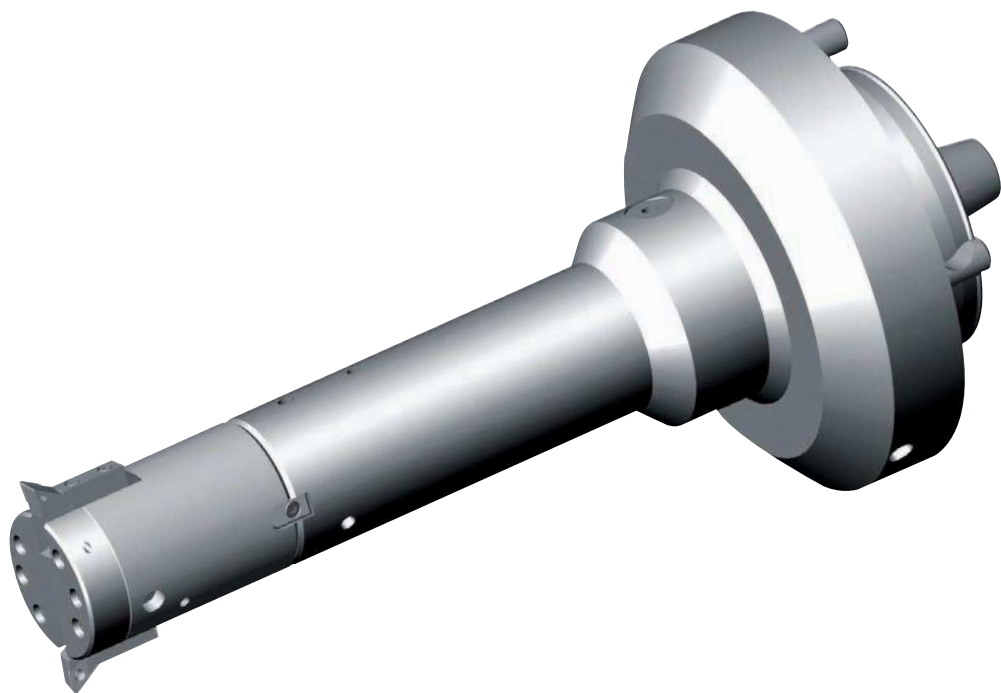




西钛珂机械U轴和展开镗头

Facing Head & Boring Head

机械式数控平旋盘

西铁可 变径镗头安装对机床的要求:

- 机床必须具备可编程的W 轴;
- 镗杆与铣套的旋转必须非常一致。

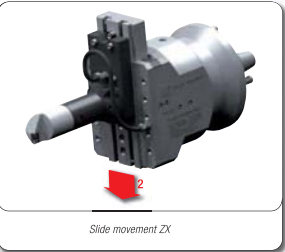
MACHINE TOOL REQUIREMENTS

system requires the use of a horizontal boring mill with a programmable inner spindle (1) that rotates in unison with the outer spindle (3), or milling sleeve.

In most horizontal boring mills, the live spindle is referred to as the “W” axis.

Diameter control: The controlled inner spindle movement (1) is converted within tool into radial cutter movement (2).

Axial Location: Movement of the machine's column or table parallel to spindle, controls the axial location of the cutting edge.

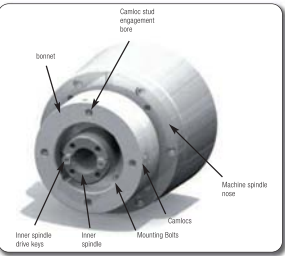


Installation: Bonnet to outer spindle

Cam-Lock adaptor is bolted onto the spindle nose/outer quill of machine.

The Cam-Lock adaptor remains permantly on the machine.

When secured it rotates in conjunction with the spindle and spindle nose.

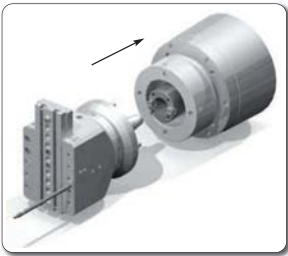


Installation: Contouring head to bonnet

The machine spindle is extended and the Contouring Head's shank is engaged into the spindle taper.

The machine spindle retracts to a home position and engages the Cam-Lock studs into the Cam-Lock adaptors in the bonnet.

Manually clamp the Cam-Lock studs effectively locking the Contouring Head onto the machine.



HBM's with RAM: To accomodate the Contouring Head System to RAM-Type Horizontal Boring Mills without live spindle, a Special Rotary Coupling can be supplied by Cogsdill.

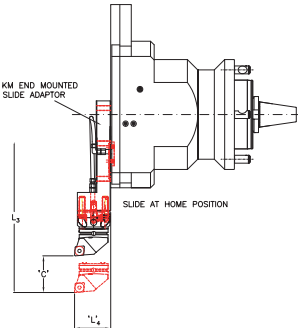
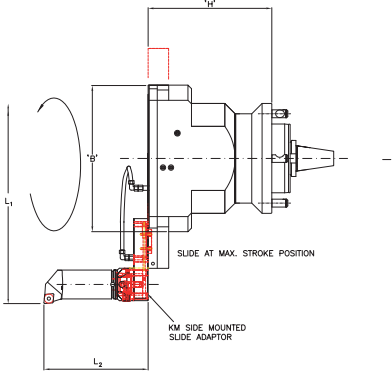
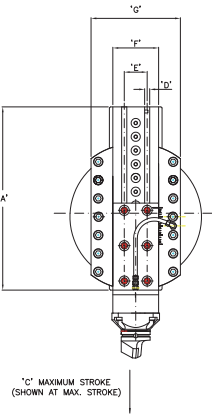
Other Machine types: The Contouring Head System can be also adapted to different machine tool types like Special Purpose Machines and other large Machining Centers utilising a special Drive Unit that provides the actuation of the internal mechanism.

可変径镗头的运动控制

西铁珂可變径镗头通过控制镗杆的伸缩，同时通过平旋盘内的精密机构转换为刀具的水平位移；

刀具的轴向位移通过滑枕的移动或工作台的移动来实现。

Contouring Head System.



We offer a New and upgraded extensive range of proven ,rugged , durable and precision manufactured contouring heads. We can provide a solution for all your manufacturing requirements, from the simple to the very large and complex. Providing adaptors for industry standard tooling as well, expensive tooling set-ups are eliminated.

型号和参数

TECHNICAL DATA	TECHNISCHE DATEN	DATOS TECNICOS	DONNÉES TECHNIQUES	DATI TECNICI	TECHNICKE UDAJE		WEC-BFH200	WEC-BFH300	WEC-BFH420	WEC-BFH500	WEC-BFH700	WEC-BFH900
'A'	'A'	'A'	'A'	'A'	'A'							
'B'	'B'	'B'	'B'	'B'	'B'	mm	200	300	420	500	700	900
'C' radial traverse	'C' Verstellweg radial	'C' camera radial	'C' course radiale	'C' corsa radiale	Radialni poyezd 'C'	mm	38	75	102	102	127	127
'D'	'D'	'D'	'D'	'D'	'D'	mm	14,29 x 1	14,29 x 2	14,29 x 2	14,29 x 2	14,29 x 2	14,29 x 2
'E'	'E'	'E'	'E'	'E'	'E'	mm	63,5	63,5	63,5	63,5	63,5	63,5
'F'	'F'	'F'	'F'	'F'	'F'	mm	70	127	127	127	127	127
'G'	'G'	'G'	'G'	'G'	'G'	mm	200	248	248	248	250	250
'H'	'H'	'H'	'H'	'H'	'H'	mm	307	343	343	343	370	370
L1	L1 max.	L1 max.	L1 max.	L1 max.	L1 max.	mm	ø 381	ø 650	ø 770	ø 850	1120	1500
L2	L2 max.	L2 max.	L2 max.	L2 max.	L2 max.	mm	210	270	310	310	310	310
L3	L3 max.	L3 max.	L3 max.	L3 max.	L3 max.	mm	ø 500	ø 800	ø 980	ø 1060	ø 1330	ø 1700
KM/Capto Adaptors	KM/Capto Adapters	KM/Capto Adattatori	KM/Capto Adapteurs	KM/Capto Adaptadores	Adapter KM/Capto	mm	65	102	102	102	102	102
L4	L4 max.	L4 max.	L4 max.	L4 max.	L4 max.	RPM	800	500	350	300	250	150
Stoke ratio	Max. Drehzahl	Max. velocidad	Vitesse maximale	Massima velocità	Max. rychlost		2 to 1	1 to 1	1 to 1	1 to 1	1 to 1	1 to 1
Feed	Aussteuer Verhältnis	Accarezzare rapporto	Caresser proportion	Acraçie proporçion	Pomer zdvihů	mm/Rev	0,4	0,4	0,4	0,4	0,4	0,4
Max. Torque	Max. Drehmoment	Max. Momento de torsion	Max. Couple maxi	Max. Momento torçante	Max. ločový moment	da Nm	100	800	800	800	1000	1000
Weight	Gewicht	Peso	Poids	Peso	Váha	kg	107	168	175	235	170	230
Repeatability accuracy	Wiederholgenauigkeit	Precisión repetitividad	Precision de répétabilité	Precisione di ripetibilità	Opakovatelnost přesnosti	mm	0,003	0,003	0,003	0,003	0,003	0,003
Backlash	Umkehrspiel	Reazione stavorevole	Reaction violente	Contragoppe	Zpetný odraz	mm	0-0,025	0-0,025	0-0,025	0-0,025	0-0,025	0-0,025
Boring accuracy	Bohrgenauigkeit	Precisión en mandrinado	Precision d'álésage	Precisione in alesatura	Přesnost vrtání		H7	H7	H7	H7	H7	H7
Max chip removal on Ø80M46 steel	Max. Materialabnahme bei Stahl Ø80M46	Cap. max. arranque de viruta en acero Ø80M46	Cap. max. arranque dans l'acier Ø80M46	Cap. max. asportazione su Acc. Ø80M46	max Res. break u ocle Ø80M46							
Facing	Plandrehen	Refrentado	Surfaçage	Stacciatura	Planování	D.O.C./mm	3	4	4	6	6	6
Boring	Ausdrehen	Mandrinado	Alésage	Alesatura	Vysoustruzení	D.O.C./mm	3	4	4	6	6	6
Rapid traverse	Eigang	Rápido	Rapido	Rápido	Rychlý vřsuv	M/min	0,4	0,4	0,4	0,4	0,5	0,5
Roughness	Rauigkeit	Rugosidad	Rugosité	Rugosità	Drsnost	Ra	1,6	1,6	1,6	1,6	1,6	1,6

Optional internal coolant supply, special work lengths, tool slide strokes, tool body diameters, and other special modifications can be accomodated; contact us for a quotation.

Industry Standard Top Tooling.

westec **contouring head system** features a single cross-slide onto which various adaptors can be fitted, such as KM, Capto, Square shank, and Cylindrical round shank.



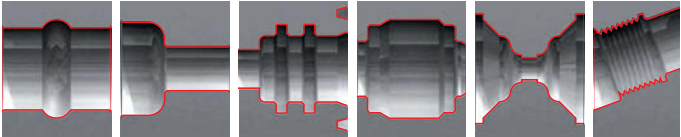
	Capto		KM tooling			Cylindrical	Cylindrical	Cylindrical	Cylindrical	Square
	C5	C6	KM50	KM63	KM80	32 mm	40 mm	50 mm	60 mm	25 mm
W-ZK200-TC	•		•			•		•		
W-ZK300-TC		•		•	•			•	•	
W-ZK420-TC		•		•	•			•	•	•
W-ZK500-TC		•		•	•			•	•	•
W-ZK700-TC		•		•	•			•	•	•
W-ZK700-TC		•		•	•			•	•	•

Special adaptors not stated above can be supplied upon request.

加工零件示例

Examples of internal configurations machined using **westec** contouring head system.

Part geometries shown below are commonly found in parts such as oil valves and blowout preventers, gearboxes, pump housings, compressors, engine housings, aerospace and power generation components, large castings, and heavy equipment components.



Contouring Head System.

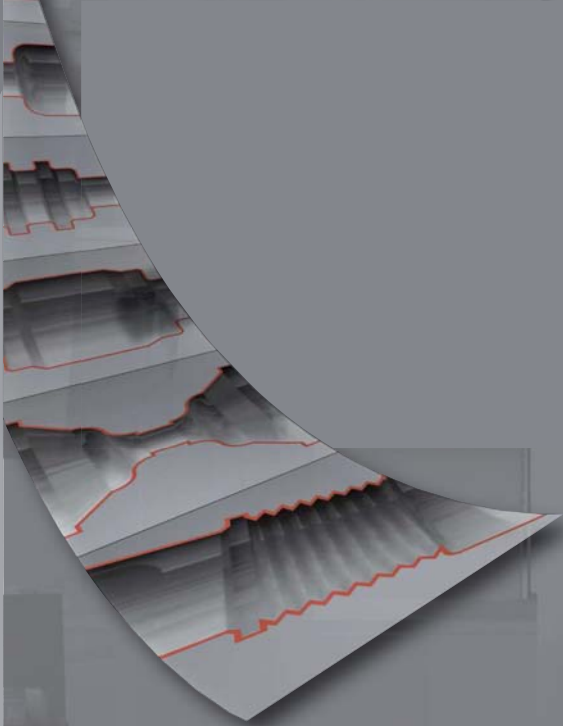


Benefits that will increase your productivity.

- Perform accurate lathe-type operations on horizontal boring mills
- Maximum application flexibility
 - machine diameters, faces, tapers, radii, and profiles
- High material removal rates
- High quality for long working life
- Extremely rigid and durable design
- Backlash-free operation



Contouring Head System.



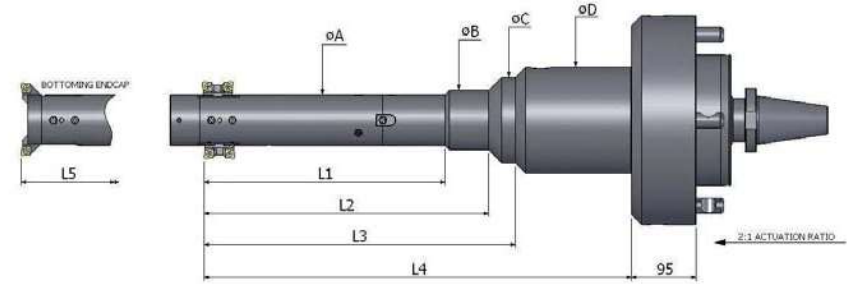
Boring • Facing • Over-Turning • Contouring • Taper boring
Grooving • Spotfacing • Chamfering • Threading

- Modular Boring Tools – Twin Slide

... offer **versatility** and **economy** when machining complex contours inside large components that require multiple operations in one set up.

Benefits

- **Versatility:** Performs forward and back boring operations (such as back counter-bores). Internal grooves, faces, and bottle bores can also be machined.
- **Exceptional concentricity:** Stepped and tapered bores are machined without tool changes. Concentricity is maintained as the tool slide adjusts for various diameters while the tool stays on the same bore centerline.
- **Twin-slide tools:** Offer high material removal rates as well as balanced cutting forces for high feeds and speeds.
- **Internal through-tool coolant is standard.**
- **Fully enclosed actuation mechanism:** No chip packing.
- **Internal forward hard stop and anti-torque features:** protect the tool in case of mishaps.



Insert Cartridges and Toolslides

- **Broad size range:** Each tool has a long tool slide stroke that is supplemented by using different cartridges and toolslides to cover an ever wider diameter range. No need to change the toolslide(s) or remove the head from the machine
- **Other special cartridge designs available on request**



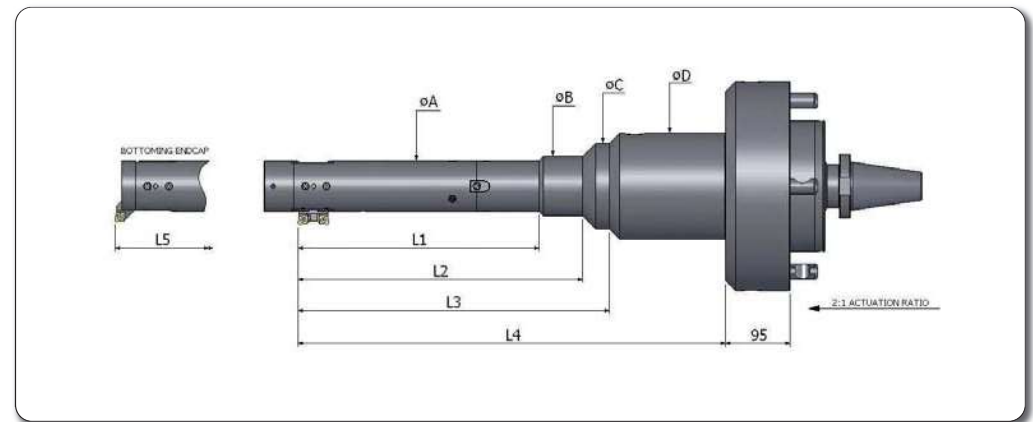
TECHNICAL DATA	TECHNISCHE DATEN	DATOS TECNICOS	DONNÉES TECHNIQUES	DATI TECNICI	TECHNISCHE UDAJE		WEC-8BH-T50	WEC-8BH-T75	WEC-8BH-T100	WEC-8BH-T125
'A'	'A'	'A'	'A'	'A'	'A'	mm	50	75	100	125
'B'	'B'	'B'	'B'	'B'	'B'	mm	N/A	86	N/A	N/A
'C'	'C'	'C'	'C'	'C'	'C'	mm	N/A	125	125	N/A
'D'	'D'	'D'	'D'	'D'	'D'	mm	155	155	155	155
Through type End Cap Radial Stroke	Verfahrenweg radial für Wkzg. Durchgang	Capuchon terminal coulant course radiale	Capuchon terminal coulant course radiale	Cappuccio terminale passante corsa radiale	Radiální zdvih koncoví kryt pro průchodzí díru	mm	23	32	45	54
Bottoming End Cap Radial Stroke	Verfahrenweg radial für Wkzg. Sackloch	Recomrido radial para herramienta ciega	Capuchon terminal fermé course radiale	Cappuccio terminale chiuso corsa radiale	Radiální zdvih koncoví kryt pro slepou díru	mm	12	22	23	30
Total Range of tool with Slide and Cartridge change	Total Arbeitsbereich, wechseln von Schlitten u. Plattenhalter	Gama total con cambio de deslizadera y cartucho	Gamme complète d'outils avec coulisse et cartouche interchangeable	Gamma completa di utensili con slitta e cartuccia intercambiabile	Celkový rozsah nástroje včetně sanířů a výměnní kazet	mm	50–118	75–194	100–230	125–272
L1 max.	L1 max.	L1 max.	L1 max.	L1 max.	L1 max.	mm	305	350	454	524
L2 max.	L2 max.	L2 max.	L2 max.	L2 max.	L2 max.	mm	N/A	414	486	N/A
L3 max.	L3 max.	L3 max.	L3 max.	L3 max.	L3 max.	mm	N/A	454	N/A	N/A
L4 max.	L4 max.	L4 max.	L4 max.	L4 max.	L4 max.	mm	521,3	622	622	692
L5 max.	L5 max.	L5 max.	L5 max.	L5 max.	L5 max.	mm	557	658	684	725
Maximum speed	Max. Drehzahl	Max. velocidad	Vitesse maximale	Massimo N° di giri	Max. rychlost	RPM	800	800	800	800
Stroke ratio	Übersetzung	Ratio desplazamiento	Conversion de mouvement	Rapporto corsa Mandrino/Utensile	Pomer zdvihu		2 to 1	2 to 1	2 to 1	2 to 1
Repeatability accuracy	Wiederholgenauigkeit	Precisión repetitividad	Précision de répétabilité	Precisione di ripetibilità	Opakovatelnost přesnosti	mm	0,003	0,003	0,003	0,003
Backlash	Umkehrspiel	Backlash	Reaction violente	Gloco di Ripresa	Zpětný odraz	mm	0–0,025	0–0,025	0–0,025	0–0,025
Boring accuracy	Bohrgenauigkeit	Precisión en mandrinado	Précision d'alésage	Precisione in alesatura	Přesnost vrtání		H7	H7	H7	H7
Max. chip removal on 080M46 steel	Max. Materialabnahme bei Stahl 080M46	Cap max. arranque de viruta en acero 080M46	Sect. max. du copeau dans l'acier 080M46	Cap. max. asportazione su Acc. 080M46	max Rez trisek u ocele 080M46					
Facing	Ausdrehen	Refrentado	Surfaçage	Slacciatura	Planování	D.O.C./mm	3	3	3	3
Boring	Plandrehen	Mandrinado	Alésage	Alesatura	Vysoustružení	D.O.C./mm	3	6	7	7
Rapid traverse	Eilgang	Rápido	Rapide	Rapido	Rychlý posuv	M/min	100	100	100	100
Roughness	Rauigkeit	Rugosidad	Rugosité	Rugosità	Drsnost	Ra	0,8	0,8	0,8	0,8

- Modular Boring Tools – Single Slide

... offer **versatility** and **economy** when machining complex contours inside large components that require multiple operations in one set up.

Benefits

- **Versatility:** Performs forward and back boring operations (such as back counter-bores). Internal grooves, faces, and bottle bores can also be machined.
- **Exceptional concentricity:** Stepped and tapered bores are machined without tool changes. Concentricity is maintained as the tool slide adjusts for various diameters while the tool stays on the same bore centerline.
- **Single-slide tools:** Offer high material removal rates as well as balanced cutting forces for high feeds and speeds.
- **Internal through-tool coolant is standard.**
- **Fully enclosed actuation mechanism:** No chip packing.
- **Internal forward hard stop and anti-torque features:** protect the tool in case of mishaps.



Insert Cartridges and Toolslides

- **Broad size range:** Each tool has a long tool slide stroke that is supplemented by using different cartridges and toolslides to cover an ever wider diameter range. No need to change the tool slide(s) or remove the head from the machine.
- **Other special cartridge designs available on request:**
e.g. Burnishing Slide



TECHNICAL DATA	TECHNISCHE DATEN	DATOS TÉCNICOS	DONNÉES TECHNIQUES	DATI TECNICI	TECHNISCHE UDAJE		WEC-88H-S50	WEC-88H-S75	WEC-88H-S100	WEC-88H-S125
'A'	'A'	'A'	'A'	'A'	'A'	mm	50	75	100	125
'B'	'B'	'B'	'B'	'B'	'B'	mm	N/A	86	N/A	N/A
'C'	'C'	'C'	'C'	'C'	'C'	mm	N/A	125	125	N/A
'D'	'D'	'D'	'D'	'D'	'D'	mm	155	155	155	155
Through type End Cap Radial Stroke	Verfahrenweg radial für Wkzg. Durchgang	Capuchon terminal coulant course radiale	Capuchon terminal coulant course radiale	Cappuccio terminale passante corsa radiale	Radiální zdvih koncoví kryt pro průchodzí díru	mm	23	32	45	54
Bottoming End Cap Radial Stroke	Verfahrenweg radial für Wkzg. Sackloch	Recomido radial para herramienta ciega	Capuchon terminal fermé course radiale	Cappuccio terminale chiuso corsa radiale	Radiální zdvih koncoví kryt pro slepou díru	mm	12	22	23	30
Total Range of tool with Slide and Cartridge change	Total Arbeitsbereich, wechseln von Schlitten u. Plattenhalter	Gama total con cambio de deslizadora y cartucho	Gamme complète d'outils avec coulisse et cartouche interchangeable	Gamma completa di utensili con slitta e cartuccia intercambiabile	Celkový rozsah nástroje včetně sanířů a výměnní kazet	mm	50–118	75–194	100–230	125–272
L1 max.	L1 max.	L1 max.	L1 max.	L1 max.	L1 max.	mm	305	350	454	524
L2 max.	L2 max.	L2 max.	L2 max.	L2 max.	L2 max.	mm	N/A	414	486	N/A
L3 max.	L3 max.	L3 max.	L3 max.	L3 max.	L3 max.	mm	N/A	454	N/A	N/A
L4 max.	L4 max.	L4 max.	L4 max.	L4 max.	L4 max.	mm	521,3	622	622	692
L5 max.	L5 max.	L5 max.	L5 max.	L5 max.	L5 max.	mm	557	658	684	725
Maximum speed	Max. Drehzahl	Max. velocidad	Vitesse maximale	Massimo N° di giri	Max. rychlost	RPM	800	800	800	800
Stroke ratio	Übersetzung	Ratio desplazamiento	Conversion de mouvement	Rapporto corsa Mandrino/Utensile	Pomer zdvihu		2 to 1	2 to 1	2 to 1	2 to 1
Repeatability accuracy	Wiederholgenauigkeit	Precisión repetitividad	Précision de répétabilité	Precisione di ripetibilità	Opakovatelnost přesnosti	mm	0,003	0,003	0,003	0,003
Backlash	Umkehrspiel	Backlash	Reaction violente	Gloco di Ripresa	Zpětný odraz	mm	0–0,025	0–0,025	0–0,025	0–0,025
Boring accuracy	Bohrgenauigkeit	Precisión en mandrinado	Precisión d'alésage	Precisione in alesatura	Přesnost vrtání		H7	H7	H7	H7
Max. chip removal on 080M46 steel	Max. Materialabnahme bei Stahl 080M46	Cap max. arranque de viruta en acero 080M46	Sect. max. du copeau dans l'acier 080M46	Cap. max. asportazione su Acc. 080M46	max Rez trisek u ocele 080M46					
Facing	Ausdrehen	Refrentado	Surfaçage	Slacciatura	Planování	D.O.C./mm	3	3	3	3
Boring	Plandrehen	Mandrinado	Alésage	Alesatura	Vysoustružení	D.O.C./mm	3	6	7	7
Rapid traverse	Eilgang	Rápido	Rapide	Rapido	Rychlý posuv	M/min	100	100	100	100
Roughness	Rauigkeit	Rugosidad	Rugosité	Rugosità	Drsnost	Ra	0,8	0,8	0,8	0,8



西钛珂伺服数控平旋盘

WESTEC Facing Head & Attachments

Main features

Coolant through the body, delivered to the tool

Sealing air blow

Custom designs under request

Manual or automatic load

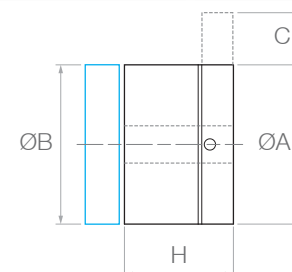
Oil-mist / grease lubrication

Mass balanced by counterweights

Siemens motor (others under request)



Product	ØA mm	ØB mm	Stroke (C) mm	Speed RPM - U/min	Precision	Weight kg	H mm	Flanged to any machine
WM-CNC-BFH-500	500	500	200	310	H7	320	303	
WM-CNC-BFH-630	630	500	200	250	H7	530	303	
WM-CNC-BFH-800	800	800	280	200	H7	995	483	
WM-CNC-BFH-1000	1000	800	300	160	H7	1170	483	



Other measures on request

