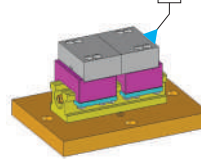
- Ürün işlem yapılacak malzemeyi sabitleirken aynı zamanda da merkezleme yapmaktadır. Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir. Diğer özelliği ise yumuşak çenelere işlenecek parçanın formu uygulanabilir (1-2-3-4-5-6 şekillerde görüldüğü gibi.)
- Kullanım alanı: CNC ve mekanik frezeler, taşlama, matkap gibi çeşitli sanayi makinalarında kullanılır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Çeneleri ayrı olarak satın almanız gerekir.
- Siyah Kaplama

Product Nr. 2310 Steel Vice with Double Opening

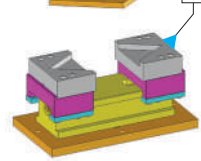
- This product fixes the material to be processes and at the same time it makes centering. The advantage of this system specially shows itself when making machinings of the materials having different outer diameter measurements as it implements this process without changing the center. It's other characteristic is to apply the form of the piece to be machined with soft claws (as seen in Figures: 1-2-3-4-5 and 6).
- Area of Using: This product is used in various industry machines such as CNC and mechanical milling machines, grinding and auger.
- Entire moving surface is sensitively grinded and hardened.
- You need to purchase jaws separate.
- Black coating



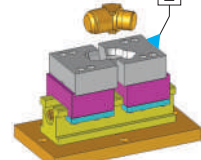
Şekil Figure 1



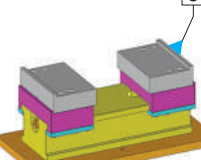
Şekil Figure 4



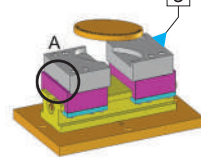
Şekil Figure 2



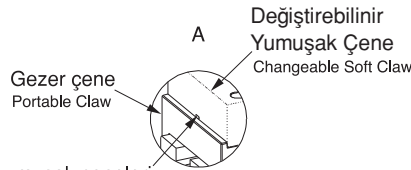
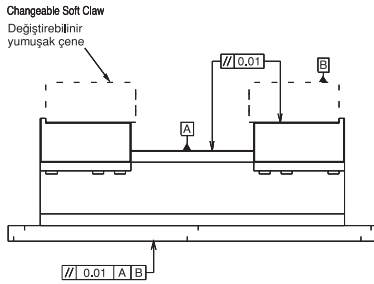
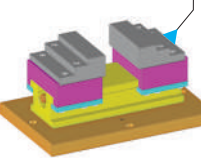
Şekil Figure 5



Şekil Figure 3



Şekil Figure 6



Gezer çene kaması yumuşak çeneleri söküp takma hassasiyeti ± 0.02 dir
Demounting and mounting of portable jaw wedge soft claws is ± 0.02 .

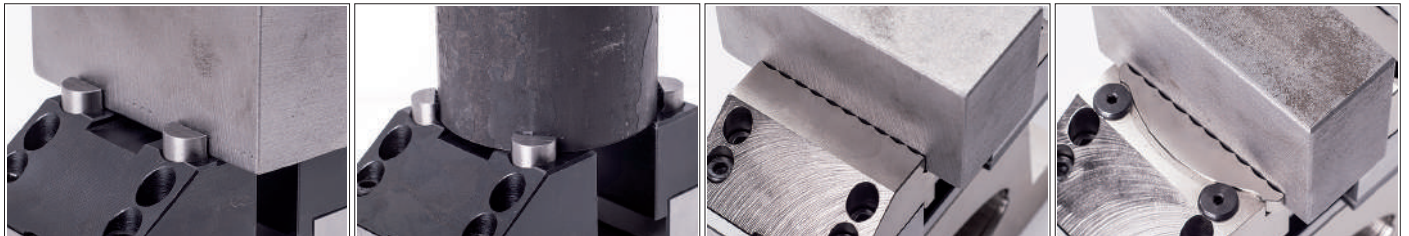
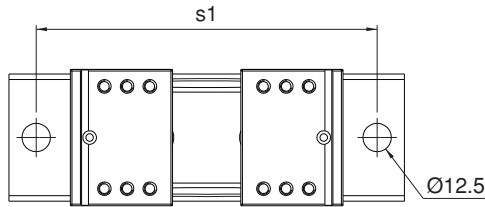
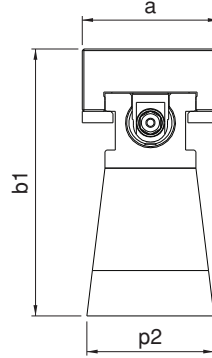
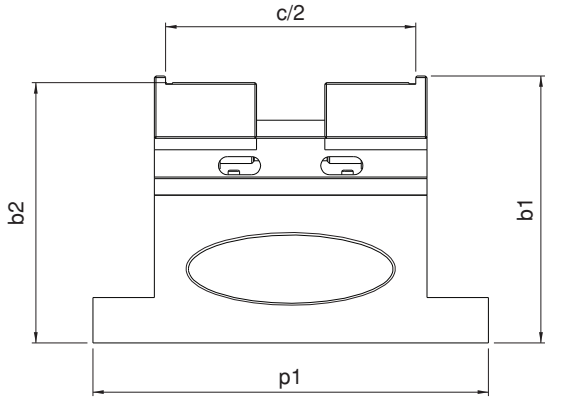
Referans Nr.	a	L	c/2	açılır opens 2 x mm	b1	b2 ±0,02	p1	p2	s1	Sıkma Kuvveti Clamping Force kgf	Tork Değeri Allowable Screw Torque (N-m)	sw	(kg)
2315-060	60	120	90	20	117.5	114.5	174	56	150	800	45	9	4.1
2315-078	78	180	130	30	159	155	224	73.5	200	1500	110	12	10
2315-100	100	220	154	38	159	155	274	95	250	1500	110	12	17.2

Ürün Nr. 2315 Çift Açılır 5-Eksen Mengene

- Ürün işlem yapılacak malzemeyi sabitlerken aynı zamanda da merkezleme yapmaktadır. Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir.
- Kullanım alanı: CNC ve CNC 5-Eksen sanayi makinalarında kullanılır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Çeneleri ayrı olarak satın almanız gerekir.
- Siyah Kaplama

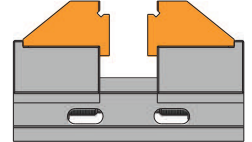
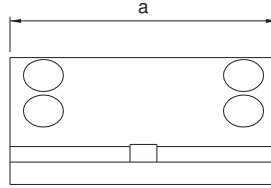
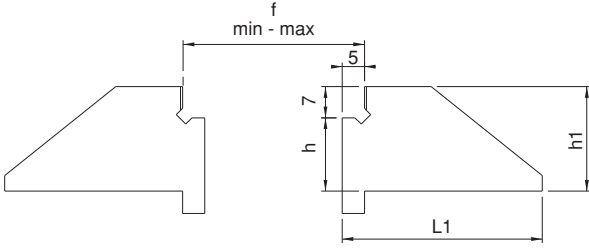

Product Nr. 2315 Double Opening 5-Axis Vice

- This product fixes the material to be processes and at the same time it makes centering. The advantage of this system specially shows itself when making machinings of the materials having different outer diameter measurements as it implements this process without changing the center.
- Area of Using: This product is used in various industry machines such as CNC and CNC 5-Axis mechanical milling machines,
- Entire moving surface is sensitevely grinded and hardened.
- You need to purchase jaws separate.
- Black coating



Referans Nr.	f min-max	h	h1	L1	a
2310-23150601	10-50	16.5	23.5	45	60
2310-23150781	10-70	26	33	65	78
2310-23151001	10-86	28	35	77	100
2310-23151251	10-104	31	38	87	125
2310-23151571	10-160	39	46	104	157

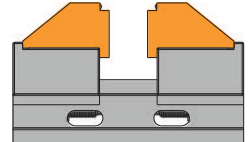
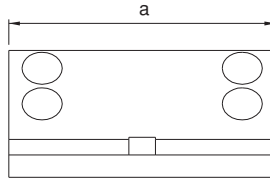
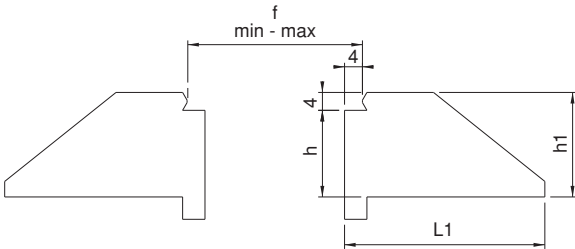
- Sertleştirilmiş
- Nikel Kaplama
- Hardened
- Nickel Coating



Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

Referans Nr.	f min-max	h	h1	L1	a
2310-23150602	8-48	20.5	23.5	45	60
2310-23150782	8-68	29	33	65	78
2310-23151002	8-84	31	35	77	100
2310-23151252	8-102	34	38	87	125
2310-23151572	8-158	46	46	104	157

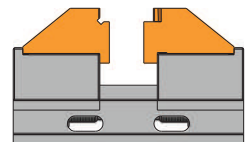
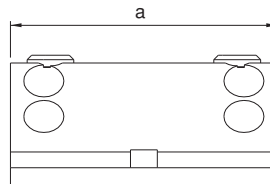
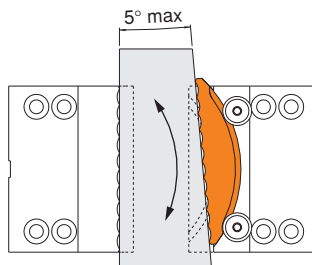
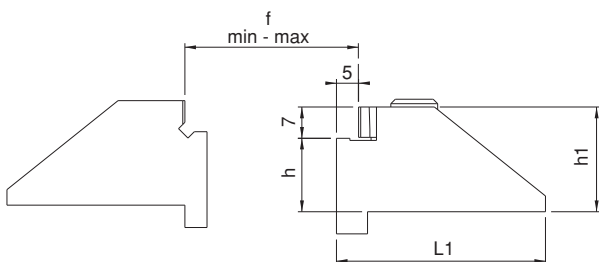
- Sertleştirilmiş
- Nikel Kaplama
- Hardened
- Nickel Coating



Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

Referans Nr.	f min-max	h	h1	L1	a
2310-23150603	10-50	16.5	23.5	47	60
2310-23150783	10-70	26	33	67	78
2310-23151003	10-86	28	35	79	100

- Sertleştirilmiş
- Nikel Kaplama
- Hardened
- Nickel Coating

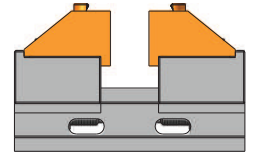
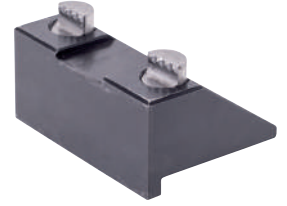
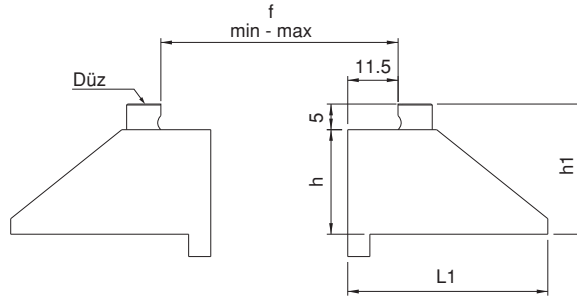
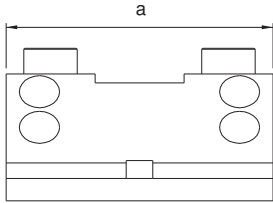
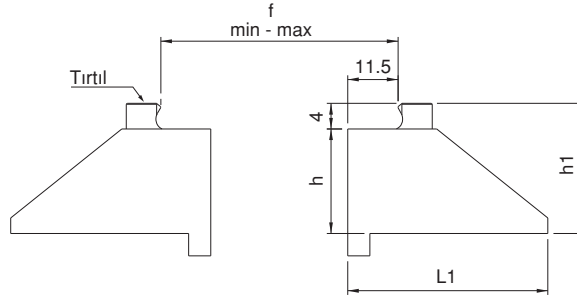
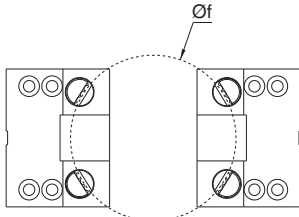


Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

Referans Nr.	f min-max		h	h1	L1	a
2310-23150604	46-72	23-63	23.5	27.5	45	60
2310-23150784	59-95	23-83	33	37	65	78
2310-23151004	77-124	23-99	35	39	77	100

- Satın almadan önce çene özelliğini belirtiniz. (Tırtıl veya Düz)
- Sertleştirilmiş
- Siyah Kaplama

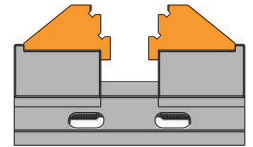
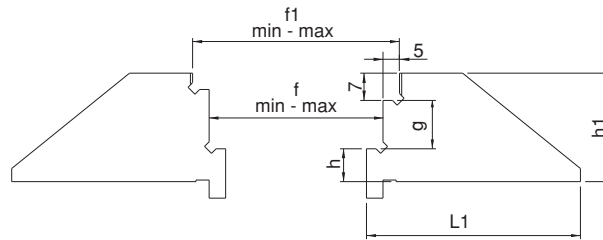
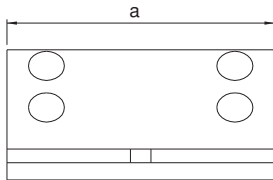
- You should specify the jaw feature before make purchase. (Serrated or Straight)
- Hardened
- Black Coating



Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

Referans Nr.	f min-max	f1 min-max	h	h1	g	L1	a
2310-23150605	10-50	20-60	7	23.5	9.5	45	60
2310-23150785	10-70	20-80	10	33	16	65	78
2310-23151005	10-86	20-96	10	35	18	77	100
2310-23151255	10-104	20-114	10	38	21	87	125
2310-23151575	10-160	20-170	10	46	29	104	157

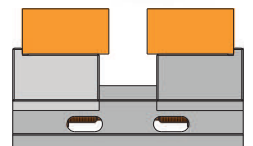
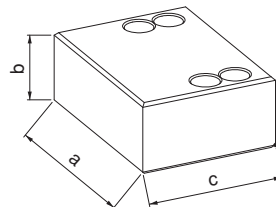
- Sertleştirilmiş
- Nikel Kaplama
- Hardened
- Nickel Coating



Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

Referans Nr.	a	b	c
2310-23150606	60	23.5	45
2310-23150786	78	33	65
2310-23151006	100	35	77
2310-23151256	125	38	87
2310-23151576	157	46	104

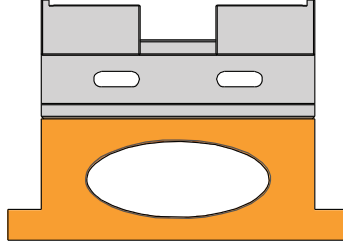
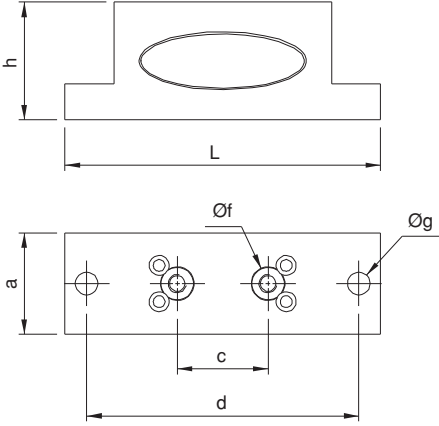
Yumuşak Çene
Soft Jaw



Nr.2310 ve Nr.2315 Kodlu Ürünlerle Uyumludur.

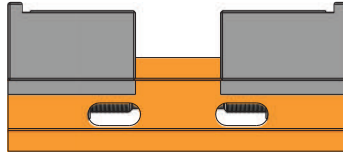
Referans Nr.	a	h	L	c	Øf H7	d	Øg	 (kg)
2315-060P	56	65	174	50	18	150	12.5	2.4
2315-078P	74	80	224	100	18	200	12.5	4.9
2315-100P	96	80	274	100	18	250	12.5	8.7

Alt Yükseltme Plakası
Lower Raising Plate



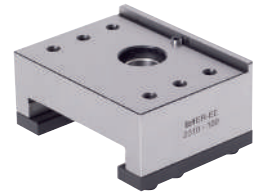
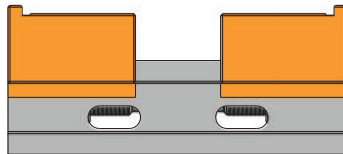
Referans Nr.
2310-2315-060AG
2310-2315078AG
2310-2315100AG
2310-2315125AG
2310-2315157AG

Alt Gövde
Sub-body



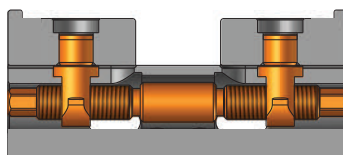
Referans Nr.
2310-2315060GÇ
2310-2315078GÇ
2310-2315100GÇ
2310-2315125GÇ
2310-2315157GÇ

Gezer Çene
Portable Jaw



Referans Nr.
2310-2315060M
2310-2315078M
2310-2315100M
2310-2315125M
2310-2315157M

Mil
Pin



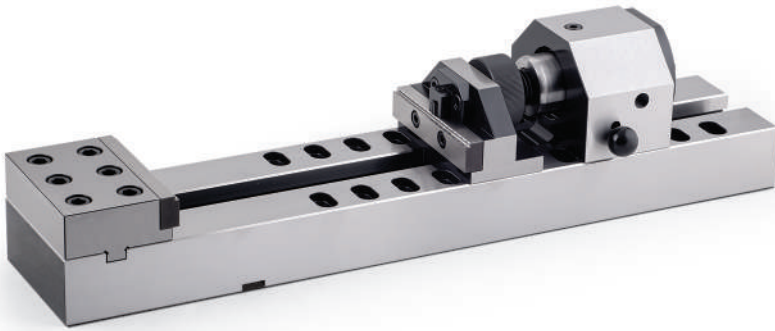
5-EKSEN MENGENE 5-AXIS VICE

Tırnaklı çenelerin 3mm yerden parçayı bağlama avantajıyla malzemenin 5 yüzeyini işleme olanağı sağlamaktadır. Kompak yapısı ile ideal bir kullanıma sahiptir. Aynı zamanda kolay bir şekilde çeneleri 180° ters çevirerek parça bağlama kapasitesini arttırabilirsiniz.

5-face-machining of workpieces possible. Ideal handling by compactness. The clamping jaws can be turned 180° and thereby enable a higher clamping capacity.

- 5 yüzey işleme
- Minimum malzeme hırdası
- Ön Presleme teknolojisi sayesinde düşük sıkma kuvvetiyle bile mükemmel tutma performansı
- ER-EL Ponit Clamp kombinasyonu ile yüksek tekrarlamaya doğruluğu
- Kolay ve esnek bir kullanım

- 5-face-machining
- Minimal scrap
- Highest holding power at low actuation forces through form-closure clamping
- High repeatability in combination with ER-EL Point Clamp
- Easy and flexibel application



ÖN ŞEKİLLENDİRME MENGENESİ PRE-FORM VICE

Ön şekillendirme mengenesi sayesinde malzemelerinize tırnaklar açarak kütleli malzemelerin 5-Eksen mengenede daha mükemmel tutma performansı sağlar. Yüksek tutma gücü gerektiren iş parçaları için ön şekillendirme mengenesi önerilir. 6mm den 355mm'ye kadar sıkma aralığına sahiptir.

For workpieces needed higher holding power is recommended Pre-Form Vice. Clamping range is 6-355 mm.

ER-EL POINT CLAMP

Dikey işleme, yatay işleme merkezlerinde 3-4-5 eksenli CNC Makinalarında ve divizörler de kullanılabilir. Kurulum süresini azaltıp Sanayieler içinde ER-EL Point Clamp ile yüksek hassasiyetle mengeneriniz ve mengene yönlerini değiştirebilir. Ayrıca aparatlarınızı değişimlerini de sağlayabilirsiniz. Nr.2315-052 ER-EL Point Clamp ile 046-077-097 Mengenerin adaptasyonunu sağlar. Nr.2315-096 ER-EL Point Clamp ile 125'lik mengene çeşitlerinin adaptasyonunu sağlayabilir. Ayrıca Nr.2315-096 Point Clamp üzerine, Nr.2315-5296 ER-EL Point Clamp merkez değiştirme adaptörünü kullanarak 046-077-097 mengeneride bağlamak için modülerlik sağlayabilirsiniz.

Kombinasyon:

Nr.2315-052 ile Nr.2315-046
Nr.2315-052 ile Nr.2315-077
Nr.2315-052 ile Nr.2315-097

Nr.2315-096 ile Nr.2315-125
Nr.2315-096 ile Nr.2315-5296

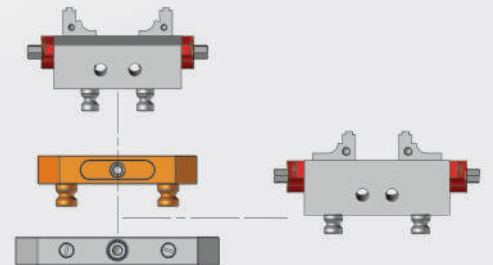
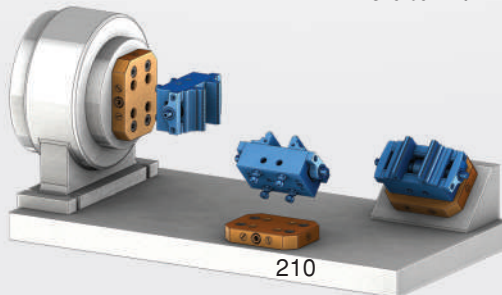
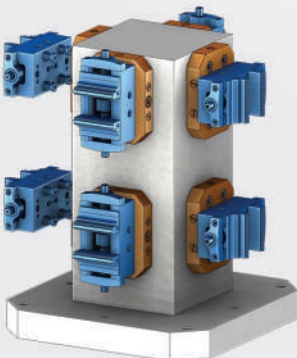


Application for horizontal machining center, vertical machining center, 3-4-5 axis CNC machines and CNC-Divisor. With ER-EL Point Clamp you can change your precision vices and the direction of the vices in a few seconds. Device change is also possible.

Combinations:

Nr.2315-052 with Nr.2315-046
Nr.2315-052 with Nr.2315-077
Nr.2315-052 with Nr.2315-097

Nr.2315-096 with Nr.2315-125
Nr.2315-096 with Nr.2315-5296



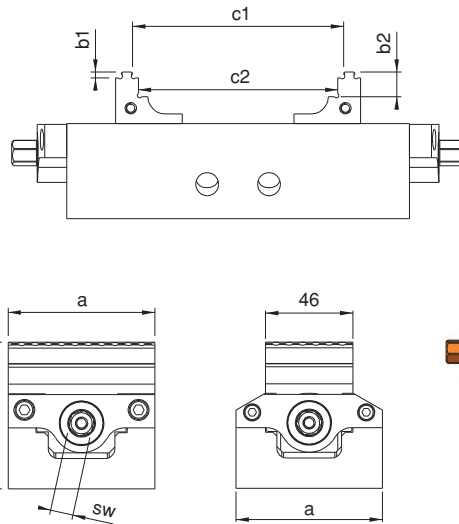
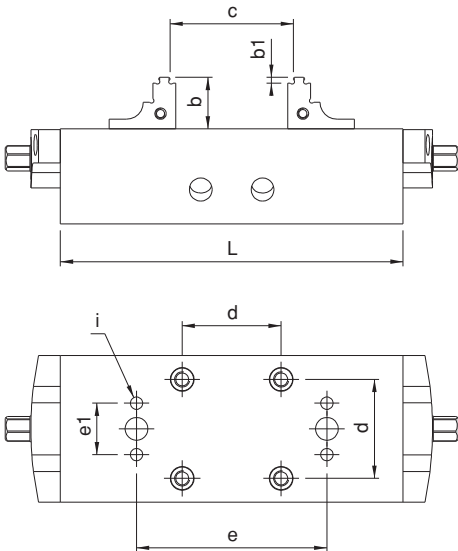
Referans Nr.	a	h	L	c	c1	c2	b	b1	b2	e	e1	i	d	Kombinasyon Combination	Kombinasyon Combination	Sıkma Kuvveti Clamping Force Kgf	Nm	sw	(kg)
2315-046120	77	77	120	6-63	45-100	39-95	27	3	13	100	25	M5	52	2315-08	2315-052	1000	50	12	3.00
2315-046160	77	77	160	6-103	45-140	39-135	27	3	13	100	25	M5	52	2315-08	2315-052	1000	50	12	3.90
2315-077105	77	77	105	6-40	72-85	66-80	27	3	13	80	27	M6	52	2315-08	2315-052	1400	70	12	3.30
2315-077130	77	77	130	6-65	72-110	66-105	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	3.50
2315-077160	77	77	160	6-95	72-140	66-135	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	4.40
2315-077180	77	77	180	6-115	72-160	66-155	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	4.80
2315-077210	77	77	210	6-145	72-190	66-185	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	5.50
2315-097105	97	77	105	6-40	72-85	66-80	27	3	13	80	27	M6	52	2315-08	2315-052	1400	70	12	6.50
2315-097130	97	77	130	6-65	72-110	66-105	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	6.70
2315-097160	97	77	160	6-95	72-140	66-135	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	7.60
2315-097180	97	77	180	6-115	72-160	66-155	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	8.00
2315-097210	97	77	210	6-145	72-190	66-185	27	3	13	100	27	M6	52	2315-08	2315-052	1400	70	12	8.70
2315-125160	125	92	160	6-70	92-138	86-130	32	3	13	100	35	M8	96	2315-10	2315-096	2000	100	14	9.50
2315-125210	125	92	210	6-120	92-188	86-180	32	3	13	100	35	M8	96	2315-10	2315-096	2000	100	14	11.50
2315-125260	125	92	260	6-170	92-238	86-230	32	3	13	150	35	M8	96	2315-10	2315-096	2000	100	14	13.70
2315-125310	125	92	310	6-220	92-288	86-280	32	3	13	150	35	M8	96	2315-10	2315-096	2000	100	14	15.80
2315-125360	125	92	360	6-270	92-338	86-330	32	3	13	150	35	M8	96	2315-10	2315-096	2000	100	14	17.50

Ürün Nr. 2315 5-Eksen Mengene

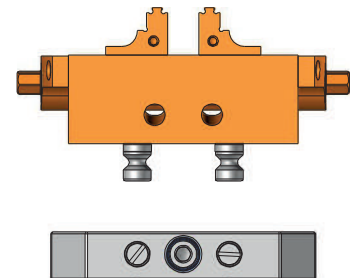
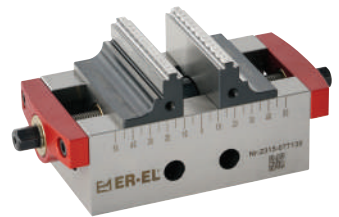
- Ürün işlem yapılacak malzemeyi sabitlerken aynı zamanda da merkezleme yapmaktadır. Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir.
- Kullanım alanı: CNC ve CNC 5-Eksen sanayi makinelerinde kullanılır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Tırnaklı çenelerin 3mm yerden parçayı bağlama avantajıyla malzemenin 5 yüzeyini işleme olanağı sağlamaktır. Kompak yapısı ile ideal bir kullanıma sahiptir. Aynı zamanda kolay bir şekilde çeneleri 180° ters çevirerek parça bağlama kapasitesini artırabilirsiniz.
- Siyah Kaplama

Product Nr. 2315 5-Axis Vice

- This product fixes the material to be processes and at the same time it makes centering. The advantage of this system specially shows itself when making machinings of the materials having different outer diameter measurements as it implements this process without changing the center.
- Area of Using: This product is used in various industry machines such as CNC and CNC 5-Axis mechanical milling machines,
- Entire moving surface is sensitively grinded and hardened.
- 5-face-machining of workpieces possible Ideal handling by compact ness The clamping jaws can be turned 180° and thereby enable a higher clamping capacity.
- Black coating



✓ Nr.2315-046120
Nr.2315-046160



Referans Nr.	a	L	h	b	b1	b2	c	sw	d	Kombinasyon Combination	Nm	(kg)
2315-052	116	150	27	100	50	-	52	8	12	2315-08	30	2.9
2315-096	156	192	27	150	50	100	96	8	12	2315-10	30	5.5


Ürün Nr. 2316 ER-EL Point Clamp

- Dikey işleme, yatay işleme merkezlerinde 3-4-5 eksenli CNC Makinalarında ve divizörler de kullanılabilir. Kurulum süresini azaltıp Saniyeler içinde ER-EL Point Clamp ile yüksek hassasiyetle mengeneriniz ve mengene yönlerini değiştirebilir. Ayrıca aparatlarınızı değişimlerini de sağlayabilirsiniz. Nr.2315-052 ER-EL Point Clamp ile 046-077-097 Mengenerin adaptasyonunu sağlar. Nr.2315-096 ER-EL Point Clamp ile 125'lik mengene çeşitlerinin adaptasyonunu sağlayabilir.

Kombinasyon:

Nr.2315-052 ile Nr.2315-046

Nr.2315-052 ile Nr.2315-077

Nr.2315-052 ile Nr.2315-097

Product Nr. 2316 ER-EL Point Clamp

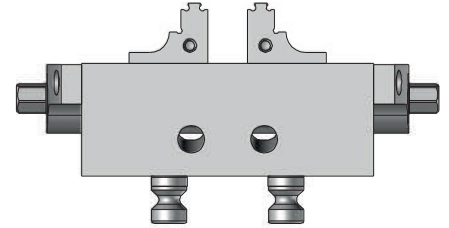
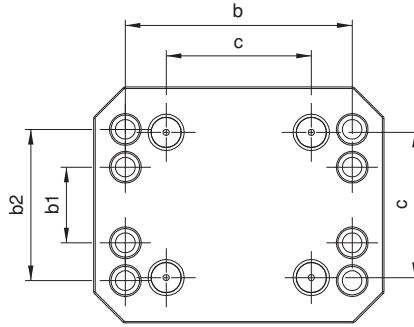
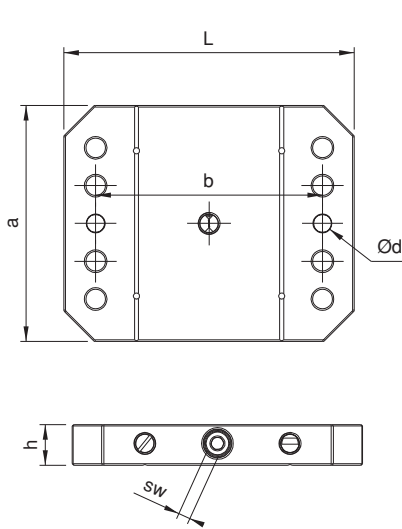
- Application for horizontal machining center, vertical machining center, 3-4-5 axis CNC machines and CNC-Divisor. With ER-EL Point Clamp you can change your precision vices and the direction of the vices in a few seconds.

Combinations:

Nr.2315-052 with Nr.2315-046

Nr.2315-052 with Nr.2315-077

Nr.2315-052 with Nr.2315-097



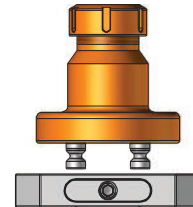
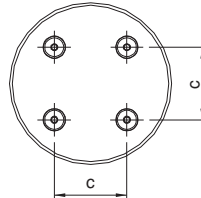
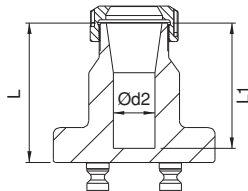
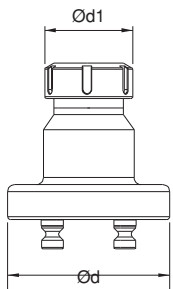
Referans Nr.	c	d	d1	d2	L	L1	(kg)
2315-052ER40	52	116	63	30	100	90	3,1
2315-096ER40	96	156	63	30	100	90	5,7

Ürün Nr. 2315 Point Clamp ER40 Tutucu

- Point Clamp ER40 Tutucu ile silindirik tipi parçalarını Pens sistemi ile bağlama yaparak Point Clamp İsteminde hızlı değişimler sağlayabilirsiniz.

Product Nr. 2315 Point Clamp ER40 Holder

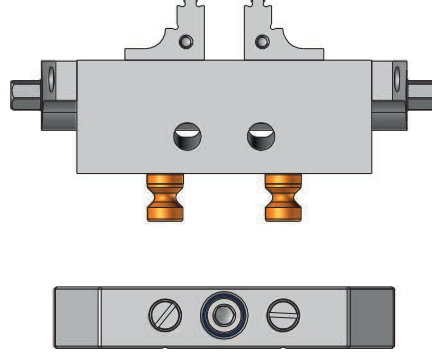
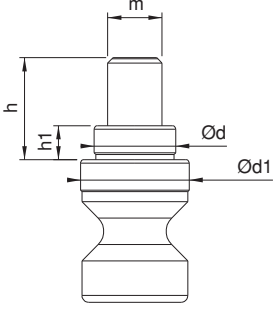
- Clamping your Point Clamp ER40 holder to clip systems gives you the opportunity to make swift changes.



Referans Nr.	m	h	h1	d	d1	Kombinasyon Combination	(g)
2315-08	M8	15	5	12	16	2315-052	35
2315-10	M10	15	5	16	20	2315-096	50

Ürün Nr. 2316 Çektirme Civatası

Product Nr. 2316 Pull Stud



Çektirme Civatası (Faturalı)

Puller Bolt With (Stopper)

Referans Nr.	m	h	h1	d	d1	d2	Kombinasyon Combination	(g)
2315-08F	M8	20	5	12	23	45	2315-052	110
2315-10F	M10	20	5	16	27	52	2315-096	150

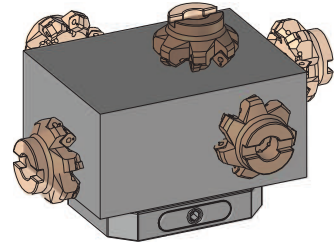
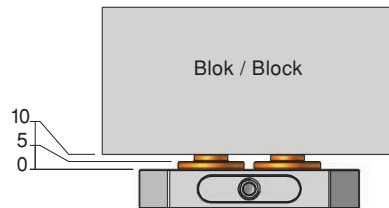
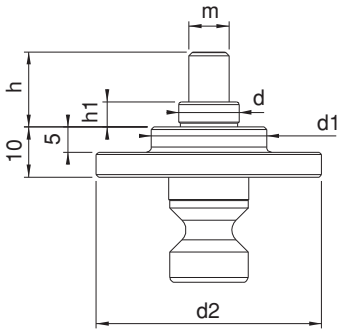
Ürün Nr. 2315 Çektirme Civatası (Faturalı)

- Blok tipi parçalarınızı Çektirme Civatası (Faturalı) ile Point Clamp İsteminde bağlama yaparak iş parçalarının beş yüzeyini de işleme olanağı sağlar.

Product Nr. 2315 Puller Bolt With (Stopper)

- Clamping your block type tools to Point Clamp Systems with your Puller Bolt (with Stopper) gives you the opportunity to use all five sides of your work piece.

NEW



Referans Nr.	a	L	h	c	c1	sw	Nm	Kombinasyon Combination	(kg)
2315-5296	116	150	27	52	96	8	30	2315-096	2.90

Ürün Nr. 2315 ER-EL Point Clamp Merkez Değişirme Adaptörü

• Nr.2315-096 Point Clamp üzerine, Nr.2315-5296 ER-EL Point Clamp merkez değişirme adaptörünü kullanarak 046-077-097 mngeneride bağlamak için modülerlik sağlayabilirsiniz.

Kombinasyon:

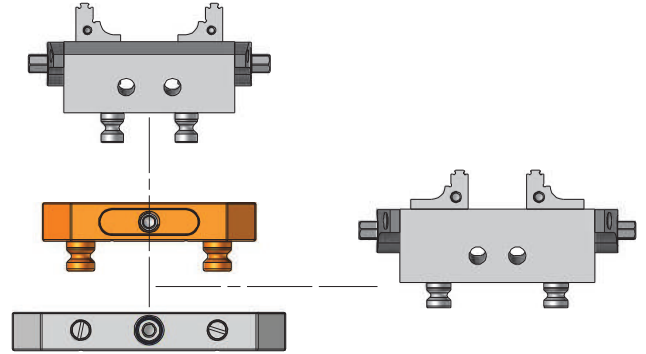
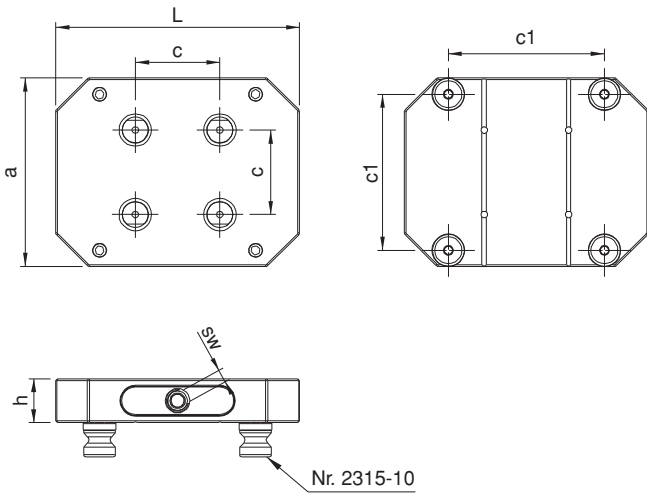
Nr.2315-096 ile Nr.2315-125
Nr.2315-096 ile Nr.2315-5296

Product Nr. 2315 ER-EL Point Clamp Center Change Adapter

• Device change is also possible.

Combinations:

Nr.2315-096 with Nr.2315-125
Nr.2315-096 with Nr.2315-5296



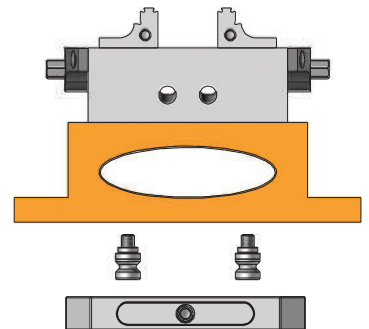
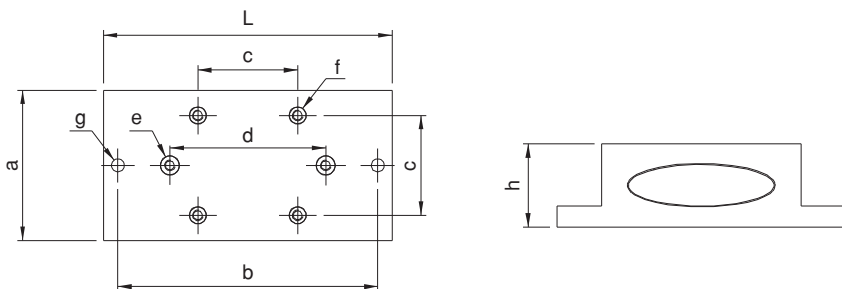
Referans Nr.	h	a	L	b	g	c	f Kombinasyon Combination	Kombinasyon Combination	d	e	(kg)
2315-04680	80	97	226	200	12,5	52	2315-08	2315-046	100	18	6.8
2315-07780	80	97	226	200	12,5	52	2315-08	2315-077	100	18	7
2315-09780	80	117	226	200	12,5	52	2315-08	2315-097	100	18	8.6
2315-12580	80	145	278	250	12,5	96	2315-10	*2315-125	150	18	13.3
2315-12581	80	145	380	350	12,5	96	2315-10	**2315-125	150	18	21.3

Ürün Nr. 2315 5- Eksen Mengene Yükseltmesi
Product Nr. 2315 5-Axis Vice Bottom Support
Kombinasyon:

Nr.2315-12580 5-Eksen mengene yükseltmesi,
*Nr.2315-125160 ve Nr.2315-125210 kodlu mengenede kullanılır.
Nr.2315-12581 5-Eksen mengene yükseltmesi,
**Nr.2315-125260, Nr.2315-125310 ve Nr.2315-125360 kodlu mengenede kullanılır.

Combinations:

Nr.2315-12580 is needed for the vice
*Nr.2315-125160 and Nr.2315-125210
Nr.2315-12581 is needed for the vice
**Nr.2315-125260, Nr.2315-125310 and Nr.2315-125360



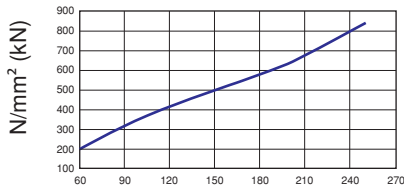
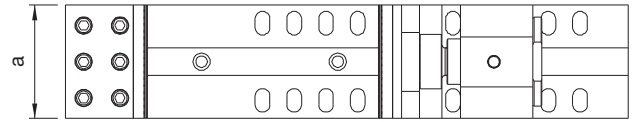
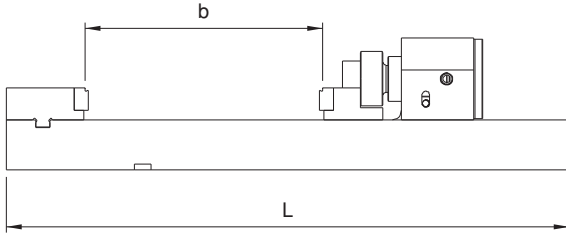
Referans Nr.	a	b	L	(kg)
2315-340	125	340	620	44

Ürün Nr. 2315 Ön Şekillendirme Mengenesi

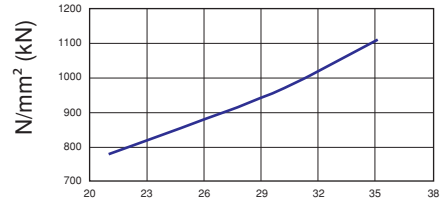
- Ön şekillendirme mengenesi sayesinde malzemelerinize tırnaklar açarak kütleli malzemelerin 5-Eksen megenede daha mükemmel tutma performansı sağlar. Yüksek tutma gücü gerektiren iş parçaları için ön şekillendirme mengenesi önerilir. 6mm den 355mm'ye kadar sıkma aralığına sahiptir.
- Pompa ünitesi dahil, arabalı set olarak satılmaktadır.
- Sadece mengene olarak talep edebilirsiniz.

Product Nr. 2315 Pre-Form Vice

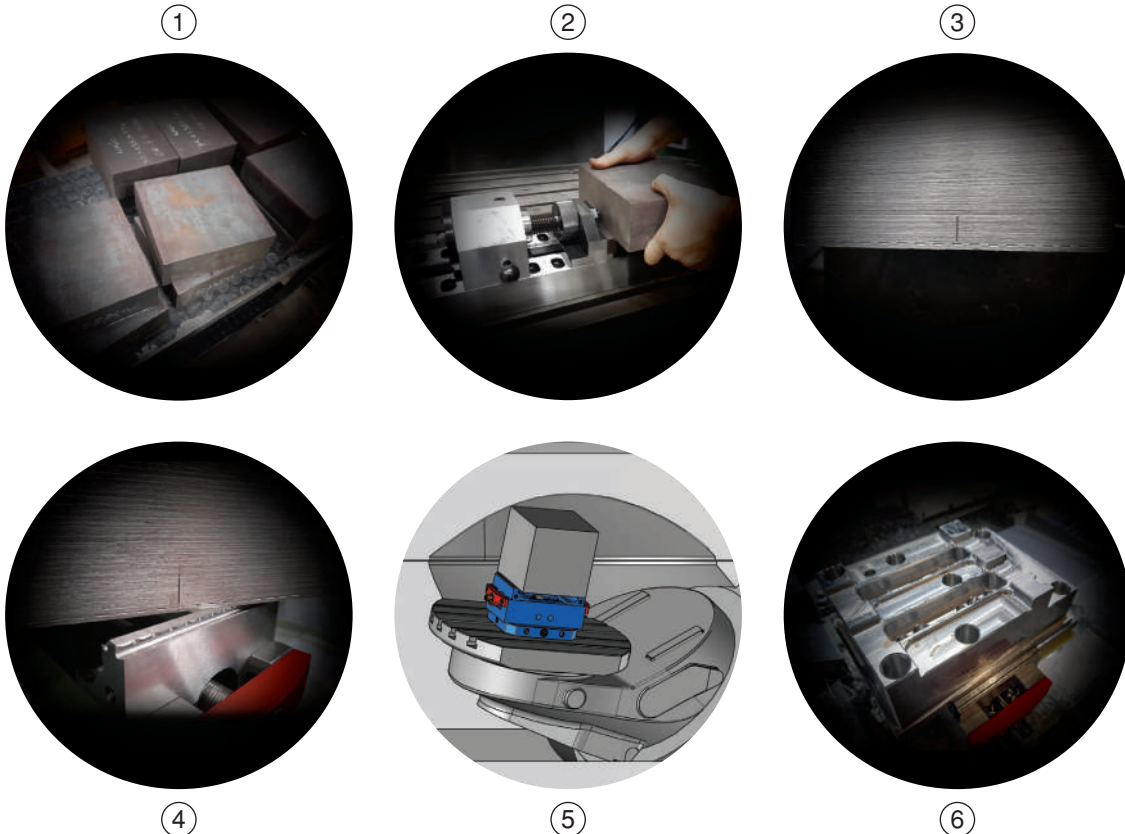
- Thanks to the pre-forming vise, it can engrave impressions on your mass materials and provide better holding performance in the 5-Axis vise.
- Pre-Form Vice is recommended for workpieces that require high holding power.
- Its clamping range is from 6mm to 355mm.
- It is sold as a car set including the pump unit.
- You can request it as Just Vice.



HB



HRC



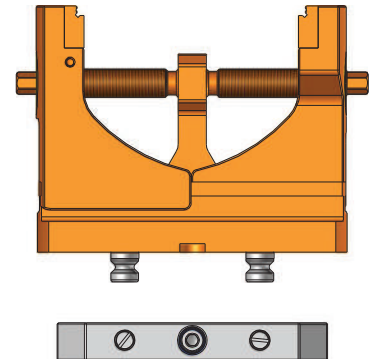
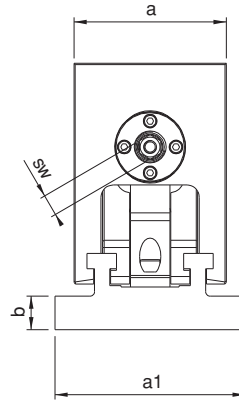
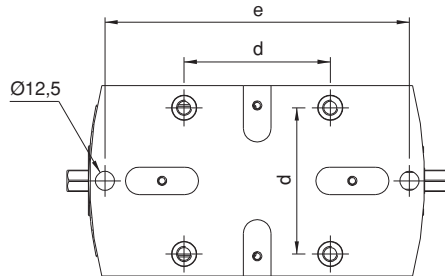
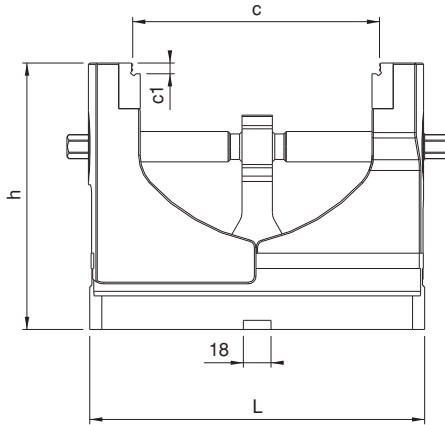
Referans Nr.	a	a1	h	L	c	c1	b	e	d	Sıkma Kuvveti Clamping Force Kgf	Nm	sw	Kombinasyon Combination	Kombinasyon Combination	(kg)
2315-100160	100	125	175	220	30-160	7	22	200	96	3000	130	14	2315-10	2315-096	13.70
2315-130225	130	155	175	285	30-225	7	22	250	96	3000	130	14	2315-10	2315-096	20.50

Ürün Nr. 2315 Yüksek 5-Eksen Mengene

- Ürün işlem yapılacak malzemeyi sabitleirken aynı zamanda da merkezleme yapmaktadır. Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir.
- Kullanım alanı: CNC ve CNC 5-Eksen sanayi makinalarında kullanılır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Siyah Kaplama

Product Nr. 2315 High 5-Axis Vice

- This product fixes the material to be processes and at the same time it makes centering. The advantage of this system specially shows itself when making machinings of the materials having different outer diameter measurements as it implements this process without changing the center.
- Area of Using: This product is used in various industry machines such as CNC and CNC 5-Axis mechanical milling machines,
- Entire moving surface is sensitively grinded and hardened.
- Black coating



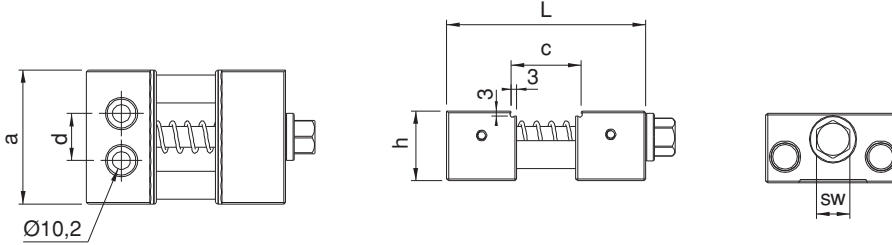
Referans Nr.	a	h	c	L	d	sw	Sıkma Kuvveti Clamping Force Kgf	(kg)
2315-040	77	40	6-40	114	27	17	1000	2


Ürün Nr. 2315 Kompak Mengene (Tek Yön)

- Pratik kullanımı ve minyatür yapısından dolayı dar olan alanlarda çoklu iş parçası bağlamak için avantaj sağlar.

Product Nr. 2315 Axis Vice (One Sided)

- Due to its practical use and miniature build, it gives you the opportunity to clamp your multi-work pieces even in small spaces.


Eksen Mengene (Çift Yön)

Axis Vice (Two Sided)

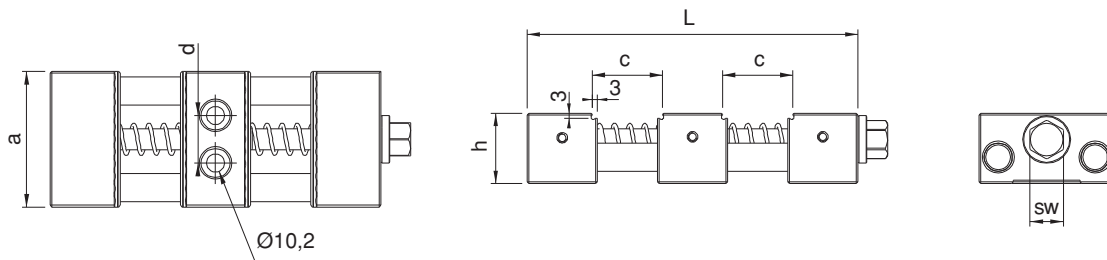
Referans Nr.	a	h	c	L	d	sw	Sıkma Kuvveti Clamping Force Kgf	(kg)
2315-080	77	40	6-40	188	27	17	1000	3


Ürün Nr. 2315 Kompak Mengene (Çift Yön)

- Pratik kullanımı minyatür yapısından dolayı dar olan alanlarda çoklu iş parçası bağlamak için avantaj sağlayan, yapısı ile beraber iki iş parçası da bağlama olanağı sağlamaktadır.
- En önemli özelliği parça ölçülerinde fark olsa bile sıkma işlemini sağlamaktadır.

Product Nr. 2315 Axis Vice (Two Sided)

- In addition to its practical use and miniature build, it gives you the opportunity to clamp your multi-work pieces even in small spaces, it also provides you the opportunity to clamp two work pieces.
- Its best feature is that you can clamp to different size pieces at the same time.



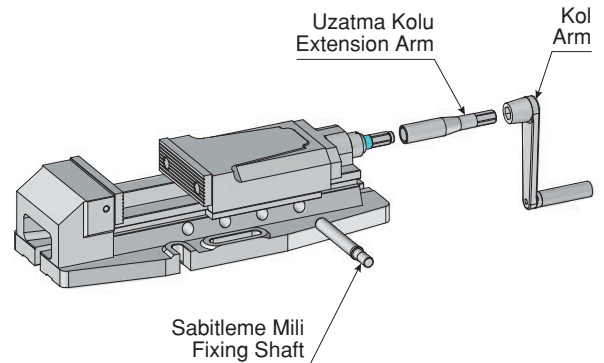
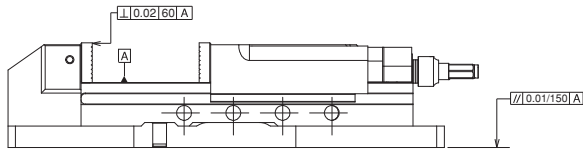
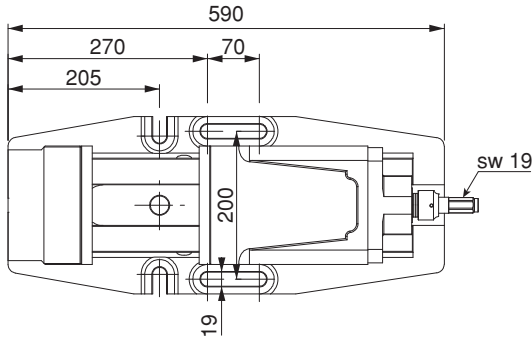
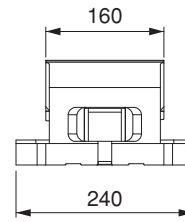
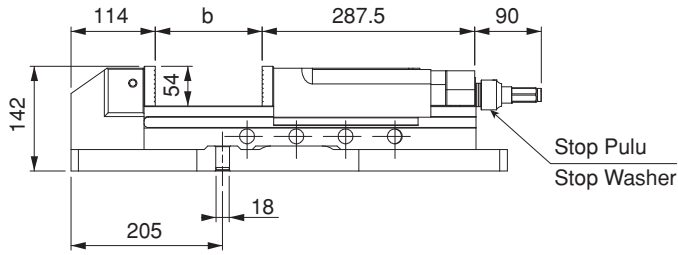
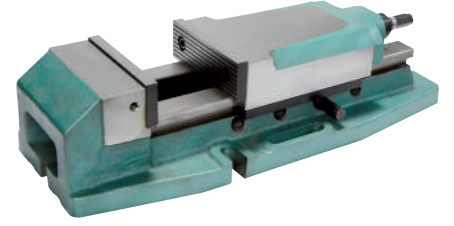
Referans Nr.	b	Sıkma Kuvveti Clamping Force kgf	 (kg)
2320-160200	0-200	4500	60

Ürün Nr. 2320 Hidrolik Mengene

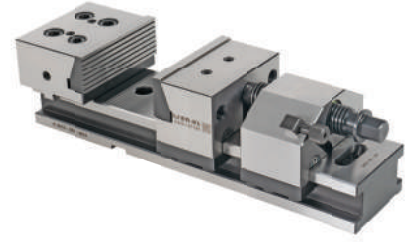
- Kullanım alanı: CNC ve mekanik frezeler, matkap tezgahları, çeşitli sanayi makineleri.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2320 Hydraulic Vice

- Area of Using: CNC and mechanical milling machines, drilling machines, various industrial machines
- Entire moving surface is sensitively grinded and hardened.



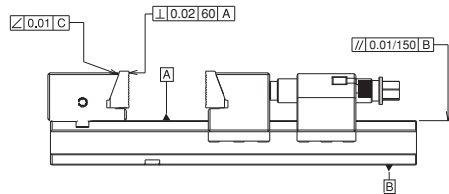
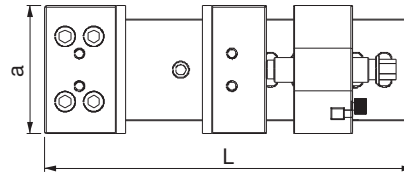
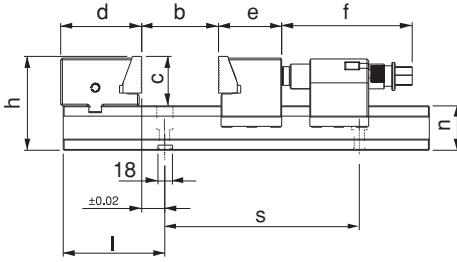
Referans Nr.	a	b	c	L	d	e	f	h	i	n	s	Sıkma Kuvveti Clamping Force kgf	Tork Değeri Allowable Screw Torque (N-m)	(kg)
2330-127160	127	0-160	60	422	99	78	160	115	125	55	200	4500	170	28
2330-157200	157	0-200	60	462	99	78	160	115	150	55	200	4500	170	46
2330-157300	157	0-300	60	562	99	78	160	115	150	55	250	4500	170	51
2330-197300	197	0-300	60	562	99	78	160	115	150	55	250	4500	170	66
2330-197400	197	0-400	60	662	99	78	160	115	150	55	350	4500	170	73
2330-197500	197	0-500	60	762	99	78	160	115	150	55	250/250	4500	170	80
2330-197600	197	0-600	60	862	99	78	160	115	150	55	250-250	4500	170	86


Ürün Nr. 2330 Mekanik Çelik Mengene

- Mekanik çelik mengene sertleştirilmiş ve hassas taşlanmış olarak mükemmel kullanıma sahiptir. Kullanım özelliği işlenecek malzemeyi sabitlerken sabit ve hareketli çenelerde bulunan modüler çeneler yaylı sisteminden dolayı malzemeyi mengene tabanına doğru çeker ve güvenli çalışma sağlar. Kamalı sabitleme özelliğiyle hareketli çene mesafesi hızlı ayarlanabilir, kolay kullanılır.
- Kullanım alanı: CNC ve mekanik frezeler, taşlama ve matkap tezgahları, çeşitli sanayi makineleri
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2330 Mechanical Steel Vice

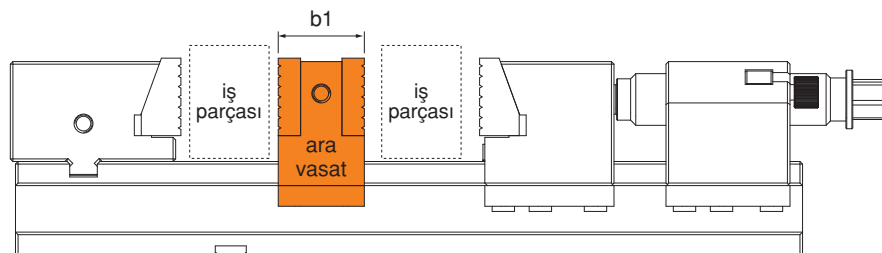
- Mechanical Steel Vice is hardened and it has excellent way of using because of being sensitively grinded. It's usage characteristic fixes the material to be machined and at the same time it pulls the material to the base of the vice because of having springed system of modular jaws taking place in the moving jaws. Entire moving surface is sensitively grinded. With it's wedged fixing characteristic, moving jaw distance can be adjusted rapidly and can be used with convenience.
- Area of Using: CNC and mechanical milling machines, grinding and drilling machines, various industrial machines
- Entire moving surface is sensitively grinded and hardened.


2'li Bağlama İçin Ara Vasat

Medium Part to Connect Two Work Piece

Referans Nr.	b1	(kg)
2330-127	50	3.1
2330-157	50	3.8
2330-197	50	4.7

Not: Çoklu bağlamalar için aravasat
Notes: To be able to clamp several workpieces, intermediate pieces are required.



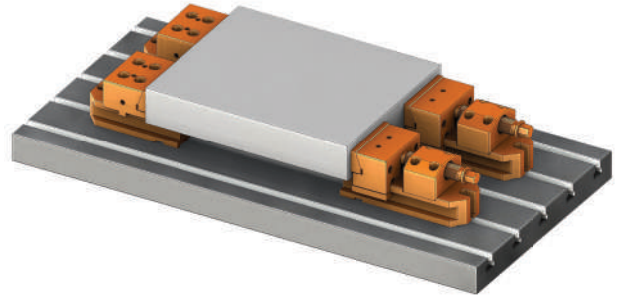
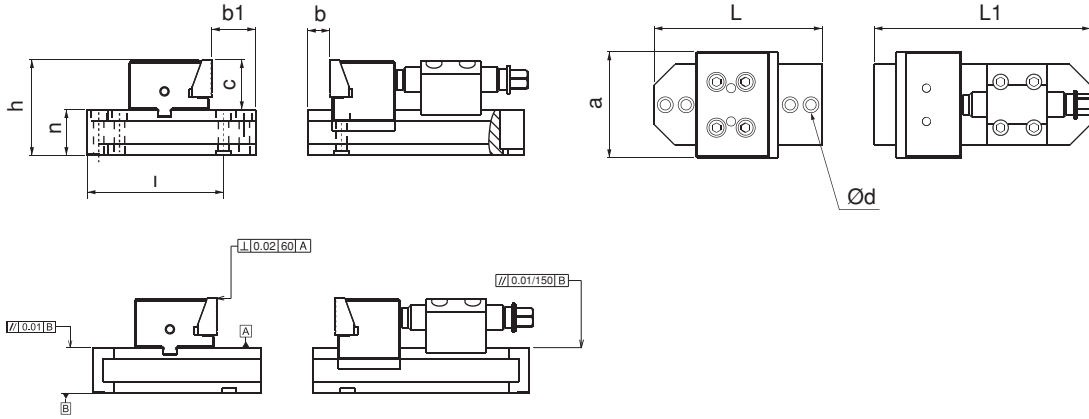
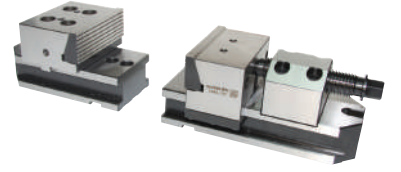
Referans Nr.	a	L	L1	b1	b	c	h	i	n	Ød	sıkma kuvveti clamping force kgf	Tork Değeri Allowable Screw Torque (N-m)	(kg)
2345-127	127	202	260	53	0-58	60	115	163.5	55	12.5	4500	170	28

Ürün Nr. 2345 Modüler Mekanik Çelik Mengene

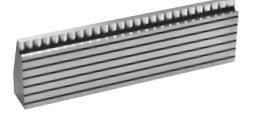
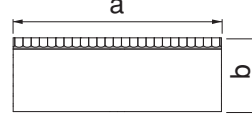
- Ürün çenelerinin hareketli oluşu iş parçasını karşıya ve aşağıya çekerek sıkar. Mengenenin iki parçalı ve paralel oluşu büyük iş parçalarını bağlamada delik diş vs. gibi işlemlerde kolaylık sağlar.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2345 Modular Mechanical Steel Vice

- Because of sliding clamping jaws it clamps the workpieces in opposite direction and down. The vice consists of two parts and it is parallel which provides clamping big tools, threading and similar processes easy.
- Entire moving surface is sensitively grinded and hardened.

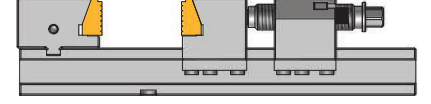


Referans Nr.	a	b	c	d	e	f	
2333-127	127	45	7	-	5	-	760
2333-157	157	45	7	-	5	-	935
2333-197	197	45	7	-	5	-	1180

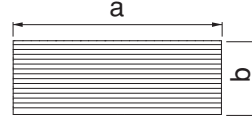


Ürün Nr. 2333 Mekanik Çelik Mengene Faturalı Çene
Product Nr. 2333 Mechanical Steel Vice Jaws with Stopper

- Sertleştirilmiş
- Hardened

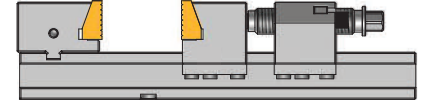


Referans Nr.	a	b	c	d	e	f	
2334-127	127	45	-	-	-	-	765
2334-157	157	45	-	-	-	-	960
2334-197	197	45	-	-	-	-	1185

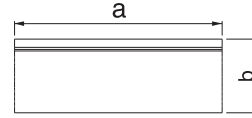
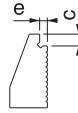


Ürün Nr. 2334 Mekanik Çelik Mengene Düz Çene
Product Nr. 2334 Mechanical Steel Vice with Straight Jaw

- Sertleştirilmiş
- Hardened

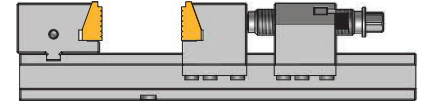


Referans Nr.	a	b	c	d	e	f	
2335-127	127	45	7	-	5	-	760
2335-157	157	45	7	-	5	-	935
2335-197	197	45	7	-	5	-	1180

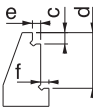


Ürün Nr. 2335 Mekanik Çelik Mengene Faturalı Çene
Product Nr. 2335 Mechanical Steel Vice Jaws with Stopper

- Sertleştirilmiş
- Hardened

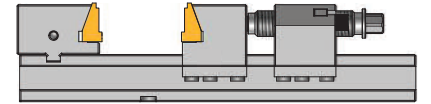


Referans Nr.	a	b	c	d	e	f	
2340-127	127	45	7	34	5	5	950
2340-157	157	45	7	34	5	5	1010
2340-197	197	45	7	34	5	5	1290

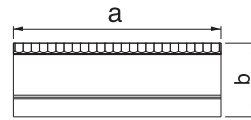
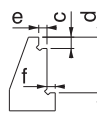


Ürün Nr. 2340 Mekanik Çelik Mengene Faturalı Çene
Product Nr. 2340 Mechanical Steel Vice Jaws with Stopper

- Sertleştirilmiş
- Hardened

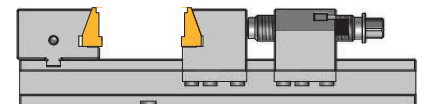


Referans Nr.	a	b	c	d	e	f	
2336-127	127	45	7	34	5	5	950
2336-157	157	45	7	34	5	5	1010
2336-197	197	45	7	34	5	5	1290



Ürün Nr. 2340 Mekanik Çelik Mengene Faturalı Çene
Product Nr. 2340 Mechanical Steel Vice Jaws with Stopper

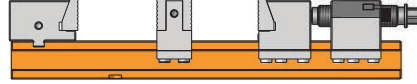
- Sertleştirilmiş
- Hardened



Referans Nr.
2330-127160AG
2330-157200AG
2330-157300AG
2330-197300AG
2330-197400AG
2330-197500AG
2330-197600AG

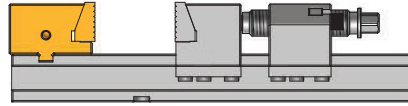
Ürün Nr. 2330 Alt Gövde
Product Nr. 2330 Sub-body

Not: Çoklu bağlamalar için aravasat
Notes: To be able to clamp several workpieces, intermediate pieces are required.



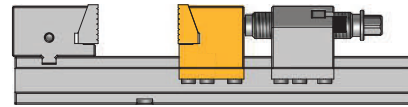
Referans Nr.
2330-127SÇ
2330-157SÇ
2330-197SÇ

Ürün Nr. 2330 Sabit Çene
Product Nr. 2330 Fixed Jaw



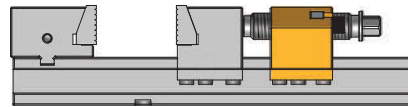
Referans Nr.
2330-127GÇ
2330-157GÇ
2330-197GÇ

Ürün Nr. 2330 Gezer Çene
Product Nr. 2330 Portable Jaw



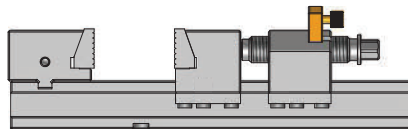
Referans Nr.
2330-127GS
2330-157GS
2330-197GS

Ürün Nr. 2330 Gezer Somun
Product Nr. 2330 Portable nut



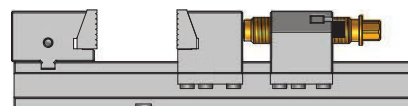
Referans Nr.
2330-127SK
2330-157SK
2330-197SK

Ürün Nr. 2330 Stop Kaması
Product Nr. 2330 Wedge of Stop



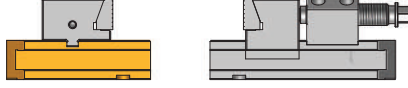
Referans Nr.
2330-127157197M

Ürün Nr. 2330 Mil
Product Nr. 2330 Pin

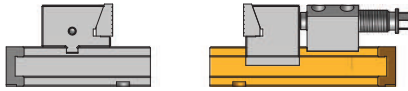


Referans
Nr.

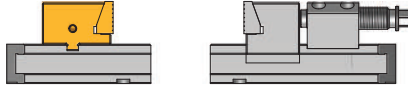
2345-127SAG

Ürün Nr. 2345 Sabit Alt Gövde
Product Nr. 2345 Fixed Sub-bodyReferans
Nr.

2345-127GAG

Ürün Nr. 2345 Gezer Alt Gövde
Product Nr. 2345 Portable Sub-bodyReferans
Nr.

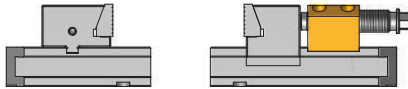
2345-127SÇ

Ürün Nr. 2345 Sabit Çene
Product Nr. 2345 Fixed JawReferans
Nr.

2345-127GÇ

Ürün Nr. 2345 Gezer Çene
Product Nr. 2345 Portable JawReferans
Nr.

2345-127SS

Ürün Nr. 2345 Sabit Somun
Product Nr. 2345 Fixed NutReferans
Nr.

2330-127157197M

Ürün Nr. 2330 Mil
Product Nr. 2330 Pin

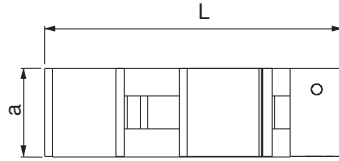
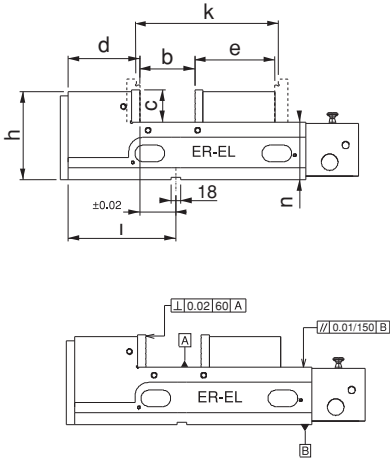
Referans Nr.	a	b	c	k	L	d	e	h	i	n ±0.01	sıkma kuvveti clamping force kgf	hareket mesafesi Moving Distance Torque	(kg)
2350-160E	160	160	58	310	530	130	145	160	190	105	2000	4	62

Ürün Nr. 2350 Pnömatik Mengene 160E

- 6 Bar hava ile çalışır. Pnömatik yapısından dolayı sıkma-açma işlemlerinde hız kazandırır.
- 2000 kgf sıkma kuvvetiyle iş parçasını sabitler. İsteğe bağlı bar ayar butonuyla sıkma kuvveti ayarlanabilir.
- Kullanım alanı: CNC ve mekanik frezeler, matkap tezgahları, çeşitli sanayi makinaları.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2350 Pneumatic Vice 160E

- It works with 6 Bar Air. It provides speed in clamping-opening processes because of it's pneumatic structure.
- It fixes the workpiece with it's 2000 kgf clamping force. Clamping force can be adjusted with it arbitrary bar adjustment button.
- Area of Using: CNC and mechanical milling machines, drilling machines, various industrial machines
- Entire moving surface is sensitevely grinded and hardened.



- "k" ölçüsüne yedek çenelerle ulaşılır. Yedek çeneler takıma dahil değildir.
- "k" measurement is reached by the spare jaws. The spare jaws are not included in the set.



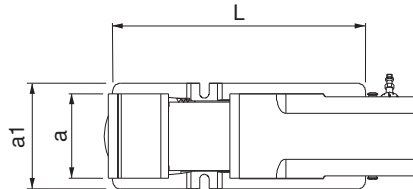
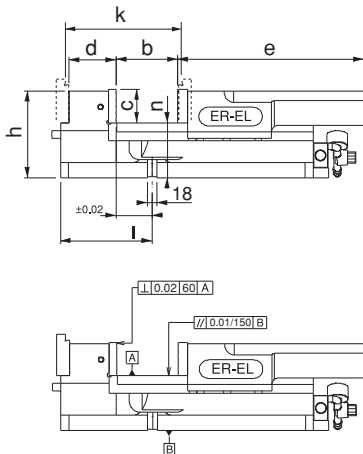
Referans Nr.	a	a1	b	c	k	L	d	e	h	i	n ±0.01	sıkma kuvveti clamping force kgf	hareket mesafesi Moving Distance Torque	(kg)
2370-051	130	188	60	58	135	327	64	209	160	-	105	1100	4	37
2370-052	130	185	140	63	225	400	69	300	160	173	105	2200	4	44
2370-053	160	201	200	63	300	485	93	353	166	170	105	3300	4	63
2370-054	200	240	250	63	360	530	93	410	166	185	105	4100	4	81

Ürün Nr. 2370 Pnömatik Mengene B

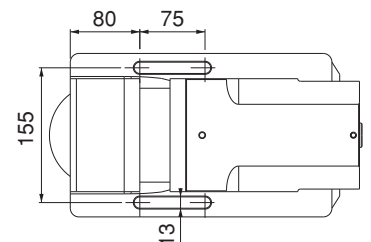
- 6 Bar hava ile çalışır. Pnömatik yapısından dolayı sıkma-açma işlemlerinde hız kazandırır.
- 1100 kgf ile 4100 kgf sıkma kuvvetiyle iş parçasını sabitler. İsteğe bağlı bar ayar butonuyla sıkma kuvveti ayarlanabilir.
- Kullanım alanı: CNC ve mekanik frezeler, matkap tezgahları, çeşitli sanayi makinaları.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2370 Pneumatic Vice B

- It works with 6 Bar Air. It provides speed in clamping-opening processes because of it's pneumatic structure.
- It fixes the workpiece with it's 1100 kgf and 4100 kgf clamping force. Clamping force can be adjusted with it arbitrary bar adjustment button.
- Area of Using: CNC and mechanical milling machines, drilling machines, various industrial machines
- Entire moving surface is sensitevely grinded and hardened.



- "k" ölçüsüne yedek çenelerle ulaşılır. Yedek çeneler takıma dahil değildir.
- "k" measurement is reached by the spare jaws. The spare jaws are not included in the set.

2370-051 Detay / Detail


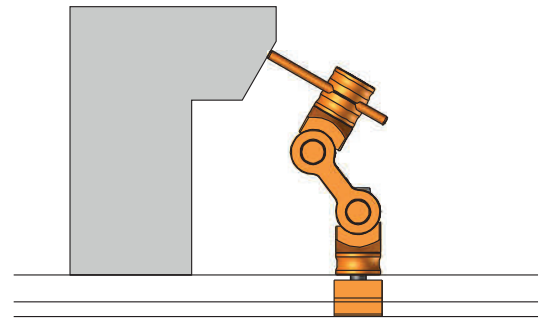
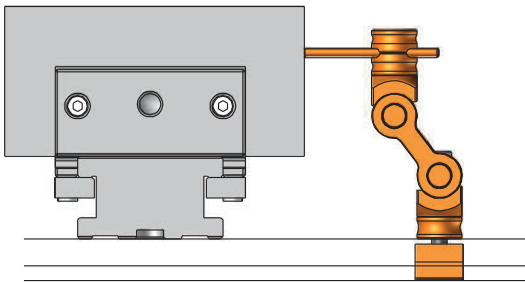
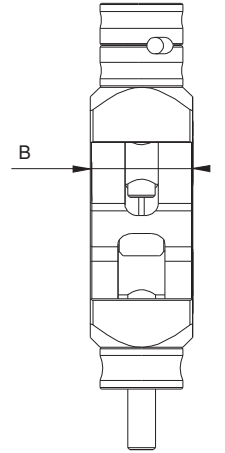
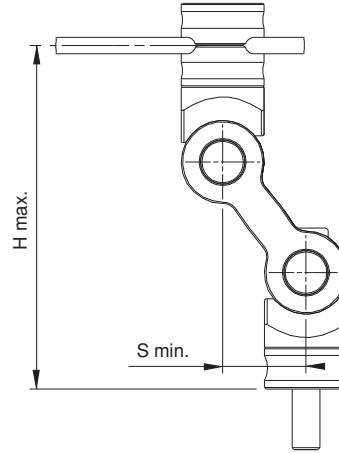
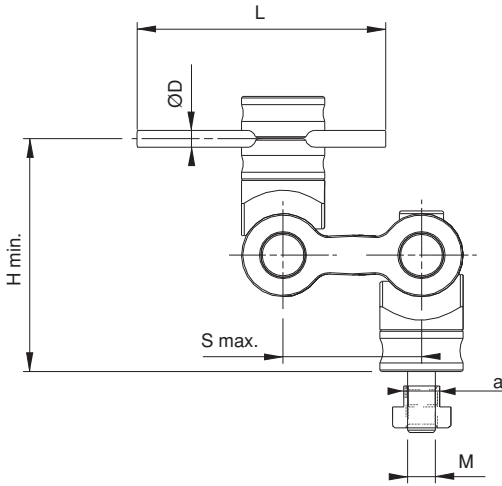
Referans Nr.	a	H min. - max.	L	ØD	S min. - max.	B	M	(g)
2377-12512	12	85-125	90	6	30-50	37	M10	780
2377-12514	14	85-125	90	6	30-50	37	M10	780
2377-12516	16	85-125	90	6	30-50	37	M10	780
2377-12518	18	85-125	90	6	30-50	37	M10	780
2377-16512	12	85-165	90	6	50-95	37	M10	865
2377-16514	14	85-165	90	6	50-95	37	M10	865
2377-16516	16	85-165	90	6	50-95	37	M10	865
2377-16518	18	85-165	90	6	50-95	37	M10	865

Ürün Nr. 2377 5D Dayama

- 5 Eksen ayarlama özelliği ile makinalarda ve montaj çalışmalarında hızlı ve esnek şekilde kolay kullanım olanağı sağlar.

Ürün Nr. 2377 5D Pluggable

- With its 5 axis adjustment feature, it provides fast and flexible usage in machines and assembly works.


Uygulama Örnekleri / Example Application
