

KINTEK





HSK KLEMMHALTER UND WERKZEUGHALTER (ICTM STANDARD)

HSK HOLDERS AND TOOLHOLDERS (ICTM STANDARD)

OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK (ICTM STANDARD)

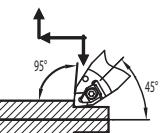
UTENSILI E PORTAUTENSILI CON ATTACCO HSK (ICTM STANDARD)

ДЕРЖАВКИ И РЕЗЦЕДЕРЖАТЕЛИ С ХВОСТОВИКОМ HSK (СТАНДАРТ ICTM)



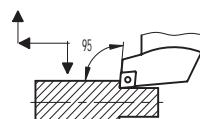


KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG PORTE-PLAQUETTES EXTERIEURES
EXTERNAL (O.D.) TURNING TOOLS PORTA INSERTI PER ESTERNI
ДЕРЖАВКИ ДЛЯ ВНЕШНЕГО ТОЧЕНИЯ



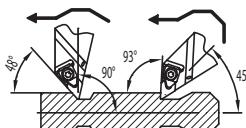
DCM

Page 391



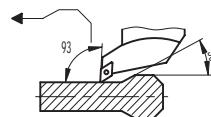
SCLC

Page 396



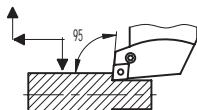
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Page 391



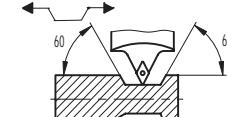
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Page 396



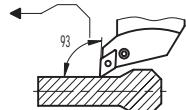
PCLN

Page 392



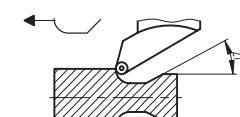
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Page 397



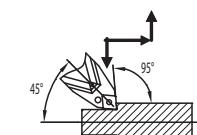
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Page 392



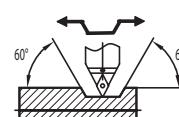
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Page 397



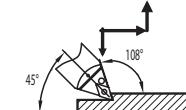
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Page 393



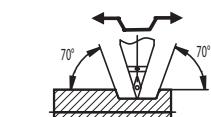
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Page 398



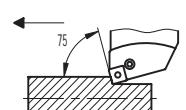
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Page 393



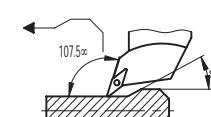
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Page 398



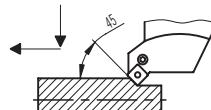
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Page 394



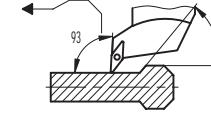
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Page 399



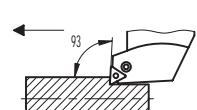
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Page 394



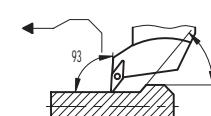
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Page 399



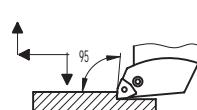
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Page 395



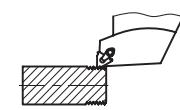
SVJB

Page 400



PWLN

Page 395

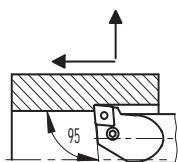


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Page 400

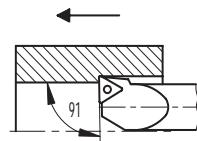


BOHRSTANGE FÜR DIE INNENBEARBEITUNG BARRES D'ALESAGE INTERIEURS
INTERNAL (I.D.) BORING BARS BARENI PER INTERNI
РАСТОЧНЫЕ ДЕРЖАВКИ



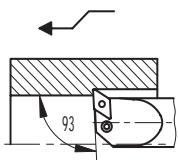
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Page 401



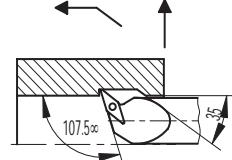
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Page 404



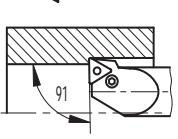
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Page 402



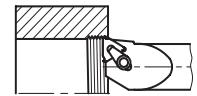
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Page 405



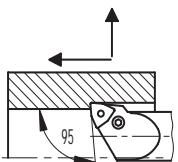
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Page 402



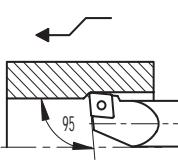
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Page 405



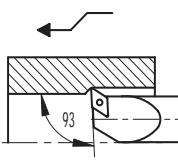
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Page 403



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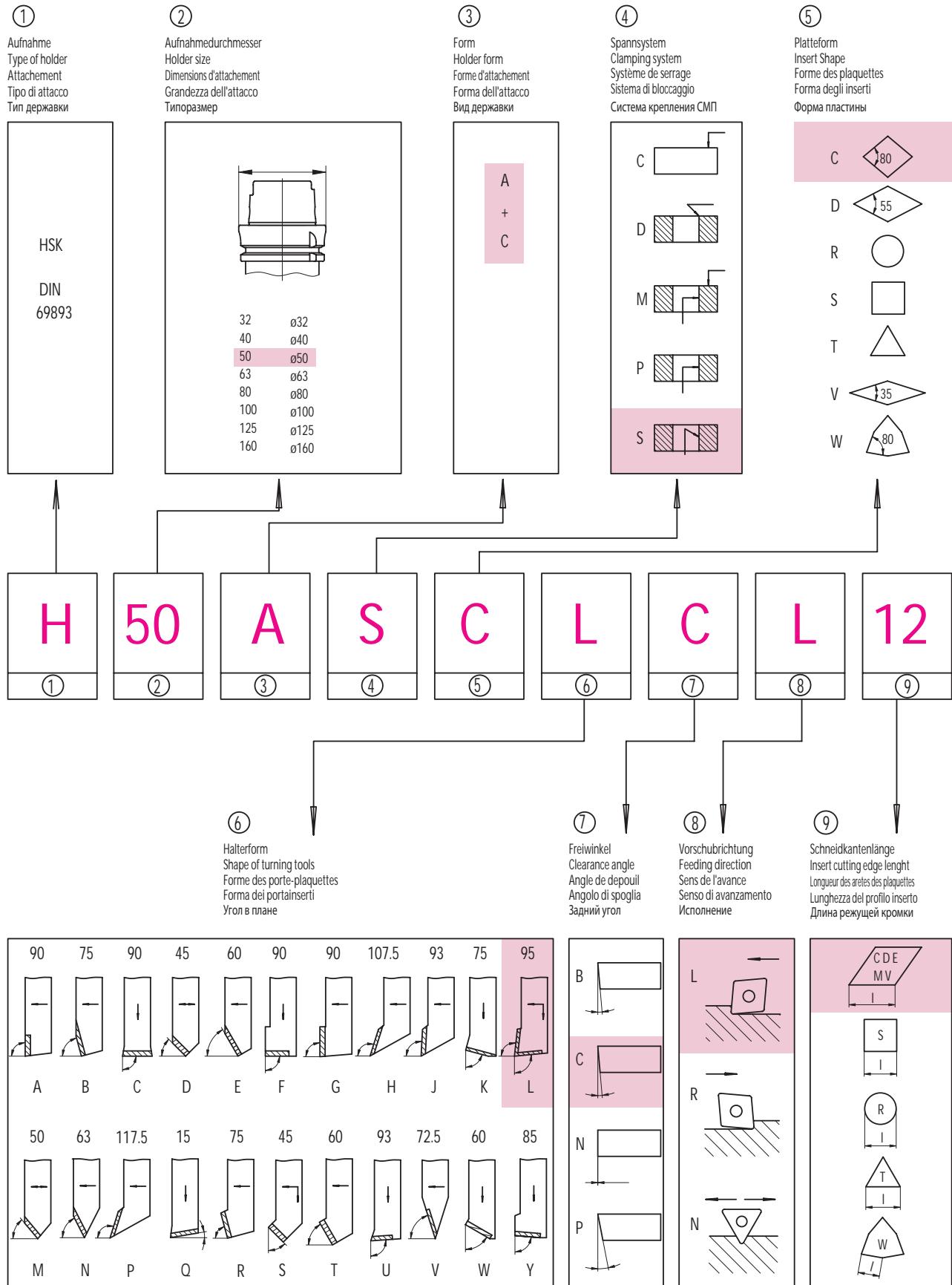
Page 403



SDUC

Page 404

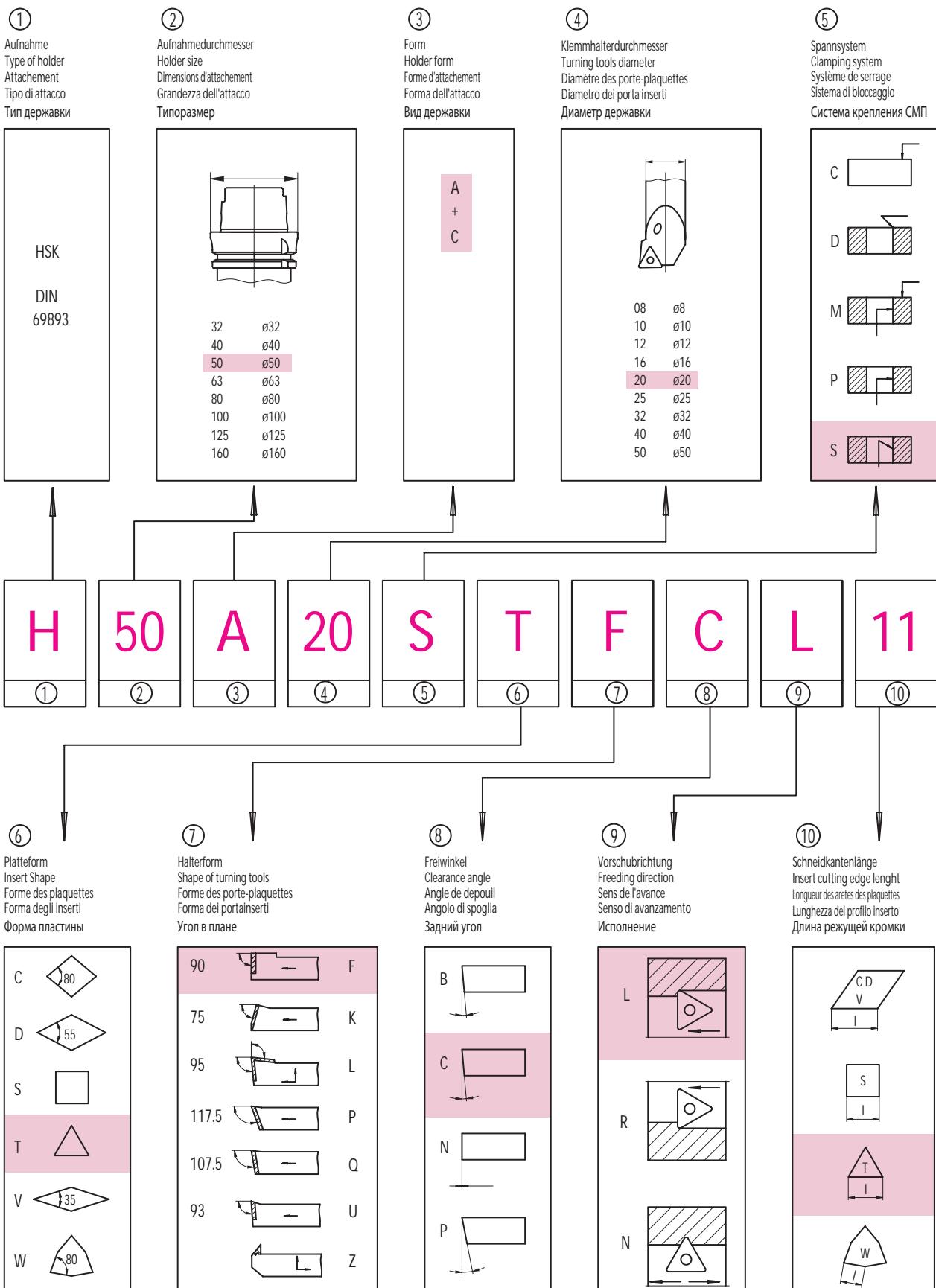
**BEZEICHNUNG VON HSK KLEMMHALTER
FÜR AUßENBEARBEITUNG
IDENTIFICATION OF EXTERNAL (O.D.)
TURNING TOOLS-HSK HOLDER
СИСТЕМА ОБОЗНАЧЕНИЯ ДЕРЖАВОК С ХВОСТОВИКОМ HSK ДЛЯ ВНЕШНЕГО ТОЧЕНИЯ**





BEZEICHNUNG VON HSK KLEMMHALTER
FÜR DIE INNENBEARBEITUNG
IDENTIFICATION OF INTERNAL (I.D.)
TURNING TOOLS-HSK HOLDER
СИСТЕМА ОБОЗНАЧЕНИЯ РАСТОЧНЫХ ДЕРЖАВОК С ХВОСТОВИКОМ HSK

DESIGNATION DES PORTE-PLAQUETTES
INTERIEURS-ATTACHEMENT HSK
IDENTIFICAZIONE DEI PORTA INSERTI
PER INTERNI-ATTACCO HSK





MODULARES WERKZUGSYSTEM FÜR DREHMASCHINEN SYSTEM MODULAIRE DE TOURNAGE TURNING MODULAR SYSTEM SISTEMA MODULARE DI TORNITURA МОДУЛЬНАЯ ТОКАРНАЯ СИСТЕМА



- Kintek präsentiert dieses modulare Drehsystem auf HSK-Basis das nicht nur die Wechselzeiten drastisch reduziert sondern auch eine universelle Schnittstelle darstellt, die auch auf den neueren Bearbeitungszentren mit HSK-Schnittstelle einsetzbar ist.
- Sehr schneller Werkzeugwechsel
- Vibrationsarm dank stabiler Spannung und Plananlage
- Sehr hohe Steifigkeit durch die Plananlage
- Hohe Wechselgenauigkeit der Schneide
- Maximaler Wiederholgenauigkeit +/- 0,002 mm
Der Werkzeugträger wird in den HSK-Adapter eingesetzt und mit einem einfachen Schlüssel in wenigen Sekunden befestigt.(Der Schlüssel dreht eine Schraube, die eine spezielle Spanneinheit ausdehnt und den HSK Kegel einzieht und so mit einer Plananlage spannt)
- Baluff chip Bohrung



- Adopting the famous HSK-DIN69893, in the several versions, and maintaining an interchangeability with the attachments for working centers, KINTEK offers the possibility to reduce, drastically, the times of set-up.
- Maximum rapidity in the tool change
- Great rigidity thanks to the big support surface
- The same cutting position
- Reduction of the vibrations
- Precision of interchangeability
- Optimal repeatability of positioning to the change tool: maximum error +/- 0,002 mm
- The conical bar hold is introduced in the appropriate center and, turning screw, a special clamp opens Locking the tool-holder taking advantage of the connection cone-plan
- Baluff chip hole



- KINTEK дает возможность заметно сократить время наладки инструмента, благодаря использованию известного конуса HSK-DIN69893 и принципа взаимозаменяемости в обрабатывающих центрах
- Максимальная скорость при смене инструмента
- Высокая жесткость благодаря большой площади опорной поверхности
- Всегда идентичное положение режущей кромки
- Уменьшение вибраций
- Точность взаимозаменяемости
- Оптимальная повторяемость при смене инструмента: максимальная ошибка +/- 0,002 мм
- Конический хвостовик устанавливается в соответствующее гнездо.
При вращении винта открываются губки, которые затем зажимают коническую часть оправки.
- Отверстие для датчика Baluff



- En utilisant le fameux HSK-DIN69893, dans les différentes versions, et en gardant une interchangeabilité avec les attaches pour des centres d'usinage à commande numérique, KINTEK offre la possibilité de réduire, significativement, les temps de l'installation.
- Rapidité maximum dans le changement d'outil.
- Grande rigidité grâce à la surface d'appui.
- La position de découpe est toujours identique
- Réduction des vibrations.
- Précision d'interchangeabilité.
- Répétabilité optimale du positionnement du changement d'outil : erreur maximum +/- millimètre 0.002
- La queue conique est introduite dans le siège spécial et en tournant une vis, on agit sur la bride spéciale qui bloquera le porte-outil en profitant de l'accouplement cône-plan.
- Trou pour balluff chip



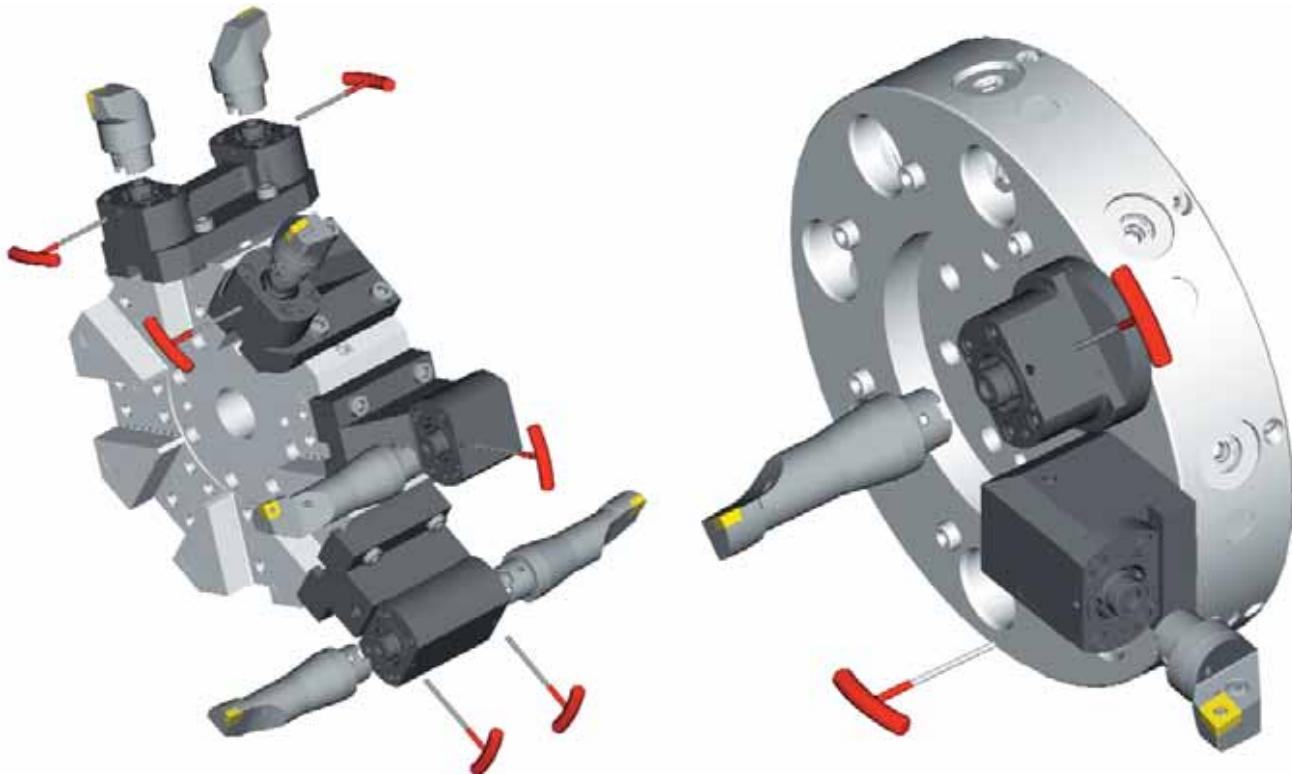
- Adottando il noto HSK-DIN69893, nelle varie versioni, e mantenendo una intercambiabilità con gli attacchi per centri di lavoro, KINTEK offre la possibilità di ridurre, drasticamente, i tempi di set-up.
- Massima rapidità nel cambio utensile
- Grande rigidità grazie alle grandi superfici d'appoggio
- Posizione del tagliente sempre identica
- Riduzione delle vibrazioni
- Precisione d'intercambiabilità
- Ottima ripetibilità di posizionamento al cambio utensile : errore massimo +/- 0,002 mm
- Il codolo conico viene introdotto nell'apposita sede e, ruotando una vite, si agisce sull'apertura della speciale pinza che bloccherà il portautensile sfruttando l'accoppiamento cono-piano.
- Foro per baluff chip





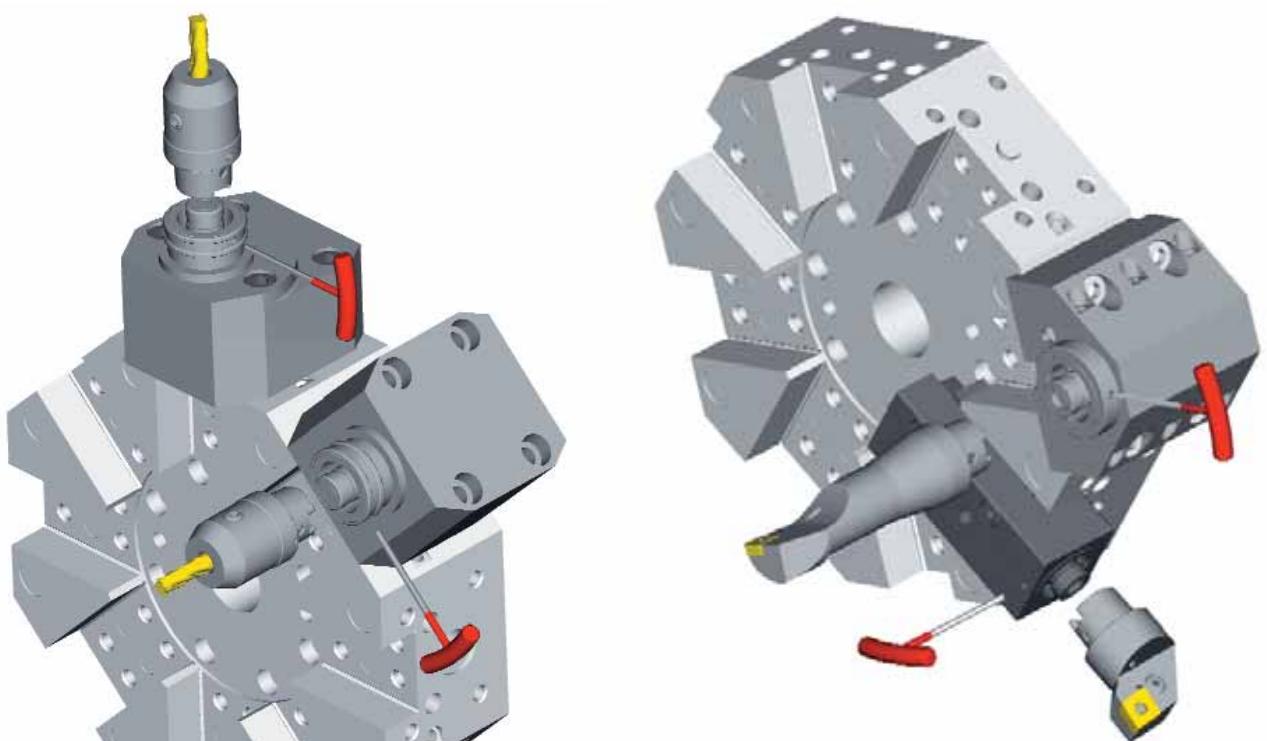
MASCHINENBEZOGENE LÖSUNGEN
PERSONALISED SOLUTION
SOLUTIONS PERSONALISÉES
SOLUZIONI PERSONALIZZATE
СПЕЦИАЛЬНОЕ РЕШЕНИЕ

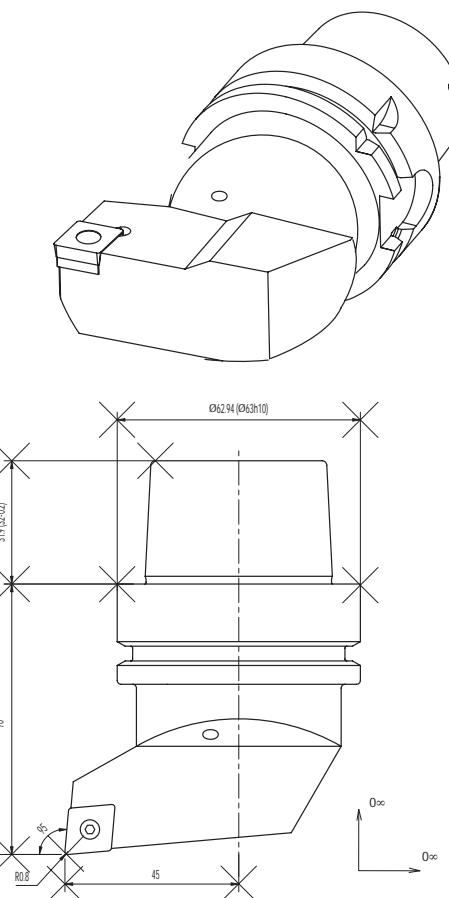
VDI LÖSUNGEN
VDI SOLUTION
SOLUTION VDI
SOLUZIONE VDI
РЕШЕНИЕ ДЛЯ VDI



ANGETRIEBENE WERKZEUGE
MOTORIZED TOOL-HOLDERS
PORTE-OUTILS MOTORISÉS
PORTAUTENSILI MOTORIZZATI
ПРИВОДНОЙ ИНСТРУМЕНТ

UNIVERSELLE LÖSUNG
UNIVERSAL SOLUTION
SOLUTION UNIVERSELLE
SOLUZIONE UNIVERSALE
УНИВЕРСАЛЬНОЕ РЕШЕНИЕ





Auf Anfrage sind Dispositionszeichnungen im dxf Format mit entsprechenden Massen verfügbar.

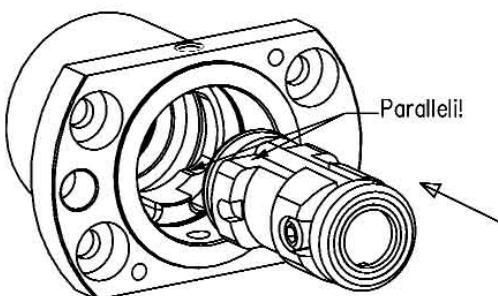
On request we can send you general layouts in dxf format with the relative dimensions.

Sur demande les dessins d'avant-projet en format dxf sont disponibles avec les relatives cotes.

Sono disponibili a richiesta i disegni di massima in formato dxf con relative quote di ingombro.

По запросу мы готовы выслать Вам общий чертеж в формате dxf с соответствующими размерами.

H63ABSL EINSATZ - MONTAGE DER SPANNZYLINDER DOUILLE H63ABSL - MONTAGE DU DISPOSITIF DE BLOCAGE
H63ABSL ADAPTER - CLAMPING ASSEMBLAGE BUSSOLA H63ABSL - MONTAGGIO DEL GIUNTO

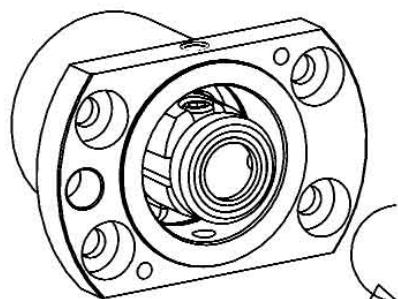


1—Setzen Sie den HN63C-Spannzylinder in den H63ABSL-Einsatz ein, indem Sie ihn durch die inneren Nuten des Einsatzes durchlassen. Spannschraube am Zylinder und Bohrung am Flansch sind um 90° versetzt.

Insert the HN63C clamping down into the H63ABSL adapter, letting it go through the slots inside the adapter.

Introduire en totalité le dispositif de blocage HN63C à l'intérieur de la douille H63ABSL en utilisant les rainures de guidage qui se trouvent à l'intérieur du corps!

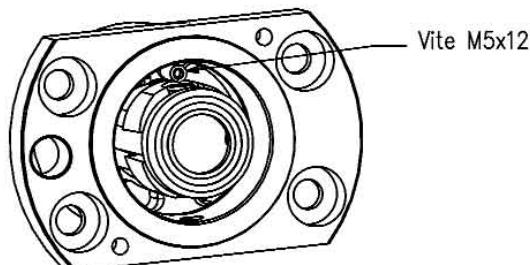
Inserire in profondità il giunto di bloccaggio HN63C all'interno della bussola H63ABSL facendolo passare fra le scanalatura presenti all'interno della bussola stessa!



2—Drehen Sie den HN63C-Spannzylinder nun um 90°, sodaB die kleine Einfrasung auf der Seite des Spannzylinders sich unter dem Gewindeestift befindet, der im Einsatz sitzt. Die Bohrung am Flansch und die Spannschraube am Spannzylinder sind nun in einer Linie.

Rotate of 90° the HN63C clamping, in order to put the little milling that lies on a side of the clamping itself exactly in the same position of the fastpin inside the adapter.

Tourner le dispositif HN63C de 90° (à gauche ou à droite) afin de positionner la goupille de retenue filetée dans la petite rainure située sur le coté du dispositif.

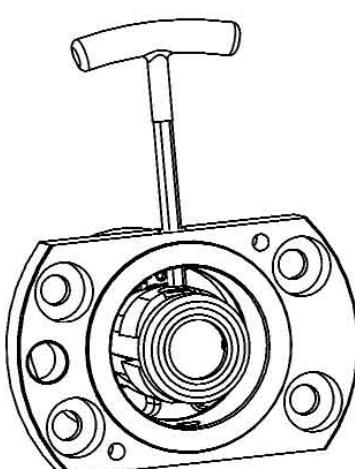


3—Schrauben Sie den M5x12 Gewindestift fest ein, sodaB der HN63C-Spannzylinder festgehalten wird.

Screw the M5x12 fastpin, in order to stop the movement of HN63C clamping.

Visser la goupille filée M5x12 afin d'arreter le mouvement du dispositif HN63C.

Avvitare la spina filettata M5x12 in modo di fermare il senso rotatorio del giunto HN63C.



4—Zur Montage und Demontage der HSK63A-Werkzeuge, schrauben Sie mit dem 5mm-Inbusschlüssel im Uhrzeiger- und Gegenuhrzeigersinn die Klemmschraube auf den HN63C-Spannzylinder auf und zu.

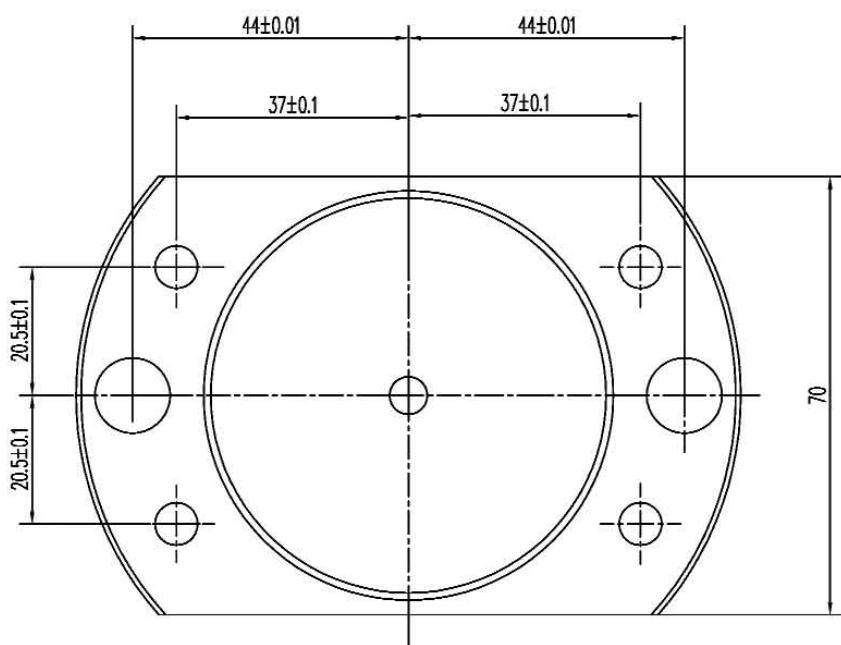
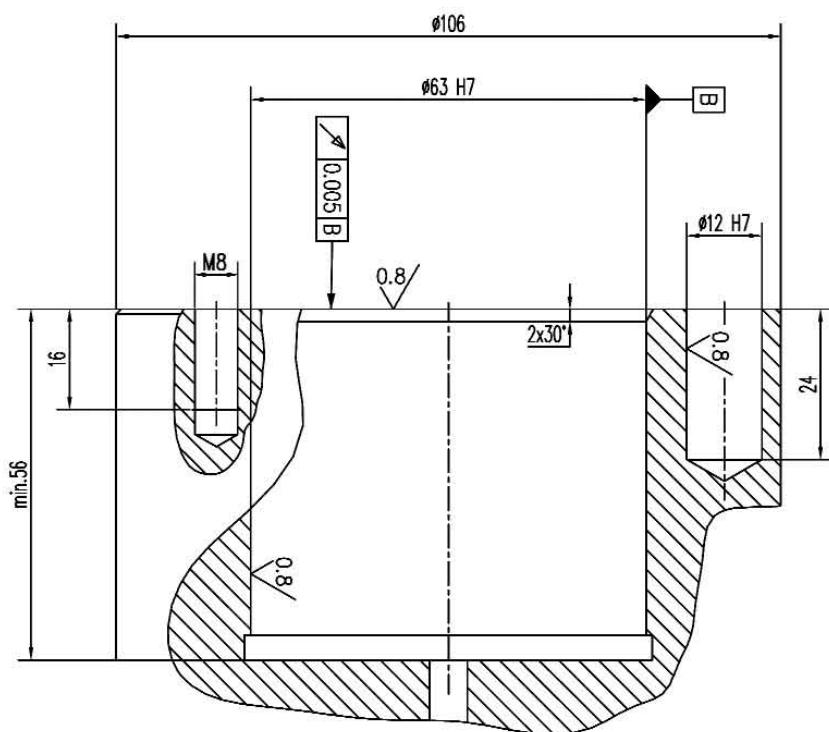
To assemble and disassemble the HSK63A tools it's necessary to operate in clock-and underclockwise with a 5mm set screw wrench on the fastening screw of the HN63C clamping.

Pour le montage et le positionnement des outils HSK63A tourner dans le sens des aiguilles d'une montre et bloquer avec la clé 6 pans de 5mm la vis de serrage placée sur le dispositif de blocage HN63C. Faire l'inverse pour le démontage.

Per il montaggio e smontaggio utensili HSK63A agire, in senso orario ed antiorario, con chiave a brugola ob 5 mm alla vite di chiusura situata sul giunto di bloccaggio HN63C.



SITZ FÜR DEN H63ABSL-EINSATZ SIEGE POUR L'ADAPTEUR H63ABSL
SEAT FOR THE H63ABSL-ADAPTER SEDE PER LA BUSSOLA H63ABSL
ГНЕЗДО ДЛЯ H63ABSL АДАПТЕРА





HSK - AUFNAHMEN UND WERKZEUGHALTER NACH DIN69893 TECHNISCHE DATEN

Alle HSK - Aufnahmen und Werkzeughalter werden nach den DIN-Normen angefertigt.

HSK-T

KEGELSHAFTTOLERANZEN

Nach DIN 69893 angefertigt.

PASSFEDERTOLERANZEN

Nach den ICTM-Toleranzen angefertigt.

Wenn die ICTM-Toleranz eingehalten wird, ist das Kupplungsspiel zwischen der Paßfeder an den Werkzeugmaschinen und dem Werkzeughaltersitz auf das Minimum reduziert.

Die ICTM-Toleranzen, die bei diesen Produkten an den Paßfegersitzen eingehalten werden, versichern Höchstpräzision.

Weitere Vorteile sind: sehr gute Wiederholbarkeit der Positionierung beim Werkzeugwechsel, höchster Fehler +/- 0,005 mm bei der gleichen Position der Schneide, sehr guter Werkzeugwechsel, Beseitigung der Vibratoren.

- aus Einsatzstahl angefertigt
- in Einsatzhärtefläche von 0,4-0,5 mm
- gehärtet, angelassen, brüniert
- Härte HRC 58+-2, Festigkeit 800-1000 N/mm²
- inneres, äußeres Schleifen
- Vorderseite (Werkzeugsitz) bearbeitet
- Fertigbearbeitung der Paßfegersitze nach den ICTM-Toleranzen
- 100% durch zertifizierte Meßinstrumente geprüft



HSK DIN69893 TOOLS AND TOOLHOLDERS

TECHNICAL FEATURES

All HSK tools and toolholders are manufactured according to DIN norm.

HSK-T

CONE'S TOLERANCE

According to DIN 69893

DRIVE KEY'S TOLERANCE

The so-called ICTM tolerance was born to reduce the positive allowance between the spindle drive key and the holder key slot. The ICTM tolerance applied on these products to the drive key gives them a great capacity of precision. The advantages of standard ICTM are multiple: excellent repeatability of change tool positioning, maximum error +/-0,005 giving the cutting edge always the same position, it permits a perfect tool interchangeability, it eliminates vibrations.

- Manufactured with casehardening Steel
- Casehardened with depth 0,4-0,5 mm
- Hardened-Tempered-Black oxidized
- Hardness HRC 58+-2 , strength 800-1000 N/mm²
- Internal and external grinding finish
- Working of the front side (tool seat)
- Taking up drive keys to ICTM tolerance
- Tested 100% with certified measuring instruments



ДЕРЖАВКИ И РЕЗЦЕДЕРЖАТЕЛИ С ХВОСТОВИКОМ HSK ТЕХНИЧЕСКОЕ ОПИСАНИЕ

Все державки и резцедержатели Kintek произведены согласно стандарту DIN.

HSK-T

ТОЧНОСТЬ КОНУСА

Соответствует классу DIN 69893

ТОЧНОСТЬ УСТАНОВКИ В ПРИВОДНОЙ ГОЛОВЕ (ТОЧНОСТЬ ШПОНОЧНОГО ПАЗА)

Согласно нормам системы ICTM, поле допуска приводной шпонки и канавки резцедержателя меньше, чем в стандартной системе. Соблюдение требований ICTM позволяет получить высокоточное соединение. К преимуществам данной системы относятся: отличная повторяемость позиционирования режущей кромки при смене инструмента, максимальная ошибка позиционирования режущей кромки +/- 0,005. Это позволяет получить хорошую взаимозаменяемость инструмента и исключить вибрации.

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску. Защитно-декоративное покрытие черного цвета.
- Твердость 58+-2 HRC, прочность 800-1000 N/mm²
- Шлифованные внешние и внутренние диаметры
- Точность приводных шпонок станка должна быть по стандарту ICTM
- Каждая оправка испытана на сертифицированном оборудовании



OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK DIN69893 DONNEES TECHNIQUES

Tous les outils et porte-outils avec attachement HSK sont fabriqués selon les normes DIN.

HSK-T

TOLERANCE DU CONE

Fabriqué selon DIN 69893

TOLERANCE DE LA CLAVETTE D'ENTRAINEMENT

La tolérance ICTM est née afin de réduire le jeu de couplage entre la cheville d'entrainement/mise en place, positionnée sur les machines outils, et le siège du porte-outil/outil.

Les tolérances ICTM appliquées pour ces produits sur le siège de la cheville de mise en place (clavettes) leur donnent des caractéristiques remarquables de haute précision. Les avantages du standard ICTM qui s'ensuivent sont différents; répétitivité de positionnement du porte-outil, erreur +/-0,005 mm maximum avec la plaque toujours au même endroit, très bonne interchangeabilité de l'outil et l'élimination des vibrations.

- Produits en acier cémenté allié
- Cémentés avec profondeur 0,4-0,5 mm
- Tempré-Revenus-brunis
- Dureté HRC 58+-2 résistance 800-1000 N/mm²
- Finition de rectification intérieure, extérieure
- Finition de la face de référence de l'outil
- Finition des sièges de la cheville d'entrainement selon tolérance ICTM
- Contrôlés à 100% avec des instruments de mesure certifiés



UTENSILI E PORTAUTENSILI CON ATTACCO HSK DIN69893

DATI TECNICI

Tutti gli utensili e portautensili con attacco HSK vengono prodotti secondo le normative DIN.

HSK-T

TOLLERANZE DEL CONO

Prodotti secondo DIN 69893

TOLLERANZE CHIAVETTE DI TRASCINAMENTO

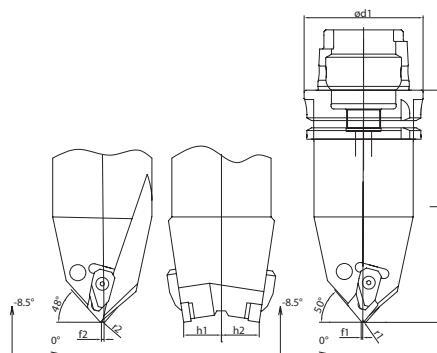
La tolleranza definita ICTM è sorta per ridurre al minimo il gioco di accoppiamento tra il tassello di trascinamento/posizionamento, posizionato sulle macchine utensili, e la sede del portautensile/utensile.

Le tolleranze ICTM applicate in questi prodotti sulle sedi del tassello di posizionamento danno allo stesso notevoli caratteristiche di alta precisione. I vantaggi che ne conseguono dello standard ICTM sono diversi: ottima ripetibilità di posizionamento del cambio utensile, errore massimo +/-0,005 mm dando al tagliente sempre la stessa posizione, perfetta intercambiabilità dell'utensile, eliminazione delle vibrazioni.

- Costruiti in acciaio da cementazione legato
- Cementati con profondità 0,4-0,5 mm
- Temprati-rinvenuti-bruniti
- Durezza HRC 58+-2 resistenza 800-1000 N/mm²
- Finitura di rettifica interna-esterna
- Lavorazione della parte anteriore (sede utensile)
- Ripresa sedi tassello di trascinamento a tolleranze ICTM
- Collaudati 100% con strumenti di misura certificati



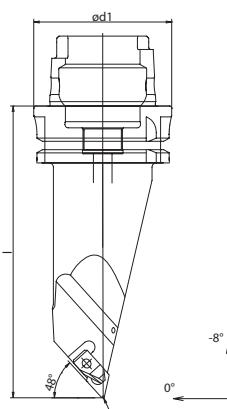
DCM12DDM15



Code N.	d1	I	f1	r1	h1	f2	r2	h2	Inserts N.1	Inserts N.2
H63ADCM12DDM15-100	63	100	0.9	0.8	20	0.9	0.8	20	CN..1204...	DN..1506...
H63ADCM12DDM15-145	63	145	0.9	0.8	20	0.9	0.8	20	CN..1204...	DN..1506...
H100ADCM12DDM15-160	100	160	0.9	0.8	20	0.9	0.8	20	CN..1204...	DN..1506...

Code N.	Support pad - 1	Support pad - 2	Shim pin	Clamp	Spring	Screw
H63ADCM12DDM15-100	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22
H63ADCM12DDM15-145	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22
H100ADCM12DDM15-160	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22

ICTM standard (HSK-T)



Code N.	d1	I	r	Inserts N.
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H63ADDMLN15-100	63	100	0.8	DN.1506..
H63ADDMLN15-145	63	145	0.8	DN.1506..
H100ADDMLN15-160	100	160	0.8	DN.1506..

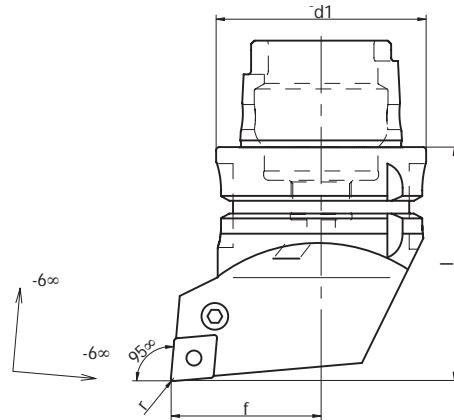
ICTM standard (HSK-T)

Support pad	Shim pin	Clamp	Spring	Screw
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SPDN15	SP02	STF12L	M2	VT22
SPDN15	SP02	STF12L	M2	VT22
SPDN15	SP02	STF12L	M2	VT22

KANTEK

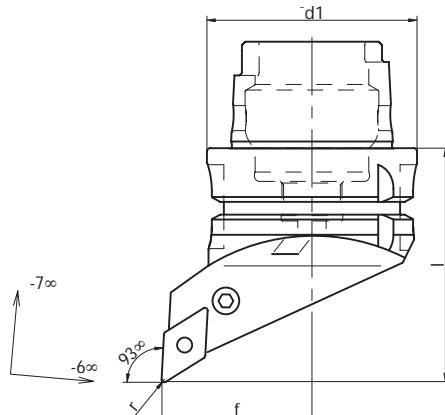
PCLN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40APCLNL/R12	40	50	27	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50APCLNL/R12	50	60	35	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50APCLNL/R16	50	60	35	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03
H63APCLNL/R12	63	70	45	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63APCLNL/R16	63	70	45	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03
H100APCLNL/R12	100	90	65	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H100APCLNL/R16	100	90	65	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03

ICTM standard (HSK-T)

PDJN

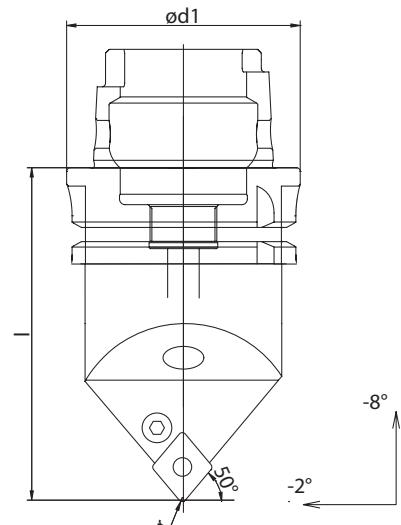


Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40APDJNL/R15	40	55	27	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H50APDJNL/R15	50	70	35	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H63APDJNL/R15	63	70	45	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H100APDJNL/R15	100	90	65	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05

ICTM standard (HSK-T)



PCMNR



Code N.	d1	l	r	Inserts N.
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H63APCMNR12-90	63	90	0.8	CN.1204..
H63APCMNR12-100	63	100	0.8	CN.1204..
H63APCMNR12-145	63	145	0.8	CN.1204..
H100APCMNR12-160	100	160	0.8	CN.1204..

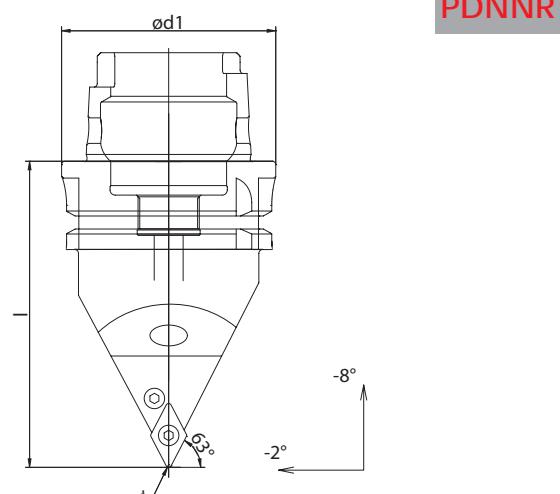
ICTM standard (HSK-T)

Support pad	Shim pin	Lever	Screw
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02

Code N.	d1	l	r	Inserts N.
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H63APDNNR15-90	63	90	0.8	DN.1506..
H63APDNNR15-100	63	100	0.8	DN.1506..
H63APDNNR15-145	63	145	0.8	DN.1506..
H100APDNNR15-160	100	160	0.8	DN.1506..

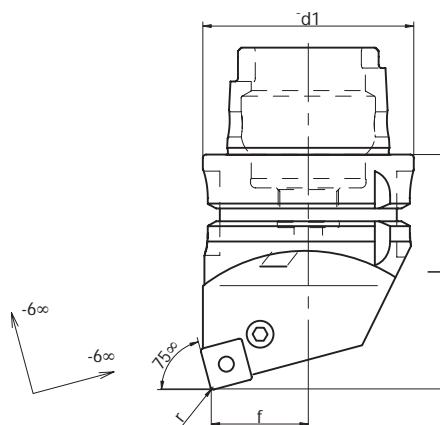
ICTM standard (HSK-T)



Support pad	Shim pin	Lever	Screw
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05

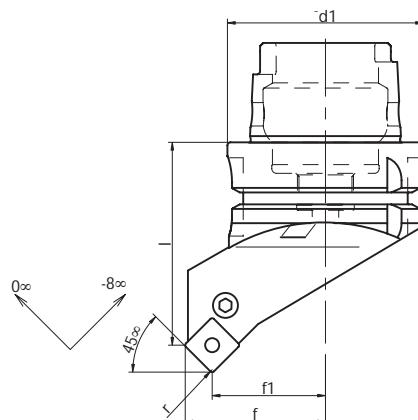


PSBN



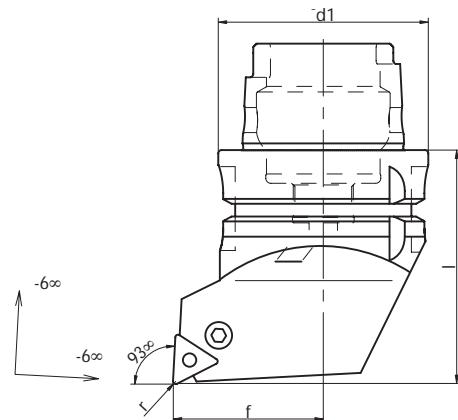
Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H63APSBNL/R12	63	70	29	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
H63APSBNL/R15	63	70	29	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03

ICTM standard (HSK-T)



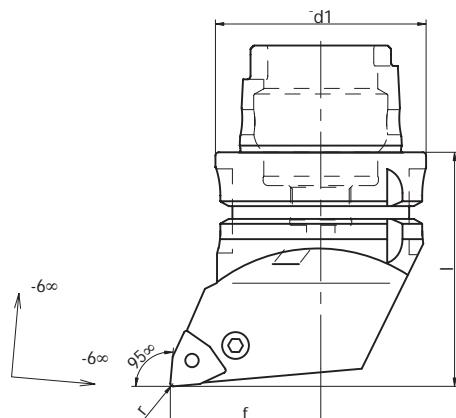
Code N.	d1	l	f	f1	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H63APSSNL/R12	63	65	45	37	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
H63APSSNL/R15	63	65	45	34	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03

ICTM standard (HSK-T)


KOMET
 PTJN


Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40APTJNL/R16	40	50	27	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H50APTJNL/R16	50	60	35	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H63APTJNL/R16	63	70	45	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01

ICTM standard (HSK-T)

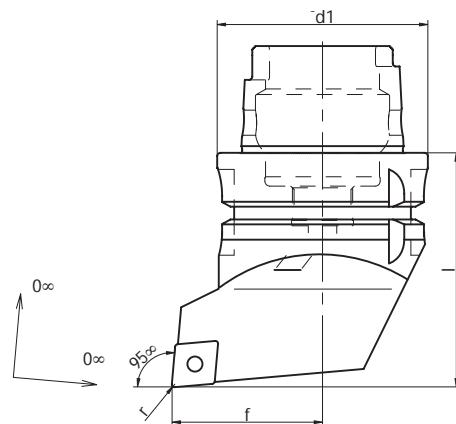


Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40APWLN/R08	40	50	27	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H50APWLN/R08	50	60	35	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H63APWLN/R08	63	70	45	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

ICTM standard (HSK-T)

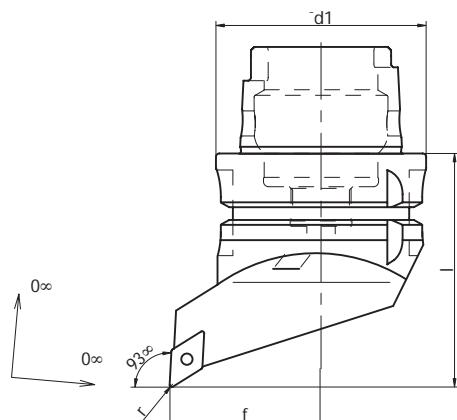


SCLC



Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H40ASCLCL/R09	40	50	27	0.8	CC..09T3..	SPCC09	VTA02	TR8
H40ASCLCL/R12	40	50	27	0.8	CC..1204..	SPCC12	VTA01	TR4
H50ASCLCL/R12	50	60	35	0.8	CC..1204..	SPCC12	VTA01	TR4
H63ASCLCL/R12	63	70	45	0.8	CC..1204..	SPCC12	VTA01	TR4

ICTM standard (HSK-T)

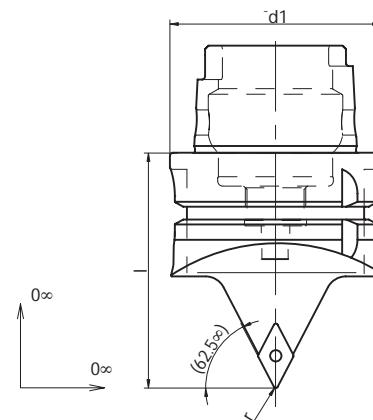


Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H40ASDJCL/R11	40	50	27	0.8	DC..11T3..	SPDC11	VTA02	TR8
H50ASDJCL/R11	50	60	35	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDJCL/R11	63	70	45	0.8	DC..11T3..	SPDC11	VTA02	TR8

ICTM standard (HSK-T)

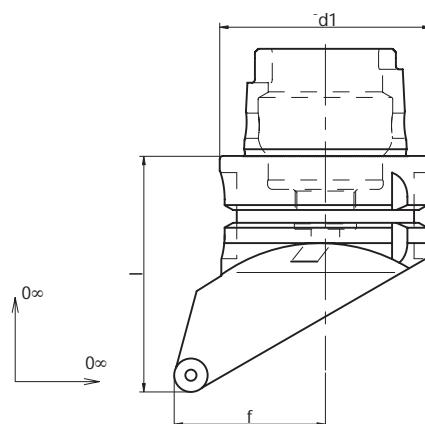


SDNC



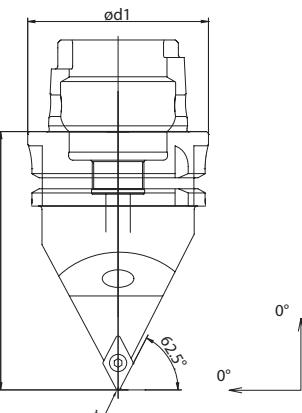
Code N.	d1	l	r	Inserts N.	Support pad	Bush	Screw
H40ASDNCN11	40	50	0.8	DC..11T3..	SPDC11	VTA02	TR8
H50ASDNCN11	50	60	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11	63	75	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100ASDNCN11	100	90	0.8	DC..11T3..	SPDC11	VTA02	TR8

ICTM standard (HSK-T)



Code N.	d1	l	f	Inserts N.	Screw
H40ASRGCL/R10	40	50	27	RC..10T3..	TR8
H50ASRGCL/R10	50	60	35	RC..10T3..	TR8
H63ASRGCL/R10	63	70	45	RC..10T3..	TR8

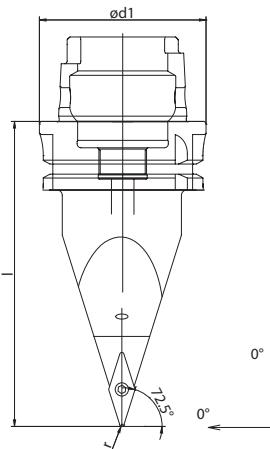
ICTM standard (HSK-T)



SDNCN

Code N.	d1	I	r	Inserts N.	Support pad	Bush	Screw
H63ASDNCN11-90	63	90	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11-100	63	100	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11-145	63	145	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100ASDNCN11-160	100	160	0.8	DC..11T3..	SPDC11	VTA02	TR8

ICTM standard (HSK-T)



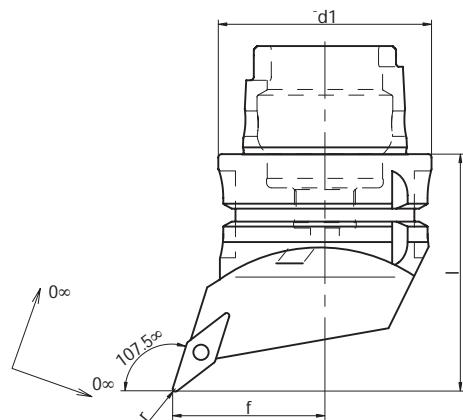
SVVCN

Code N.	d1	I	r	Inserts N.	Support pad	Bush	Screw
H63ASVVCN16-90	63	90	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVVCN16-100	63	100	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVVCN16-145	63	145	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVVCN16-160	100	160	0.8	VC..1604..	SPVC16	VTA02	TR8

ICTM standard (HSK-T)

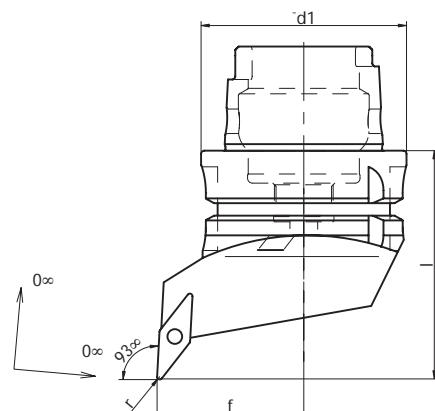


SVHC



Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H40ASVHCL/R16	40	55	27	0.8	VC..1604..	SPVC16	VTA02	TR8
H50ASVHCL/R16	50	60	35	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVHCL/R11	63	70	45	0.4	VC..1103..	-	-	TR1
H63ASVHCL/R16	63	70	45	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVHCL/R16	100	90	65	0.8	VC..1604..	SPVC16	VTA02	TR8

ICTM standard (HSK-T)

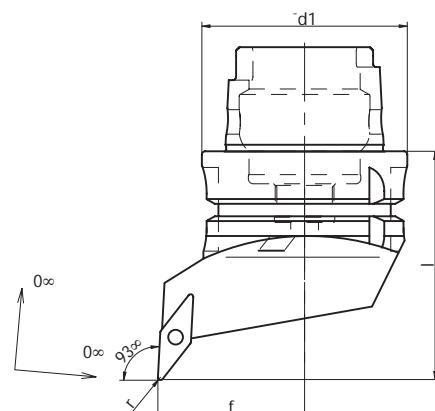


Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H40ASVJCL/R16	40	60	27	0.8	VC..1604..	SPVC16	VTA02	TR8
H50ASVJCL/R16	50	70	35	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVJCL/R16	63	75	45	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVJCL/R16	100	90	65	0.8	VC..1604..	SPVC16	VTA02	TR8

ICTM standard (HSK-T)

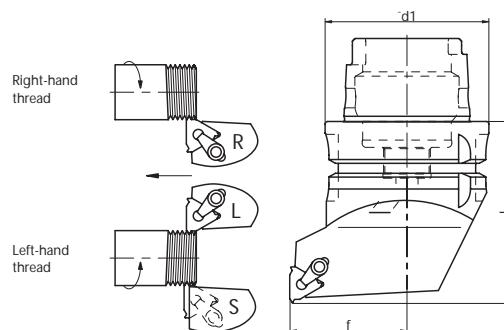


SVJB



Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H40ASVJBL/R16	40	60	27	0.8	VB..1604..	SPVC16	VTA02	TR8
H50ASVJBL/R16	50	70	35	0.8	VB..1604..	SPVC16	VTA02	TR8
H63ASVJBL/R16	63	75	45	0.8	VB..1604..	SPVC16	VTA02	TR8

ICTM standard (HSK-T)

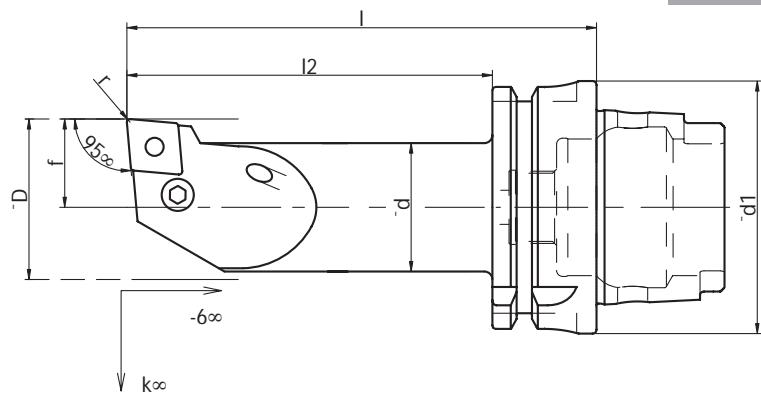


Code N.	d1	l	f	r	Support pad	Screw	Clamp
H63ATHEL16	63	70	45	16EL	SPTF16	VT26	STF13
H63ATHER16	63	70	45	16ER	SPTF16	VT26	STF13
H100ATHEL16	100	90	65	16EL	SPTF16	VT26	STF13
H100ATHER16	100	90	65	16ER	SPTF16	VT26	STF13

ICTM standard (HSK-T)



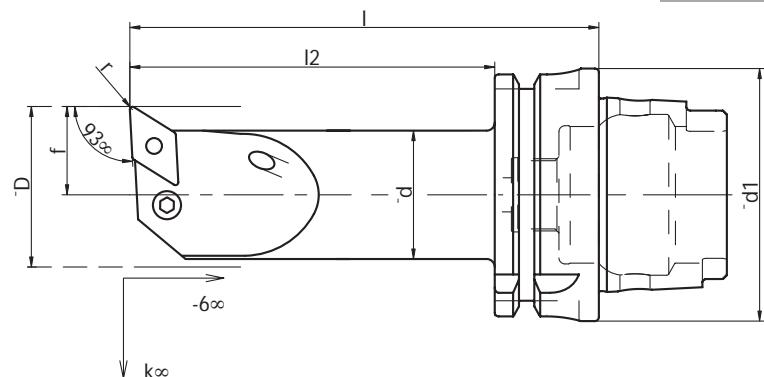
PCLN



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40A25PCLNL/R12	40	25	90	70	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H40A32PCLNL/R12	40	32	110	90	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50A25PCLNL/R12	50	25	100	74	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H50A32PCLNL/R12	50	32	120	94	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50A40PCLNL/R12	50	40	140	114	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A20PCLNL/R09	63	20	85	59	13	-12	25	0.8	CNM.0903..	-	-	LV12	VT06
H63A25PCLNL/R12	63	25	100	74	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H63A32PCLNL/R12	63	32	120	94	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A40PCLNL/R12	63	40	140	114	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A40PCLNL/R16	63	40	140	114	27	-10	50	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
H100A40PCLNL/R12	100	40	160	131	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H100A50PCLNL/R16	100	50	190	161	35	-8	63	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03

ICTM standard (HSK-T)

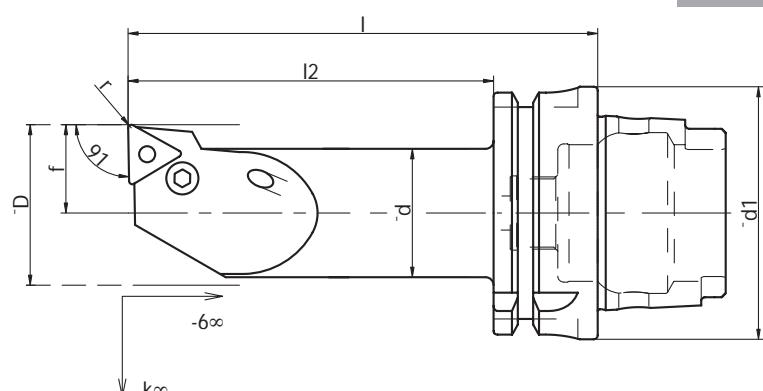
PDUN



Code N.	d1	d	I	I2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40A25PDUNL/R11	40	25	90	70	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H40A32PDUNL/R15	40	32	110	90	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H50A25PDUNL/R11	50	25	100	74	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H50A32PDUNL/R15	50	32	120	94	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H63A20PDUNL/R11	63	20	85	59	13	-10	25	0.8	DN..1104..	-	-	LV13	VT12
H63A25PDUNL/R11	63	25	100	74	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H63A32PDUNL/R15	63	32	120	94	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H63A40PDUNL/R15	63	40	140	114	27	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H100A40PDUNL/R15	100	40	160	131	27	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H100A50PDUNL/R15	100	50	190	161	35	-8	63	0.8	DN..1506..	SPDN15	SP02	LV05	VT05

ICTM standard (HSK-T)

PTFN

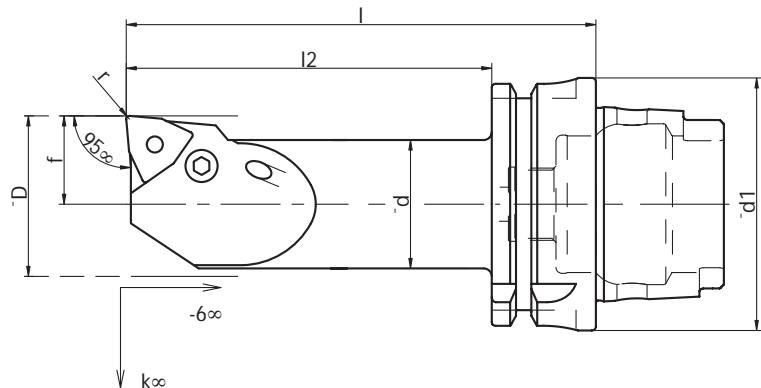


Code N.	d1	d	I	I2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H40A25PTFNL/R16	40	25	90	70	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H40A32PTFNL/R16	40	32	110	90	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H50A25PTFNL/R16	50	25	100	74	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H50A32PTFNL/R16	50	32	120	94	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A20PTFNL/R11	63	20	85	59	13	-12	25	0.4	TN..1103..	-	-	LV06	VT06
H63A25PTFNL/R16	63	25	100	74	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A32PTFNL/R16	63	32	120	94	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A40PTFNL/R16	63	40	140	114	27	-8	50	0.8	TN..1604..	SPTN16	SP05	LV01	VT01

ICTM standard (HSK-T)



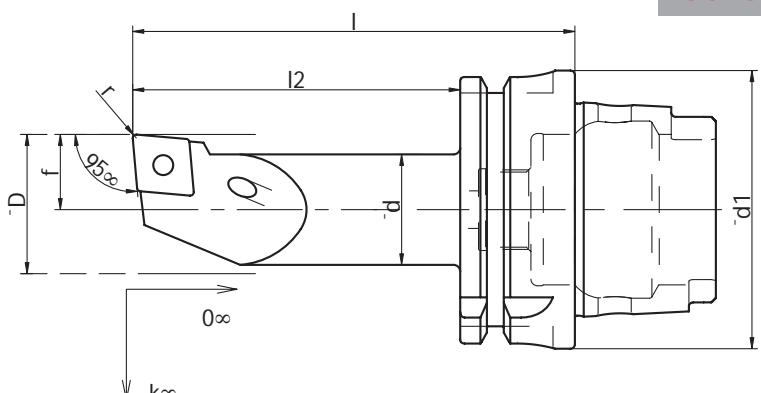
PWLN



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H63A25PWNLN/R08	63	25	100	74	17	-12	32	0.8	WN..0804..	-	-	LV11	VT10
H63A32PWNLN/R08	63	32	120	94	22	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H63A40PWNLN/R08	63	40	140	114	27	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H100A40PWNLN/R08	100	40	160	131	27	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H100A50PWNLN/R08	100	50	190	161	35	-8	63	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

ICTM standard (HSK-T)

SCLC

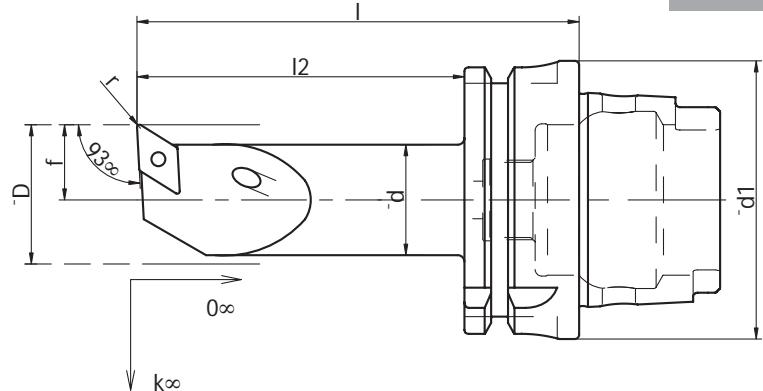


Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H63A20SCLCL/R09	63	20	85	59	13	-8	25	0.8	CC..09T3..	--	--	TR12
H63A25SCLCL/R12	63	25	100	74	17	-5	32	0.8	CC..1204..	--	--	TR13
H63A32SCLCL/R12	63	32	120	94	22	-5	40	0.8	CC..1204..	SPCC12	VTA01	TR4
H63A40SCLCL/R12	63	40	140	114	27	-5	50	0.8	CC..1204..	SPCC12	VTA01	TR4

ICTM standard (HSK-T)



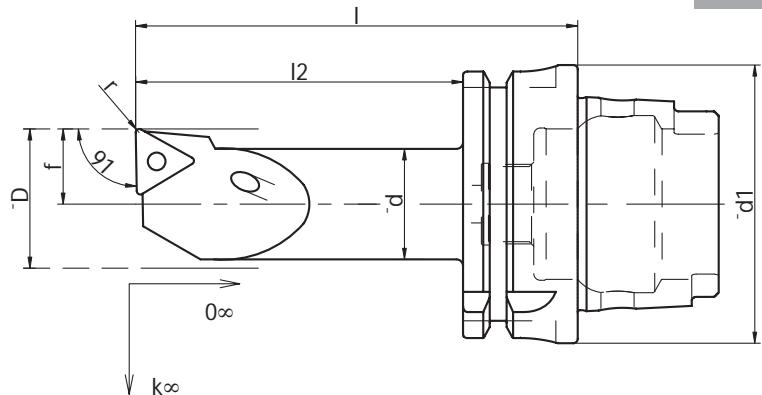
SDUC



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H63A20SDUCL/R11	63	20	85	59	13	-8	25	0.8	DC..11T3..	-	-	TR12
H63A25SDUCL/R11	63	25	100	74	17	-5	32	0.8	DC..11T3..	-	-	TR14
H63A32SDUCL/R11	63	32	120	94	22	-5	40	0.8	DC..11T3..	SPDC11	VTA02	TR8

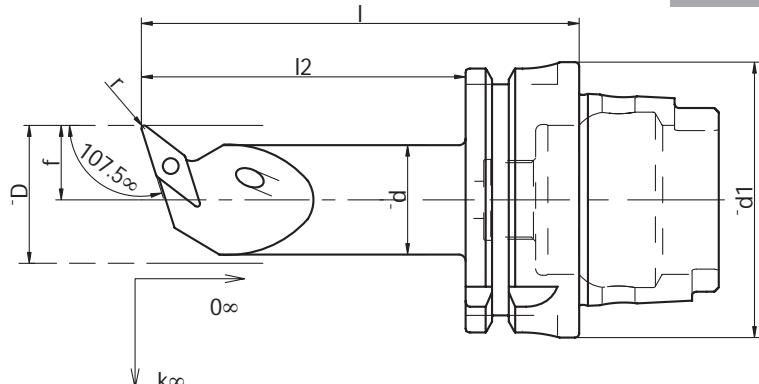
ICTM standard (HSK-T)

STFC



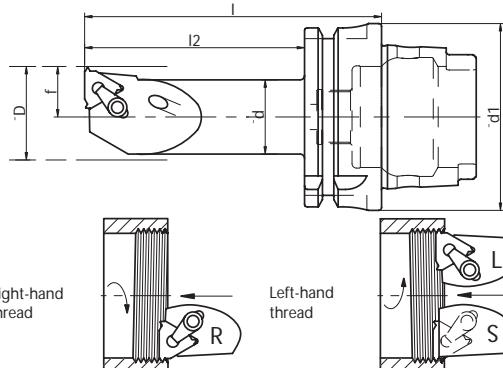
Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H63A20STFCL/R11	63	20	85	59	13	-8	25	0.4	TC..1102..	-	-	TR1
H63A25STFCL/R16	63	25	100	74	17	-5	32	0.8	TC..16T3..	-	-	TR14
H63A32STFCL/R16	63	32	120	94	22	-5	40	0.8	TC..16T3..	SPTC16	VTA02	TR8
H63A40STFCL/R16	63	40	140	114	27	-5	50	0.8	TC..16T3..	SPTC16	VTA02	TR8

ICTM standard (HSK-T)


SVQB


Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H63A20SVQBL/R11	63	20	85	59	13	-8	25	0.4	VB..1102..	-	-	TR1
H63A25SVQBL/R11	63	25	100	74	17	-5	32	0.4	VB..1102..	-	-	TR1
H63A32SVQBL/R16	63	32	120	94	22	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
H63A40SVQBL/R16	63	40	140	114	27	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8

ICTM standard (HSK-T)



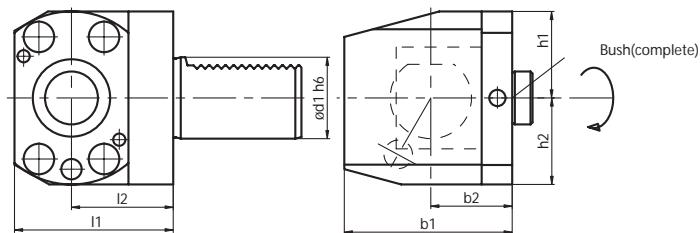
Code N.	d1	d	l	l2	f	D	Insert N.	Support pad	Screw	Clamp
H63A20THEL16	63	20	85	59	14	25	16IL	SPTF16	VT26	STF13
H63A20THER16	63	20	85	59	14	25	16IR	SPTF16	VT26	STF13
H63A25THEL16	63	25	100	74	16,5	32	16IL	SPTF16	VT26	STF13
H63A25THER16	63	25	100	74	16,5	32	16IR	SPTF16	VT26	STF13
H63A32THEL16	63	32	120	94	22	40	16IL	SPTF16	VT26	STF13
H63A32THER16	63	32	120	94	22	40	16IR	SPTF16	VT26	STF13
H63A40THEL16	63	40	140	114	27	50	16IL	SPTF16	VT26	STF13
H63A40THER16	63	40	140	114	27	50	16IR	SPTF16	VT26	STF13

ICTM standard (HSK-T)



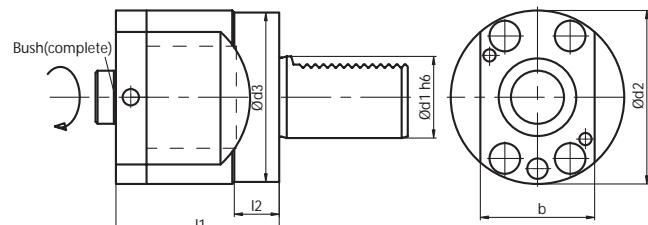
DIN 69893 A+C

RADIAL WERKZEUGHALTER, MIT HSK KUPPLUNG
 RADIAL TOOL-HOLDER WITH HSK COUPLING
 ПОТРЕ-ОУЛ РАДИАЛЬ АВЕК АТТАКЕ HSK
 PORTAUTENSILE RADIALE PER UTENSILI CON ATTACCO HSK
 ДЕРЖАТЕЛИ ИНСТРУМЕНТА С ХВОСТОВИКОМ HSK РАДИАЛЬНЫЕ



Code N.	Description	d1	b1	b2	h1	h2	l1	l2	Bush (complete)
118-03001	H32AOV30L	30	65	30	28	33	58	40	H32ABSL
118-03002	H32AOV30R	30	65	30	28	33	58	40	H32ABSL
118-04001	H32AOV40L	40	80	40	30	40	58	40	H32ABSL
118-04002	H32AOV40R	40	80	40	30	40	58	40	H32ABSL
118-04003	H40AOV40L	40	80	40	34	40	67.5	45	H40ABSL
118-04004	H40AOV40R	40	80	40	34	40	67.5	45	H40ABSL
118-04005	H50AOV40L	40	80	40	42.5	42.5	78	50	H50ABSL
118-04006	H50AOV40R	40	80	40	42.5	42.5	78	50	H50ABSL
118-05001	H50AOV50L	50	90	40	42.5	48	78	50	H50ABSL
118-05002	H50AOV50R	50	90	40	42.5	48	78	50	H50ABSL
118-05003	H63AOV50L	50	90	40	53	53	90	55	H63ABSL
118-05004	H63AOV50R	50	90	40	53	53	90	55	H63ABSL

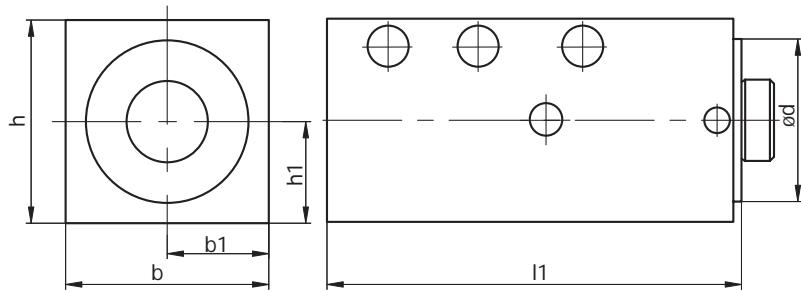
AXIAL WERKZEUGHALTER MIT HSK KUPPLUNG
 AXIAL TOOLHOLDER WITH HSK COUPLING
 ПОРТЕ-ОУЛ АКСИАЛЬ АВЕК АТТАКЕ HSK
 ПОРТАУЕНСИЛЕ АССИАЛЕ PER UTENSILI CON ATTACCO HSK
 ДЕРЖАТЕЛИ ИНСТРУМЕНТА С ХВОСТОВИКОМ HSK ОСЕВЫЕ



Code N.	Description	d1	d2	d3	b	l1	l2	Bush (complete)
118-03003	H32ADV30	30	55	68	36	52	22	H32ABSL
118-04007	H32ADV40	40	55	83	36	52	22	H32ABSL
118-04008	H40ADV40	40	68	83	45	60	22	H40ABSL
118-04009	H50ADV40	40	85	83	56	75	25	H50ABSL
118-05005	H50ADV50	50	85	98	56	75	30	H50ABSL
118-04013	H63ADV40	40	106	83	70	90	25	H63ABSL
118-05006	H63ADV50	50	106	98	70	90	33	H63ABSL

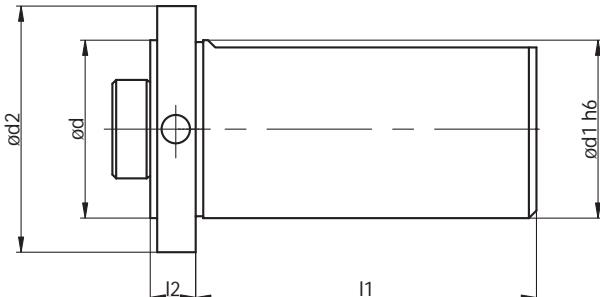


WERKZEUGHALTER MIT VIERECKIGEM SCHAFT UND HSK KUPPLUNG
TOOLHOLDER WITH SQUARE SHANK AND HSK ATTACHMENT
PORTE-OUTIL AVEC QUEUE CARÉE ET ATTAQUE HSK
PORTAUTENSILE A STELO QUADRO CON ATTACCO HSK
ДЕРЖАТЕЛИ С ПРИЗМАТИЧЕСКИМ ХВОСТОВИКОМ ДЛЯ ИНСТРУМЕНТА С ХВОСТОВИКОМ HSK



Code N.	Description	d	b	b1	h	h1	l1
137-00001	H40ASTQ50L	40	48	24	50	25	120
137-00002	H40ASTQ50R	40	48	24	50	25	120
137-00039	H50ASTQ50L	50	50	25	50	25	140
137-00040	H50ASTQ50R	50	50	25	50	25	140

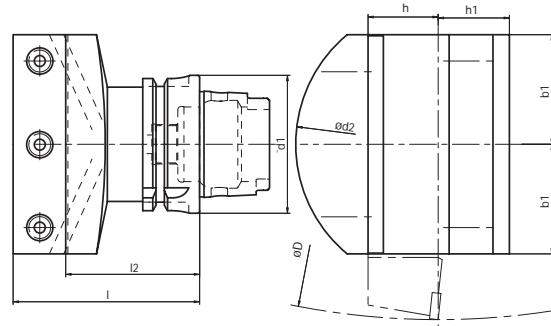
WERKZEUGHALTER MIT ZYLINDRISCHEM SCHAFT UND HSK KUPPLUNG
TOOLHOLDER WITH CYLINDRICAL SHANK AND HSK ATTACHMENT
PORTE-OUTIL AVEC QUEUE CYLINDRIQUE ET ATTAQUE HSK
PORTAUTENSILE A STELO CILINDRICO CON ATTACCO HSK
ДЕРЖАТЕЛИ С ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ ДЛЯ ИНСТРУМЕНТА С ХВОСТОВИКОМ HSK



Code N.	Description	d	d1	d2	l1	l2
137-00003	H40ASTC40	40	40	50	80	12
137-00041	H50ASTC40	50	40	50	80	30
137-00104	H63ASTC50	63	50	63	160	36



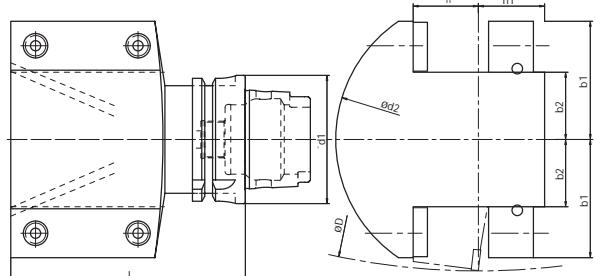
RADIAL WERKZEUGHALTER PORTE-OUTIL RADIAL
RADIAL TOOLHOLDER PORTAUTENSILE RADIALE
РЕЗЦЕДЕРЖАТЕЛИ РАДИАЛЬНЫЕ



Code N.	Description	d1	d2	D	b1	h	h1	l	l2
141-11408	H63ARAD32/25	63	130	340	50	32/25	32.5	85	50

ICTM standard (HSK-T)

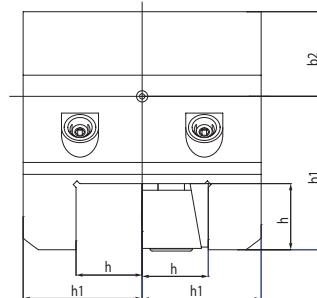
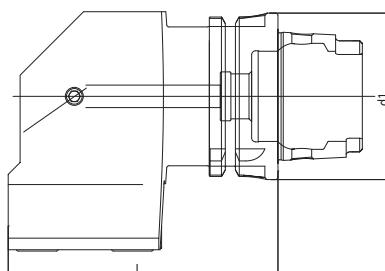
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE
РЕЗЦЕДЕРЖАТЕЛИ ОСЕВЫЕ



Code N.	Description	d	d2	D	b1	b2	h	h1	l
142-11405	H63AAX25/32	63	110	305	40	15	32/25	26.5	120
142-11406	H63AAX32/25	63	140	340	58	33	32/25	32.5	120

ICTM standard (HSK-T)

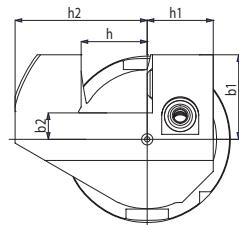
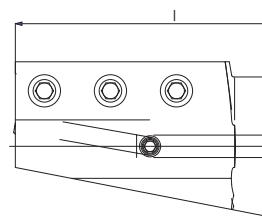
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE
 РЕЗЦЕДЕРЖАТЕЛИ ОСЕВЫЕ



Code N.	Description	d1	b1	b2	h	h1	l
142-11402	H63AAD25R	63	58	32	25	45	102
142-11607	H100AAD25R	100	48	53	25	57	119
142-11608	H100AALD25R	100	48	53	25	57	175

ICTM standard (HSK-T)

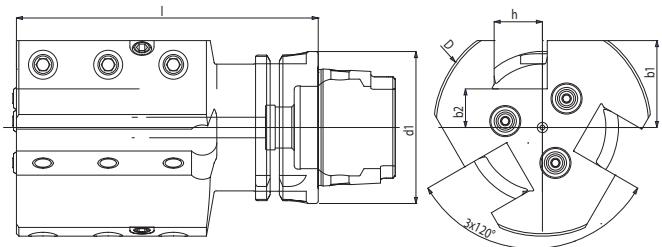
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE
 РЕЗЦЕДЕРЖАТЕЛИ ОСЕВЫЕ



Code N.	Description	d1	b1	b2	h	h1	h2	l
142-21401	H63AA25L	63	32	10	25	25	50	125
142-11403	H63AA25R	63	32	10	25	25	50	125
142-21601	H100AA25L	100	75.5	50.5	32	30	62	130
142-11601	H100AA25R	100	75.5	50.5	32	30	62	130
142-21604	HSK100ASL25X25	100	55	33	25	30	55	160
142-11603	HSK100ASR25X25	100	55	33	25	30	55	160
142-21603	HSK100ASL32X32	100	53	25	32	30	62	189
142-11604	HSK100ASR32X32	100	53	25	32	30	62	189

ICTM standard (HSK-T)

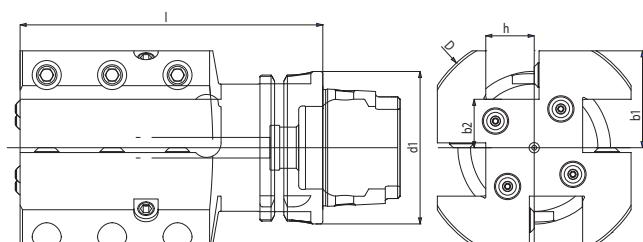
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE
 РЕЗЦЕДЕРЖАТЕЛИ ОСЕВЫЕ



Code N.	Description	d1	D	b1	b2	h	l
142-21402	H63AAT20L	63	90	36	16	20	125
142-11404	H63AAT20R	63	90	36	16	20	125
142-21605	H100AAT25L	100	122	51	26	25	160
142-11605	H100AAT25R	100	122	51	26	25	160

ICTM standard (HSK-T)

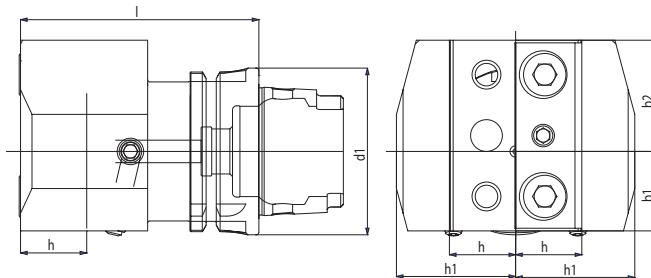
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE
 РЕЗЦЕДЕРЖАТЕЛИ ОСЕВЫЕ



Code N.	Description	d1	D	b1	b2	h	l
142-21403	H63AAQ20L	63	95	40	20	20	125
142-21404	H63AAQ20R	63	95	40	20	20	125
142-21609	H100AAQ25L	100	122	51	26	25	160
142-11610	H100AAQ25R	100	122	51	26	25	160

ICTM standard (HSK-T)

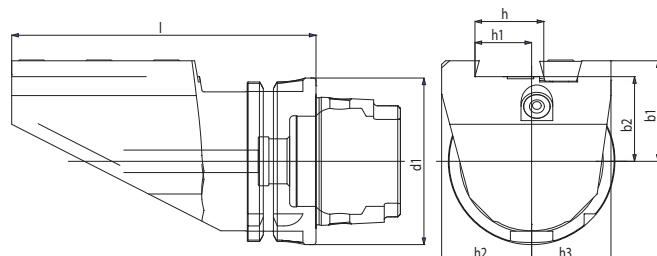
RADIAL WERKZEUGHALTER PORTE-OUTIL RADIAL
 RADIAL TOOLHOLDER PORTAUTENSILE RADIALE
 РЕЗЦЕДЕРЖАТЕЛИ РАДИАЛЬНЫЕ



Code N.	Description	d1	b1	b2	h	h1	l
141-11406	H63ARD25R	63	30	42	25	45	90
141-11602	H100ARD25R	100	20	65	25	57	146

ICTM standard (HSK-T)

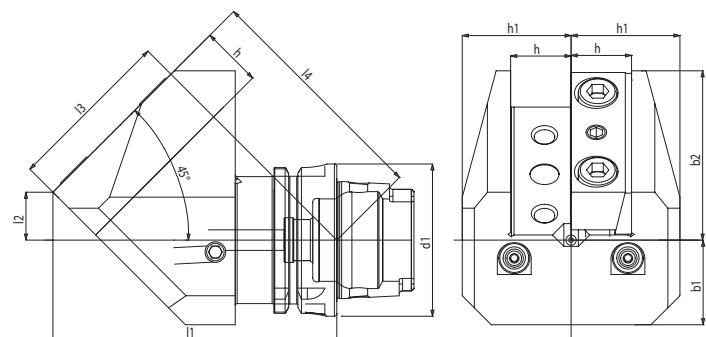
AXIAL ABSTECHMEISSELHALTER PORTE-OUTIL AXIAL DE TRONCONNAGE
 AXIAL TOOLHOLDER FOR CUT OFF TOOLS PORTAUTENSILE ASSIALE PER LAMA DA TAGLIO
 ДЕРЖАТЕЛИ ОСЕВЫЕ ДЛЯ ОТРЕЗНЫХ РЕЗЦОВ



Code N.	Description	d1	b1	b2	h	h1	h2	h3	l
147-51405	H63ASCA26L	63	38	32	26	21.4	34	30	115
147-51406	H63ASCA26R	63	38	32	26	21.4	34	30	115
147-51407	H63ASCA32L	63	38	32	32	25	38	33	150
147-51408	H63ASCA32R	63	38	32	32	25	38	33	150

ICTM standard (HSK-T)

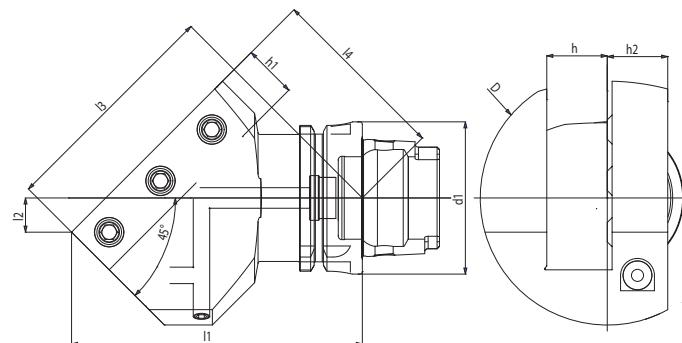
45° WERKZEUGHALTER PORTE-OUTIL 45°
 45° TOOLHOLDER PORTAUTENSILE 45°
 РЕЗЦЕДЕРЖАТЕЛИ 45°



Code N.	Description	d1	b1	b2	h	h1	l1	l2	l3	l4
141-11405	H63AARD25L	63	35	70	25	45	117.4	19.8	69	97
141-11603	H100AARD25L	100	53	73	25	57	139.5	0	98.6	98.6

ICTM standard (HSK-T)

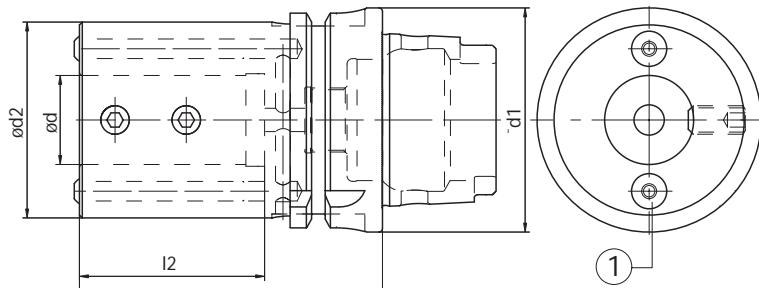
45° WERKZEUGHALTER PORTE-OUTIL 45°
 45° TOOLHOLDER PORTAUTENSILE 45°
 РЕЗЦЕДЕРЖАТЕЛИ 45°



Code N.	Description	d1	D	h	h1	h2	l1	l2	l3	l4
141-11407	H63AAR25L	63	105	25	22	25	120	14.1	95	75
141-21401	H63AAR25R	63	105	25	22	25	120	14.1	95	75
141-11601	H100AAR25L	100	115	25	22	28	172.4	24	139	105

ICTM standard (HSK-T)

AXIAL BOHRSTANGENHALTER PORTE-OUTIL POUR BARRES D'ALESAGE AXIAL
 AXIAL BORING BAR HOLDER PORTAUTENSILE PER BARENI, ASSIALE
 ДЕРЖАТЕЛИ ОСЕВЫЕ ДЛЯ РАСТОЧНЫХ РЕЗЦОВ



Code N.	Description	d1	d	d2	l1	l2	Coolant noose
145-21201	H40AAX-E2x08	40	8	32	60	37	PWZ1008D8X06
145-21202	H40AAX-E2x10	40	10	34	60	37	PWZ1008D8X06
145-21203	H40AAX-E2x12	40	12	36	65	40	PWZ1008D8X06
145-21204	H40AAX-E2x16	40	16	40	70	42	PWZ1008D8X06
145-21205	H40AAX-E2x20	40	20	45	70	42	PWZ1008D10X7
145-21306	H50AAX-E2x10	50	10	38	75	45	PWZ1008D10X7
145-21307	H50AAX-E2x12	50	12	40	75	45	PWZ1008D10X7
145-21308	H50AAX-E2x16	50	16	45	80	50	PWZ1008D10X7
145-21309	H50AAX-E2x20	50	20	50	80	47	PWZ1008D10X7
145-21310	H50AAX-E2x25	50	25	55	85	50	PWZ1008D8X06
145-21402	H63AAX-E2x08	63	8	32	70	40	PWZ1008D10X7
145-21403	H63AAX-E2x10	63	10	38	75	45	PWZ1008D10X7
145-21404	H63AAX-E2x12	63	12	40	75	45	PWZ1008D10x7
145-21406	H63AAX-E2x16	63	16	45	80	50	PWZ1008D10x7
145-21408	H63AAX-E2x20	63	20	50	80	50	PWZ1008D10X7
145-21409	H63AAX-E2x25	63	25	55	85	52	PWZ1008D10X7
145-21410	H63AAX-E2x32	63	32	72	95	58	PWZ1008D10X7
145-21411	H63AAX-E2x40	63	40	80	120	72	PWZ1008D12X8
145-21606	H100AAX-E2x16	100	16	45	85	48	PWZ1008D12X8
145-21607	H100AAX-E2x20	100	20	50	85	48	PWZ1008D10X7
145-21601	H100AAX-E2x25	100	25	55	85	48	PWZ1008D10X7
145-21602	H100AAX-E2x32	100	32	72	95	58	PWZ1008D12X8
145-21603	H100AAX-E2x40	100	40	80	110	73	PWZ1008D12X8
145-21604	H100AAX-E2x50	100	50	90	120	82	PWZ1008D12X8

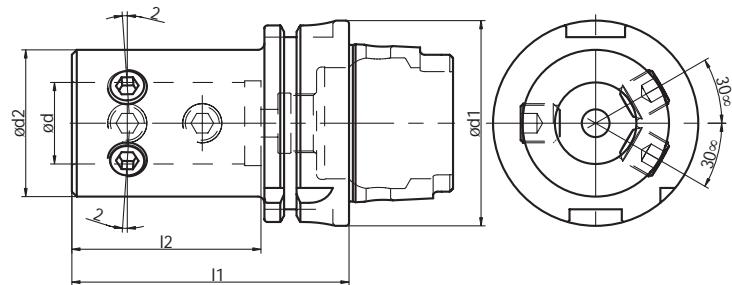
ICTM standard

Con refrigerante interno ed esterno - With internal and external coolant - С внутренним и внешним подводом СОЖ



AXIAL WERKZEUGHALTER FÜR WENDELPLATTENBOHRER
MIT INNERER KÜHLMITTELZUFUHR
AXIAL HOLDER FOR INDEXABLE INSERT DRILLS
WITH INTERNAL COOLANT SUPPLY
ДЕРЖАТЕЛИ ОСЕВЫЕ ДЛЯ СВЕРЛ С СМП С ВНУТРЕННИМ ПОДВОДОМ СОЖ

PORTE-OUTIL POUR FORETS A PLAQUETTER AVEC
ALIMENTATION INTERNE DU LIQUIDE D'ARROSAGE , AXIAL
PORTAUTENSILE PER PUNTE AD INSERTI CON
PASSAGGIO REFRIGERANTE INTERNO, ASSIALE

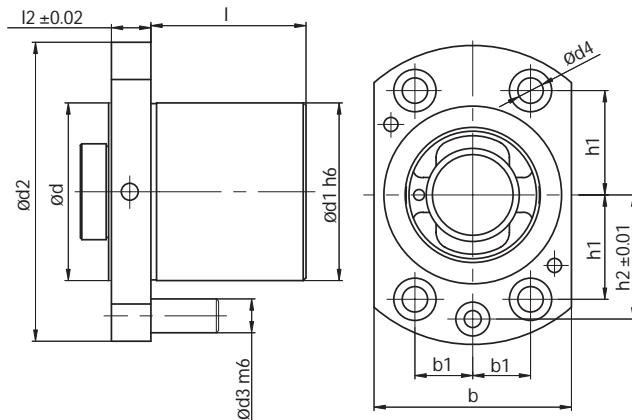


Code N.	Description	d1	d	d2	l1	l2
145-11201	H40AAX-E1x16	40	16	36	75	54
145-11202	H40AAX-E1x20	40	20	40	75	54
145-11301	H50AAX-E1x16	50	16	36	80	54
145-11302	H50AAX-E1x20	50	20	40	80	54
145-11303	H50AAX-E1x25	50	25	45	85	59
145-11406	H63AAX-E1x16	63	16	36	80	54
145-11408	H63AAX-E1x20	63	20	40	80	54
145-11409	H63AAX-E1x25	63	25	45	85	59
145-11410	H63AAX-E1x32	63	32	52	90	63
145-11411	H63AAX-E1x40	63	40	65	100	73
145-11604	H100AAX-E1x16	100	16	36	85	54
145-11605	H100AAX-E1x20	100	20	40	85	54
145-11601	H100AAX-E1x25	100	25	45	90	59
145-11602	H100AAX-E1x32	100	32	52	95	63
145-11603	H100AAX-E1x40	100	40	65	105	73

ICTM standard

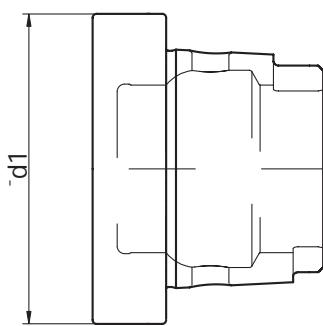
Für werkzeuge mit weldon oder whistle notch schaft
For weldon and whistle notch tools
Pour weldon et whistle notch outils
Per utensili weldon e whistle notch
Для инструмента с хвостовиком Weldon и Whistle Notch

EINSÄTZE MIT HSK KUPPLUNG ADAPTEUR AVEC ATTACHE HSK
 ADAPTER WITH HSK ATTACHMENT BUSSOLA CON ATTACCO HSK
 ПЕРЕХОДНИКИ С КРЕПЛЕНИЕМ HSK



Code N.	d	d1	d2	d3	d4	l	l2	b	b1	h1	h2
H32ABSL	32	32	55	6	5.5	27	10	36	10.5	19.2	22
H40ABSL	40	40	68	8	6.5	33	12	45	13.5	23	27
H50ABSL	50	50	85	10	9	42	15	56	16	30	35
H63ABSL	63	63	106	12	9	55	15	70	20.5	37	44

VERSCHLUSSDECKEL BOUCHON DE PROTECTION
 BLANKING PLUG TAPPO DI PROTEZIONE
 ЗАГЛУШКИ



Code N.	d1
H32ATP	32
H40ATP	40
H50ATP	50
H63ATP	63

ROHLINGE FÜR SONDERWERKZEUGE EBAUCHES POUR PORTE-OUTILS SPECIAUX
BLANK TOOLHOLDER FOR SPECIAL TOOLS SEMILAVORATI PER UTENSILI SPECIALI
ЗАГОТОВКИ ДЛЯ СПЕЦИАЛЬНЫХ РЕЗЦЕДЕРЖАТЕЛЕЙ



Code N.	d1	d2	l	l2
H40A040095SML	40	40	95	71
H40A060160SML	40	60	160	136
H50A110090SML	50	110	90	59
H63A080190SML	63	80	190	158
H63A110085SML	63	110	85	53
H63A130095SML	63	130	95	63

ICTM standard



PRODOTTI SPECIALI • SPECIAL TOOLS



KOMET





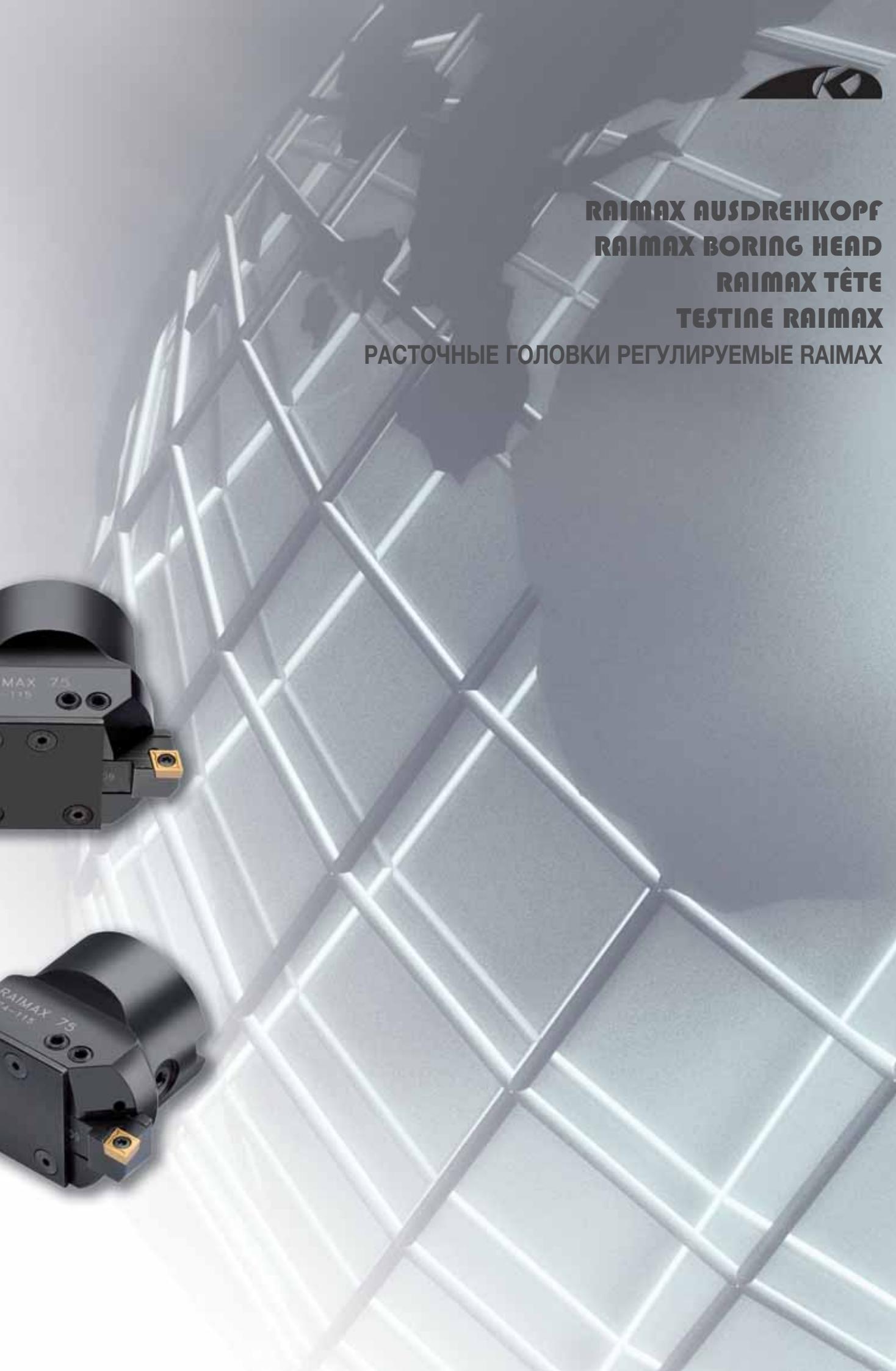
RAIMAX AUSDREHKOPF

RAIMAX BORING HEAD

RAIMAX TÊTE

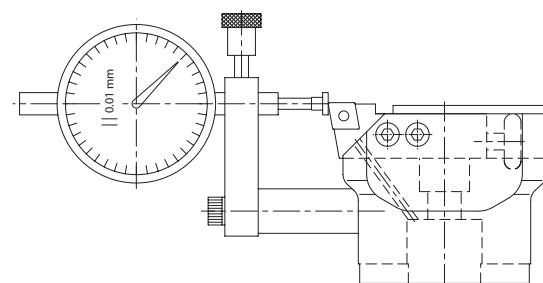
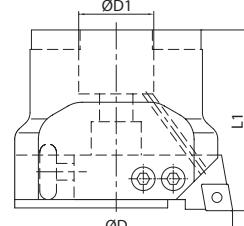
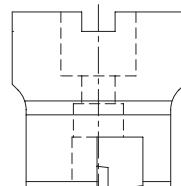
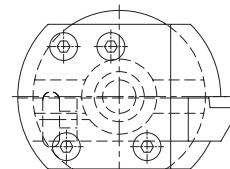
TESTINE RAIMAX

РАСТОЧНЫЕ ГОЛОВКИ РЕГУЛИРУЕМЫЕ RAIMAX

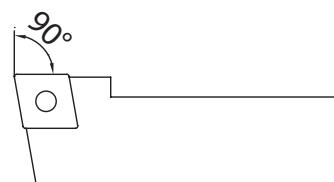




EINSTELLBARER AUSDREHKOPF TÊTE À ALÉSER RÉGLABLE
 ADJUSTABLE BORING HEAD TESTINA REGOLABILE PER ALESATURA
 РАСТОЧНЫЕ ГОЛОВКИ РЕГУЛИРУЕМЫЕ

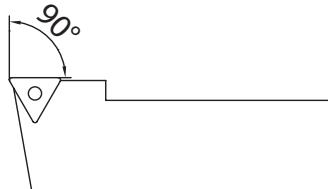


Code N.	d	d1	l1	Einbauhalter - Cartridges - Cartouches - Cartucce		
RAIMAX 30	Ø28-40	16	45	K-SCGCL 08-06	K-STGPL 08-09	-
RAIMAX 40	Ø39-55	16	50	K-SCGCL 10-06	K-STGPL 10-09	-
RAIMAX 50	Ø49-75	22	56	K-SCGCL 12-09	K-STGPL 12-11	K-SSXCL 12-09
RAIMAX 75	Ø74-115	27	65	K-SCGCL 16-09	K-STGPL 16-11	K-SSXCL 16-09
RAIMAX 100	Ø98-160	40	67	K-SCGCL 20-09	K-STGPL 20-11	K-SSXCL 20-09
RAIMAX 150	Ø148-250	40	67	K-SCGCL 20L-09	K-STGPL 20L-11	K-SSXCL 20L-09

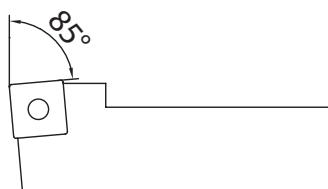


Code N.	Inserts N.	Screw	Wrench
K-SCGCL 08-06	CCMT 0602	KV28	Torx 7
K-SCGCL 10-06	CCMT 0602	KV28	Torx 7
K-SCGCL 12-09	CCMT 09T3	KV4c	Torx 15
K-SCGCL 16-09	CCMT 09T3	KV4c	Torx 15
K-SCGCL 20-09	CCMT 09T3	KV4c	Torx 15
K-SCGCL 20L-09	CCMT 09T3	KV4c	Torx 15

EINBAUHALTER CARTOUCHES
CARTRIDGES CARTUCCE
КАРТРИДЖИ



Code N.	Inserts N.	Screw	Wrench
K-STGPL 08-09	TPGX 0902	KV28	Torx 7
K-STGPL 10-09	TPGX 0902	KV28	Torx 7
K-STGPL 12-11	TPGX 1103	KV10	Torx 9
K-STGPL 16-11	TPGX 1103	KV10	Torx 9
K-STGPL 20-11	TPGX 1103	KV10	Torx 9
K-STGPL 20L-11	TPGX 1103	KV10	Torx 9



Code N.	Inserts N.	Screw	Wrench
K-SSXCL 12-09	SCMT 09T3	KV4c	Torx 15
K-SSXCL 16-09	SCMT 09T3	KV4c	Torx 15
K-SSXCL 20-09	SCMT 09T3	KV4c	Torx 15
K-SSXCL 20L-09	SCMT 09T3	KV4c	Torx 15

Code N.	Screw	Cover	Screw for cover	Screw	Screw
RAIMAX 30	KSR M8 R/L	KCC30	2 x KVCC30	KVR30	2 x KGG30
RAIMAX 40	KSR M8x20	KCC40	3 x KVCC40	KVR40	2 x KGG40
RAIMAX 50	KSR M10x20	KCC50	3 x KVCC50	KVR50	2 x KGG50
RAIMAX 75	KSR M12x25	KCC75	4 x KVCC75	KVR75	2 x KGG75
RAIMAX 100	KSR M20X	KCC100	4 x KVCC100	KVR100	2 x KGG100
RAIMAX 150	KSR M20X	KCC150	4 x KVCC150	KVR150	2 x KGG150

Code N.	
RAIMAX 30	
RAIMAX 40	
RAIMAX 50	
RAIMAX 75	
RAIMAX 100	
RAIMAX 150	

RAIMAX 30	K-MISURAIMAX 30-40 + Dial indicator 1/100 0-5 mm
RAIMAX 40	K-MISURAIMAX 30-40 + Dial indicator 1/100 0-5 mm
RAIMAX 50	K-MISURAIMAX 50 + Dial indicator 1/100 0-10 mm
RAIMAX 75	K-MISURAIMAX 75 + Dial indicator 1/100 0-10 mm
RAIMAX 100	K-MISURAIMAX 100 + Dial indicator 1/100 0-10 mm
RAIMAX 150	K-MISURAIMAX 150 + Dial indicator 1/100 0-10 mm



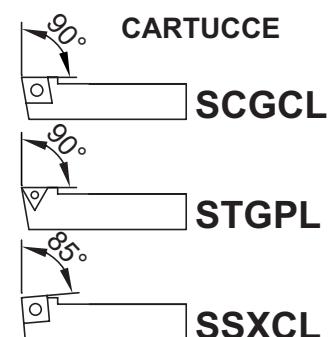
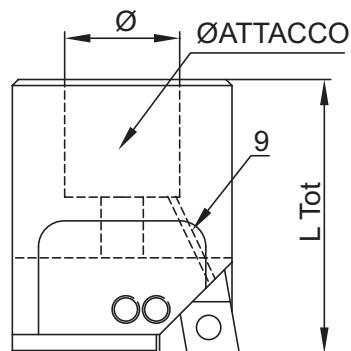
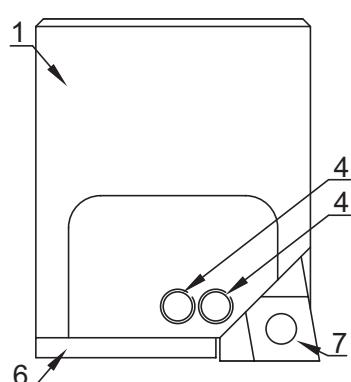


RAIMAX® TESTINA REGOLABILE PER ALESATURA Ø28-250

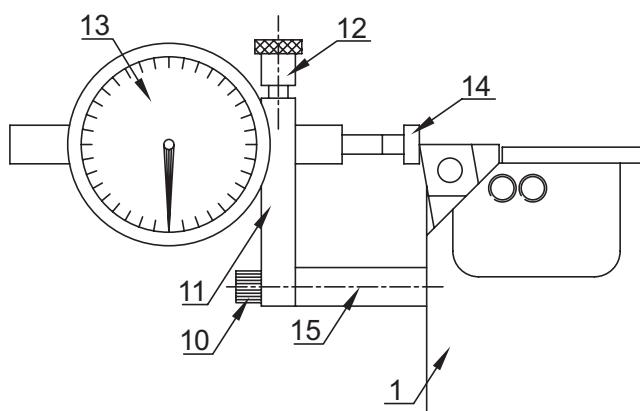
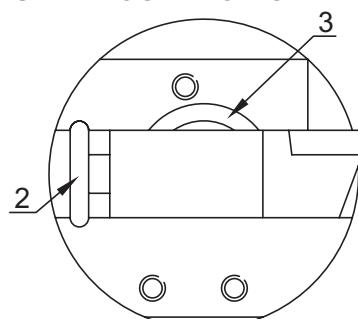
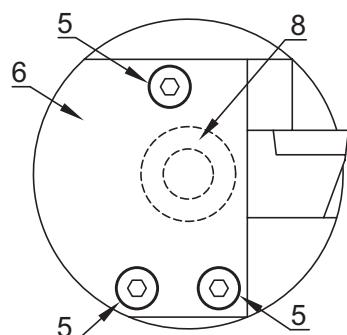
MISURAIMAX® DISPOSITIVO MISURATORE

Montabili sui mandrini porta-frese comunemente reperibili in commercio

Testina RAIMAX



SENZA COPERCHIO



- 1_ Corpo bareno RAIMAX
- 2_ Vite di regolazione cartuccia
- 3_ Vite di bloccaggio cono
- 4_ Grano di bloccaggio cartuccia
- 5_ Viti di bloccaggio coperchio
- 6_ Coperchio
- 7_ CARTUCCIA
- 8_ Molla a tazza
- 9_ Foro di lubrificazione
- 10_ Vite di bloccaggio MISURAIMAX
- 11_ Braccetto
- 12_ Vite di bloccaggio Comparatore
- 13_ COMPARATORE
- 14_ Puntalino piatto per Comparatore
- 15_ Cilindro forato



RAIMAX® EINSTELLBARER AUSDREHKOPF

MISURAIMAX® MESSUHR

Der einstellbare RAIMAX Ausdrehkopf ermöglicht Bohr- und Ausdrehbearbeitungen. Alle Ausdrehköpfe mit Kühlkanal.

Mit Drehung einer Schraube erfolgt die Einstellung vom Schneiddurchmesser des Werkzeuges.

Die Schraube verursacht die Gleitung vom Wendeplattenhalter in der U-Nut des Kopfes.

Die RAIMAX Ausdrehköpfe werden auf gewöhnlichen Aufnahmedorne eingespannt.

Zur zentesimalen Verstellung vom Schneiddurchmesser wird das MISURAIMAX Gerät verwendet. MISURAIMAX besteht aus einem Einspannhalter, einem gebohrten Zylinder und einer Messuhr mit 1/100- und 1/1000 Ablesung.

RAIMAX GEBRAUCHSANWEISUNGEN:

1. Abschrauben Sie die drei Schrauben (5) und entnehmen Sie den Deckel
2. Lockern Sie die zwei Schrauben (4)
3. Ziehen Sie die Kassette (7) von dem Sitz heraus.
4. Stellen Sie den Kopf auf die Aufnahme und klemmen Sie die Spannschraube (3)
5. Stellen Sie die Kassette (7) wieder in die Nut.
6. Montieren Sie wieder den Deckel und stellen Sie die drei Schrauben fest (5)
7. Zur Einstellung vom Schneiddurchmesser drehen Sie die Einstellungsschraube (2). Die Kassette bewegt sich.
8. Schrauben Sie die zwei Schrauben (4)
9. RAIMAX Ausdrehkopf ist zur Verwendung bereit

MISURAIMAX GEBRAUCHSANWEISUNGEN:

1. Prüfen Sie, dass die zwei Schrauben der Kassette gespannt sind.
2. Montieren Sie MISURAIMAX, ohne Messuhr, auf dem Grundkörper der Kassette. Schrauben Sie die Schraube (10)
3. Stellen Sie die Messuhr in die Bohrung des Einspannhalters (11).
Nähern Sie an den Kopf, damit die Tastspitze (14) die Plattenkanten der Kassette berührt. Spannen Sie die Klemmschraube der Messuhr.
4. Stellen Sie die Messuhr auf Null.
5. Lockern Sie die Spannschraube der Kassette (4)
6. Zur Änderung vom Ausdrehdurchmesser drehen Sie die Einstellungsschraube (2) und lesen Sie den zentesimalen Wechsel auf dem Display.
7. Spannen Sie die Schrauben (4)
8. Zur Demontage von MISURAIMAX schrauben Sie die Klemmschraube ab (10)
9. RAIMAX ist zur Verwendung bereit.



RAIMAX® ADJUSTABLE BORING HEAD

MISURAIMAX® MEASUREMENT DEVICE

RAIMAX adjustable head allows boring operations. Boring Heads supplied with coolant hole.

The adjustment of cutting diameter of the tools is obtained rotating a screw. In this way an insert-cartridge positioned in the U-slot of the tool will slide at radial direction of the head.

This kind of boring head can be fixed on common face mill holders.

For the centesimal adjustment of cutting diameter you can use the MISURAIMAX device, composed of a holding bar, a drilled cylinder and a centesimal/thousandth dial gauge.

RAIMAX INSTRUCTIONS:

1. Unscrew the three screws (5) and remove the cover (6)
2. Loosen the two screws (4)
3. Remove the cartridge (7) from the slot
4. Fix the head on the holder and clamp it with the screw (3)
5. Put again the cartridge (7) in the slot.
6. Tighten the screws (5) to assemble the cover
7. Adjust the measure of cutting diameter rotating the screw. This will cause the shifting of the cartridge.
8. Tighten the two screws (4)
9. RAIMAX boring head is ready to be used

MISURAIMAX INSTRUCTIONS:

1. Check the two locking screws of the cartridge (4). These must be tightened.
2. Fix MISURAIMAX without dial gauge up to the head and tighten the screw (10).
3. Insert the dial gauge in the holding bar, push it up to the head till the contact point will touch the edge of insert of cartridge. Then tighten carefully the locking screw of the dial gauge (12).
4. Zero fill the dial gauge
5. Loosen the two locking screws of the gauge (4)
6. Modify the boring diameter of the head rotating the adjustment screws (2). Check also the centesimal variation on the gauge display.
7. After getting the measure, tighten the screws (4)
8. Remove MISURAIMAX loosening the screws (10)
9. RAIMAX is now ready to be used



RAIMAX® TESTINA REGOLABILE PER ALESATURA

MISURAIMAX® DISPOSITIVO MISURATORE

La testina regolabile RAIMAX permette l'esecuzione di lavorazioni di barenatura e alesatura. Tutte le testine hanno il foro di lubrificazione. La regolazione del diametro di taglio dell'utensile è ottenuta tramite la rotazione di una vite. Quest'ultima fa scorrere, radialmente all'asse di rotazione della testina, una cartuccia ad inserti posizionata all'interno di una scanalatura a forma U ricavata nel corpo dell'utensile in commercio. Per la regolazione centesimale del diametro di taglio si utilizza il dispositivo MISURAIMAX composto da un braccetto, un cilindretto forato ed un comparatore centesimale o millesimale.

ISTRUZIONI D'USO PER IL RAIMAX:

- 1 Svitare le tre viti (5) e togliere il coperchio (6)
- 2 Allentare le due viti (4)
- 3 Estrarre la cartuccia (7) dal suo alloggiamento
- 3 Montare la testina sul mandrino e bloccarla tramite la vite (3)
- 5 Ricollocare la cartuccia (7) nel suo alloggiamento
- 6 Rimontare il coperchio riavvitando le tre viti (5)
- 7 Regolare la misura del diametro di taglio facendo ruotare la vite (2) la quale permette lo spostamento della cartuccia (7)
- 8 Riavvitare le due viti (4)
- 9 La testina RAIMAX è pronta per essere utilizzata

ISTRUZIONI D'USO PER IL MISURAIMAX:

- 1 Assicurarsi che le due viti di bloccaggio della cartuccia (4) siano serrate
- 2 Montare il MISURAIMAX senza comparatore al corpo della testina avvitando la vite (10)
- 3 Introdurre il comparatore all'interno del foro del braccetto (11), avvicinarlo alla testina fino a far toccare il puntalino (14) sullo spigolo dell'inserto della cartuccia e serrare in maniera non eccessiva la vite di bloccaggio del comparatore (12)
- 4 Azzerare il comparatore
- 5 Allentare le due viti di bloccaggio della cartuccia (4)
- 6 Modificare il diametro di alesatura della testina facendo ruotare la vite di regolazione (2) e leggendo la variazione centesimale sul quadrante del comparatore
- 7 Ottenuuta la misura desiderata bloccare le viti (4)
- 8 Smontare il MISURAIMAX svitando la vite (10)
- 9 La testina RAIMAX è pronta per essere utilizzata



RAIMAX® TÊTE À ALÉSER RÉGLABLE

MISURAIMAX® COMPARATEUR

La Tête à aléser RAIMAX permet des exécutions d'alésage et perçage. Les têtes ont le trou d'arrosage. Le diamètre de coupe de l'outil est réglé par la rotation d'une vis. Cette rotation cause le glissement d'une porte-plaquettes situé dans une U-rainure obtenue dans le corps de l'outil. L'attachement de la tête permet le montage sur des communes mandrins porte-fraises. Pour obtenir la régulation centésimale du diamètre de coupe on utilise le dispositif MISURAMAX, composé d'un support, un cylindre percé et un comparateur 1/100 – 1/1000.

MODE D'EMPLOI DE RAIMAX :

1. Dévisser les trois vis (5) et enlever le couvercle.
2. Desserrer les deux vis (4)
3. Extraire le porte-plaquette (7) de son emplacement.
4. Monter la tête sur le mandrin et fixer avec la vis (3)
5. Poser le porte-plaquette (7) dans l'emplacement.
6. Monter le couvercle et visser le trois vis (5)
7. Régler la dimension du diamètre de coupe et tourner la vis (2). Le porte-plaquettes (7) va glisser.
8. Serrer les deux vis (4)
9. La tête RAIMAX est prête pour être utilisée.

MODE D'EMPLOI DE MISURAIMAX:

1. Les vis de serrage du porte-plaquettes (4) doivent être bien fermées.
2. Monter le MISURAIMAX sans comparateur sur le corps de la tête et visser la vis (10)
3. Introduire le comparateur dans le trou du support (11) et le rapprocher à la tête d'alésage. La touche (14) doit toucher le coin de la plaquette. Fermer doucement la vis de serrage du comparateur (12).
4. Mettre le comparateur à zéro.
5. Dévisser les deux vis de serrage du porte-plaquettes (4)
6. Pour modifier le diamètre d'alésage de la tête il faut tourner la vis de réglage (2) et contrôler la variation centésimale sur le cadran du comparateur.
7. Quand on a obtenu la dimension désirée, fermer les vis (4)
8. Desserrer les vis pour démonter MISURAIMAX (10)
9. RAIMAX est prête pour être utilisée



РАСТОЧНЫЕ РЕГУЛИРУЕМЫЕ ГОЛОВКИ RAIMAX® ПРИСПОСОБЛЕНИЕ ДЛЯ НАСТРОЙКИ MISURAIMAX®

Головки RAIMAX предназначены для расточных операций. В корпусе головки находятся отверстия для подвода СОЖ.

Настройка диаметра инструмента осуществляется путем вращения установочного винта.

Таким образом, картридж с режущей пластиной перемещается в U-образном пазу корпуса головки в радиальном направлении.

Расточные головки устанавливаются на оправки для насадных фрез.

Если вам необходима точность диаметра головки до сотых, предлагаем вам использовать приспособление для настройки MISURAIMAX, состоящее из кронштейна, цилиндра с отверстием и индикатора с ценой деления 0,01 мм/0,001 мм.

ИНСТРУКЦИЯ К ГОЛОВКЕ RAIMAX

- 1 Открутите три винта (5) и снимите крышку (6)
- 2 Ослабьте два винта (4)
- 3 Выньте картридж (7) из паза
- 4 Установите головку на оправку и закрепите винтом (3)
- 5 Закрепите картридж (7) в пазу
- 6 Закрутите винты (5), чтобы закрепить крышку
- 7 Вращение установочного винта приведет к движению картриджа. Произведите настройку диаметра инструмента.
- 8 Затяните два винта (4)
- 9 Головка RAIMAX готова к применению

ИНСТРУКЦИЯ К ПРИСПОСОБЛЕНИЮ MISURAIMAX

- 1 Убедитесь, что оба стопорных винта картриджа (4) затянуты.
- 2 Установите MISURAIMAX без индикатора на расточную головку и закрутите винт (10).
- 3 Закрепите индикатор в кронштейн, прижмите его к инструменту до тех пор, пока ножка индикатора не упрется в режущую кромку пластины.
- 4 Обнулите индикатор
- 5 Ослабьте два стопорных винта (4) картриджа
- 6 Настройте диаметр головки, поворачивая установочный винт (2). Проверьте также шкалу сотых на циферблате индикатора.
- 7 После получения необходимого размера, затяните винты (4)
- 8 Отсоедините MISURAIMAX, ослабив винт (10)