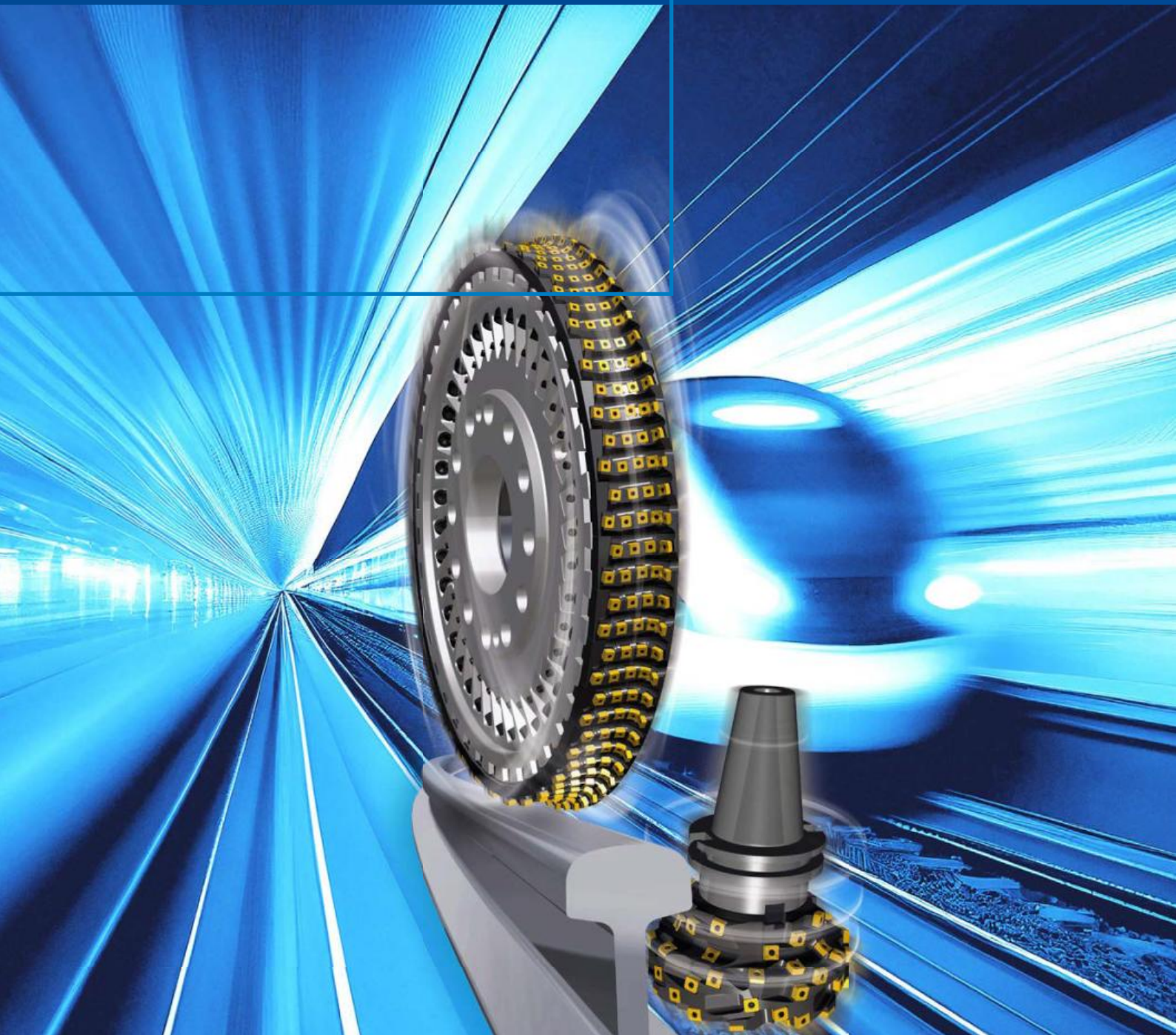


boehlerit

鐵道鋼軌和道岔加工
Rail- and turnout
machining



Boehlerit – 硬質合金開發先驅

Boehlerit是一家家族企業，隸屬於Brucklacher集團（Leitz、Bilz和Boehlerit），總部位於奧地利小鎮卡芬貝格，為金屬、木材、塑膠和複合材料加工的硬質合金和刀具制定了全球標準。

憑藉用於銑削、車削、鑽孔和成型的切削材料、半成品、精密刀具和刀具系統，Boehlerit確保了全球範圍內的工藝安全性和效率。該公司廣泛的產品組合包括用於曲軸加工以及採礦業、棒材剝皮、管材和板材加工以及重型加工的高度專業化工具。Boehlerit產品系列還具有用於建築部件和磨損保護的碳化物。

在塗層技術方面，Boehlerit在全球範圍內佔據著獨特的地位，從有史以來第一個奈米CVD黏合層到全球最硬的鑽石層。憑藉在冶金、塗層技術和最先進的沖壓技術方面的多年經驗，Boehlerit成為刀具製造商的高素質開發合作夥伴。

Boehlerit – Pioneer in carbide development www.boehlerit.com

Boehlerit, a family business that is part of the Brucklacher group (Leitz, Bilz and Boehlerit) and headquartered in the Austrian town of Kapfenberg, sets global standards with carbides and tools for the processing of metal, wood, plastics and composites. With cutting materials, semi-finished products, precision tools and tool systems for milling, turning, drilling and forming, Boehlerit ensures process safety and efficiency on a global scale. The company's extensive product portfolio includes highly specialised tools for the machining of crankshafts as well as for the mining industry, for bar peeling, tube and sheet metal processing and heavy-duty machining. The Boehlerit product range also features carbides for construction components and wear protection. When it comes to coating technology, Boehlerit occupies a unique position worldwide, ranging from the first-ever nano-CVD bonding layer to the hardest diamond layer worldwide. With its many years' experience in metallurgy, coating technology and state-of-the-art press technology, Boehlerit is a highly competent development partner for toolmakers.



hard facts for best results

生產基地

Boehlerit集團制定了國際品質標準。每年，公司都會投資新的生產技術並擴大其先進生產基地的產能。奧地利、德國和土耳其製造的高品質產品融合了最新的研發成果。

Production sites

The Boehlerit Group sets international quality standards. Every year, the company invests in new production technologies and in the expansion of capacities at its advanced production sites. High-quality products made in Austria, Germany and Turkey incorporate the latest research and development findings.



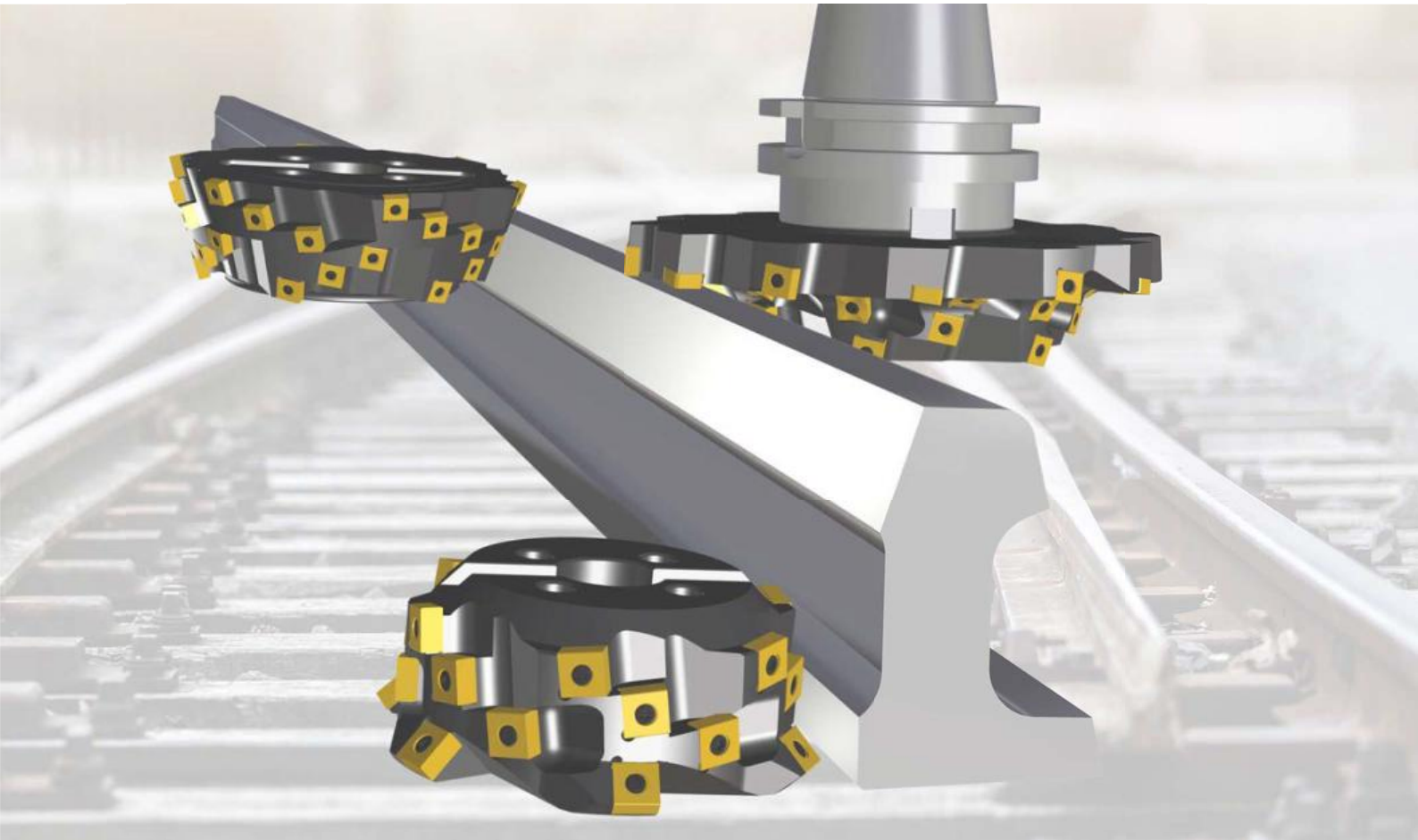
Boehlerit Kapfenberg (Headquarter)
in der Steiermark/Österreich Styria/Austria



Boehlerit Sert Metal
in Istanbul/Türkei Turkey



Boehlerit Deutschland
in Oberkochen Deutschland/Germany



對於每個處理步驟 正確的銑刀

道岔是鐵軌上壓力很大，昂貴的元素，設計複雜，生產要求高。精確、高效地製造的組件可確保最佳功能並延長工具壽命。

Boehlerit為您提供：

可靠的刀具和精確的切削以進行道岔加工量身定制的設計可滿足您的需求。



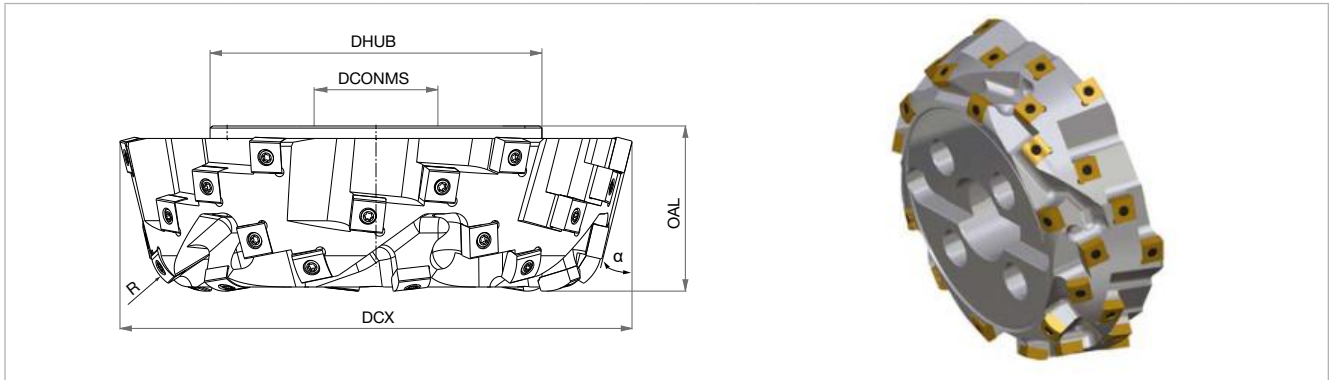
The right milling tool for every processing step

We know that turnouts are highly stressed, expensive elements of the railway track, complex in terms of design and demanding in terms of production. Precisely, efficiently manufactured components ensure optimal functionality and a long tool life.

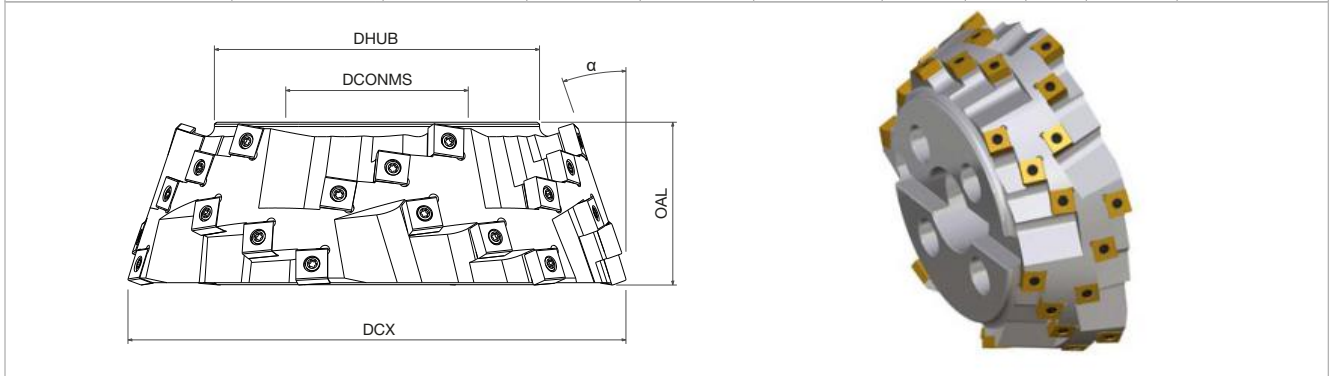
Boehlerit offers you:

Robust tools and precise cutting for turnout machining Tailor-made designs to fit your profile.

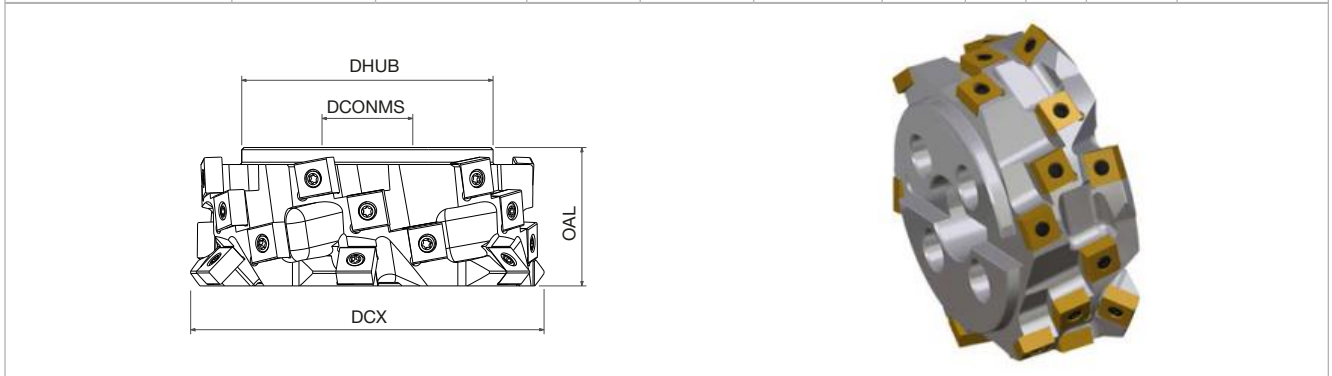




Artikelbezeichnung Item code	Bestell-Nr. Ordering No.	Verfügbarkeit Availability								Ersatzteil Spar parts
			∅ DCX	∅ DHUB	∅ DCONMS	OAL	α	R	ZEFF☼	
D-06-243/ R20 R	5132271	○	250	162	60	80	14°	20	36	Spannschraube Fixation screw A021-S0150 5132563
D-06-242/ R20 L	5193143	○	250	162	60	80	14°	20	36	



Artikelbezeichnung Item code	Bestell-Nr. Ordering No.	Verfügbarkeit Availability								Ersatzteil Spar parts
			∅ DCX	∅ DHUB	∅ DCONMS	OAL	α	R	ZEFF☼	
D-06-239/ 18,5°	5132273	○	250	162	60	80	18,5	-	36	Spannschraube Fixation screw A021-S0150 5132563



Artikelbezeichnung Item code	Bestell-Nr. Ordering No.	Verfügbarkeit Availability								Ersatzteil Spar parts
			∅ DCX	∅ DHUB	∅ DCONMS	OAL	α	R	ZEFF☼	
D-06-240/Z1153 L	5132272	○	164	112	40	60	-	-	24	Spannschraube Fixation screw A021-S0150 5132563

Bestellbeispiel Order example:
1 Stück Piece D-06-243/R20 R oder or 5132271

***)可根據要求定制設計! 我們很樂意為您提供建議!**
*)Customized designs on request! We will be happy to advise you!

CEDC = Anzahl der Schneidkanten CEDC = Number of cutting edges	Artikelbezeichnung Item code	Schneidstoff- sorte Cutting materials	Bestell-Nr. Ordering No.	Verfügbarkeit Availability	Abmessungen [mm] Dimensions [mm]					
					IC	S	D1	RE	R	α
 CEDC = 8	SNNX 1507-FP	BCP40M	5136526	●	15,88	7,94	5,8	-	-	-
 CEDC = 8	SNNQ 1507	BCP35M	5127251	●	15,88	7,94	5,8	0,6	-	-
	SNNQ 1507	BCP40M	5127269	●	15,88	7,94	5,8	0,6	-	-
 CEDC = 4	SNNX 150706	BCP35M	5127275	○	15,88	7,94	5,8	0,6	-	-
	SNNX 150706	BCP40M	5127276	●	15,88	7,94	5,8	0,6	-	-
 CEDC = 4	SNNX 150720	BCP35M	5127278	○	15,88	7,94	5,8	2	-	-
	SNNX 150720	BCP40M	5127280	●	15,88	7,94	5,8	2	-	-
 CEDC = 2	SNNX 1507 - OR10	BCP35M	5127299	○	15,88	7,94	5,8	-	10	-
	SNNX 1507 - OR10	BCP40M	5127306	●	15,88	7,94	5,8	-	10	-
	SNNX 1507 - OR14	BCP35M	5127281	○	15,88	7,94	5,8	-	14	7°
	SNNX 1507 - OR14	BCP40M	5127290	●	15,88	7,94	5,8	-	14	7°
	SNNX 1507 - OR20	BCP35M	5127292	○	15,88	7,94	5,8	-	20	17°
	SNNX 1507 - OR20	BCP40M	5127294	●	15,88	7,94	5,8	-	20	17°
 CEDC = 4	SNNX 1507-IR13	BCP35M	5127315	○	15,88	7,94	5,8	-	13	-
	SNNX 1507-IR13	BCP40M	5127316	●	15,88	7,94	5,8	-	13	-

Bestellbeispiel Order example: 10 Stück piece SNNX 150720 oder or 5127278

● Verfügbar ab Lager Available from stock
○ Lieferzeit auf Anfrage Delivery time on request



完美保養的鐵軌

完美保養的鐵軌使乘坐擁有舒適性，也使刀具壽命長和操作安全性擁有高水平。借助我們專門設計的軌道銑削系統，賦予了磨損的軌道新生命，精確度和效率都很高。

Boehlerit為您提供履帶銑削系統，可對磨損的鋼軌進行完美的重型加工，並根據您的要求量身定制。
速度：0.2 – 3 mm，最高2500 m/h。

優點：

- 堅固耐用的設計
- 一體式或刀片式版本，可快速更換刀具
- 高度精確的設計可提供精確的銑削結果

Perfectly maintained rails

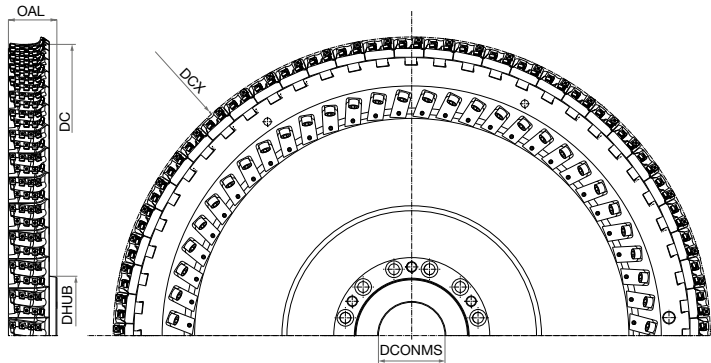
Perfectly maintained rails are a prerequisite for excellent riding comfort, a long tool life and a high level of operational safety. With our specially designed track-milling system, worn rails are given a new lease of life, with great precision and efficiency. Boehlerit offers you track-milling systems for the perfect re-profiling of worn rails, tailored to fit your exact requirements. Removal rate: 0.2 – 3 mm, up to 2500 m/h.

Benefits:

- Robust, durable design
- Monobloc or cartridge version for speedy tool changes
- Highly precise design for clean, exact milling results



Fräser für die Schienenbearbeitung
Milling Cutter for Railway machining



Artikelbezeichnung Item code	Bestell-Nr. Ordering No.	Verfügbarkeit Availability						
			Ø DC	Ø DCX	Ø DHUB	Ø DCONMS	OAL	ZEFF ^{*)}
D-75-140/Z-15745 Right	5066120	○	1400	1437	280	160	116	36
D-75-139/Z-15745 Left	5066114	○	1400	1437	280	160	116	36

Bestellbeispiel Order example: 1 Stück Piece BF45 HP12.125BT Z07 R oder or 5144138
Fräser einsatzfertig montiert - exklusive Wendschneidplatte
Milling cutter ready to use - exclusive Inserts

Ersatz-Kassette und Ersatzteile für Planfräskopf 45° HP12
Replacment-cartridge and spare parts for face milling cutter 45° HP12

	Kassette Rechts Cartridge D-72-473 5066123			
	Kassette Links Cartridge D-72-472 5066122	Unterlagsplatte Shim D-20-060 5062628	Gewindehülse Shim screw D-23-005 6413185	Spannschraube Fixation screw D-22-020 6413184

CEDC = Anzahl der Schneidkanten CEDC = Number of cutting edges	Artikelbezeichnung Item code	Schneid- stoffsorte Cutting materials	Bestell-Nr. Ordering No.	Verfügbarkeit Availability	Abmessungen [mm] Dimensions [mm]			
					IC	S	D1	RE
 CEDC = 8	SNNQ 1206	BCM35W	5200973	○	12,7	6,35	4,5	0,8
 CEDC = 4	SNNX 1306 IR13	BCM35W	5200978	○	13,5	5,35	4,5	0,8

***)可根據要求定制設計！ 我們很樂意為您提供建議！**
***)Customized designs on request! We will be happy to advise you!**

● Verfügbar ab Lager Available from stock
○ Lieferzeit auf Anfrage Delivery time on request



一個刀盤多種選擇 One basic body - many options

BULLtec® 2.0 Serie

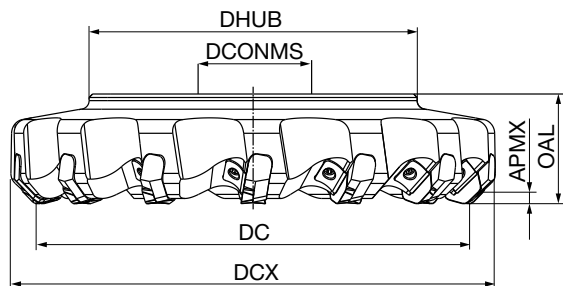
模組化BULLtec® 2.0刀具系統為重型加工的性能、成本效益和靈活性樹立了新標準。其小型、經濟的刀夾易於更換，可用於多種不同材料的表面銑削。單一 BULLtec® 2.0 刀具系統由刀盤和用於可轉位切削刀片的可更換刀架組成。不同的刀架類型可以與不同尺寸的刀盤靈活組合，與其他系統相比大大增加了靈活性。創新的固定設計確保刀盤本體、刀夾和可轉位切削刀片穩定、精確地融合，無需進一步調整。

透過這種方式，BULLtec® 2.0 工具可以快速、輕鬆地適應特殊任務，或根據需要從頭開始設定。此外，可轉位刀片的可觸及位置使得更換它們變得非常容易。由於採用專門設計的可轉位刀片主偏角，所有 BULLtec® 2.0 刀具系統均以其特別柔軟的切削而脫穎而出，從而保護刀具和機器並顯著延長刀具壽命。

The modular BULLtec® 2.0 tooling system sets new standards for performance, cost-efficiency and flexibility in heavy-duty machining. Its small, economical cartridges are easy to replace and can be used for face milling of a wide range of different materials. A single BULLtec® 2.0 tooling system consists of a base body and exchangeable cartridges for the indexable cutting inserts. Different cartridge types may be combined flexibly with different-sized base bodies, greatly increasing flexibility in comparison with other systems. The innovative tool holders ensure the stable, precise fusion of the base body, the cartridges and the indexable cutting inserts, without the need for further adjustments. In this way, BULLtec® 2.0 tools may be adapted to special tasks quickly and effortlessly, or set up from scratch where required. In addition, the accessible position of the indexable inserts makes it astonishingly easy to exchange them. Thanks to the specially designed approach angle of the indexable inserts, all the BULLtec® 2.0 tooling systems stand out for their particularly soft cut, thereby protecting tools and machines and significantly increasing tool life.



Planfräskopf 45° / SP.. 20
Face milling cutter 45° / SP.. 20



Artikelbezeichnung Item code	Bestell-Nr. Ordering No.	Verfügbarkeit Availability	Abmessungen [mm] Dimensions [mm]						
			DC	DCX	DHUB	DCONMS	OAL	APMX	ZEFF [⊙]
BF45 SP20.125BT Z07 R	5144152	○	125	147	120	40	63	10	7
BF45 SP20.160BT Z09 R	5144153	●	160	182	120	40	63	10	9
BF45 SP20.200BT Z11 R	5144154	●	200	222	159	60	63	10	11
BF45 SP20.250BT Z14 R	5144156	●	250	272	190	60	63	10	14
BF45 SP20.315BT Z18 R	5144157	●	315	337	274	60	63	10	18
BF45 SP20.400BT Z18 R	5144158	○	400	422	274	60	80	10	18
BF45 SP20.400BT Z22 R	5144159	○	400	422	274	60	80	10	22
BF45 SP20.500BT Z22 R	5144160	○	500	522	274	60	80	10	22
BF45 SP20.500BT Z26 R	5144162	○	500	522	274	60	80	10	26

Bestellbeispiel Order example: 1 Stück Piece 5144152 oder or BF45 SP20.125BT Z07 R
 Fräser einsatzfertig montiert - exklusive Wendeschneidplatte
 Milling cutter ready to use - exclusive Inserts

Hinweis: Linksausführung **L** auf Anfrage
 Note: Left hand version **L** on request

Ersatz-Kassette und Ersatzteile für Planfräskopf 45° SP20
Replacement-cartridge and spare parts for face milling cutter 45° SP20

	Kassette CBT45 SP20 R inkl. Spannschraube Cartridge CBT45 SP20 R incl. fixation screw 5136693		Spannschraube für Kassette Fixation screw for cartridge 5049762		Spannkeil Wedge clamp 5132639		Spannschraube für Spannkeil Fixation screw for wedgeclamp 5132480		Drehmoment- schlüssel Torque wrench 5136235
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Bestellbeispiel Order example: 1 Stück Piece Kassette Cartridge 5136693 oder or CBT45 SP20 R

N = Anzahl der Schneidkanten N = Number of cutting edges	Artikelbezeichnung Item code	Schneidstoffsorte Cutting materials	Bestell-Nr. Ordering No.	Verfügbarkeit Availability	Abmessungen [mm] Dimensions [mm]		
					L	IC	S
 CEDC = 4	SPKN 2006 ADSN	BCP20M	5173433	○	20	20	6,35
	SPKN 2006 ADSN	BCP25M	5190694	●	20	20	6,35
	SPKN 2006 ADSN	BCP30M	5190697	○	20	20	6,35
	SPKN 2006 ADSN	BCP35M	5137986	●	20	20	6,35
	SPKN 2006 ADSN	BCM40M	5137989	●	20	20	6,35
	SPKN 2006 ADSN	BCK15M	5190708	○	20	20	6,35
	SPKN 2006 ADSN	BCK20M	5176323	●	20	20	6,35

Bestellbeispiel Order example: 10 Stück piece 5173433 oder or SPKN 2006 ADSN BCP20M

Empfehlung: Mindestens Aufnahme SK-60 verwenden!
 Recommendation: Use at least chuck SK-60!

- Verfügbar ab Lager Available from stock
- kurzfristig lieferbar shortly available
- Auf Anfrage On request

● **BCK15M (HC-K15) TERAspeed 2.0**

Ausgesuchte Rohstoffe für ein optimiertes K15-Hartmetallsustrat mit einer extrem harten und verschleißfesten HR-CVD Mehrlagen-Beschichtung. Ideal geeignet für die Trockenbearbeitung von Grauguss (GJL), Kugelgraphitguss (GJS), Temperguss und legiertem Guss.

● **BCK20M (HC-K20/P10)**

Zähes K20 Substrat und eine dicke PVD-Beschichtung für die Bearbeitung von Gussmaterialien.
Auch als Schlichtsorte für die Stahlzerspanung und für die Bearbeitung von Kaltarbeitsstählen härter als 54 HRC geeignet.

● **BCK15M (HC-K15) TERAspeed 2.0**

Selected raw materials for an optimised K15 carbide substrate with a particularly hard and wear-resistant HR-CVD multilayer coating. Ideal for dry machining of grey cast iron (GJL), spheroidal graphite cast iron (GJS), tempered cast iron and alloyed cast iron.

● **BCK20M (HC-K20/P10)**

Tough K20 substrate and a thick PVD coating for the machining of cast materials.
Also suited as finishing grade for steel cutting and the machining of cold work steels of 54 HRC.

Schnittwertempfehlung für Fräser 45°

Cutting data recommendations for Milling Cutter 45°

ISO 513	BZG	Kühlung Cooling			Schnittdaten v _c [m/min] Cutting data v _c [m/min]			
		MMS/Luft MMS/Air	Trocken Dry	Nass Wet	BCP35M BCP40M	BCM35W	BCM40M	BCK15M BCK20M
P	P1	●	●		180 - 260	---	200 - 260	220 - 280
	P2	●	●		160 - 200	---	160 - 220	190 - 240
	P3	●	●		120 - 160	---	130 - 170	150 - 190
	P4	●	●		110 - 150	---	120 - 150	---
	P5	●	●		120 - 170	---	130 - 190	140 - 200
M	M1	●	●	●	---	120 - 200	110 - 160	---
	M2	●	●	●	---	80 - 130	70 - 120	---
K	K1	●	●		---	---	---	220 - 360
	K2	●	●		---	---	---	150 - 190
	K3	●	●		---	---	---	170 - 240
S	S1	●	●	●	---	70 - 90	55 - 70	---
	S2	●	●	●	---	35 - 45	25 - 35	---
	S3	●	●	●	---	50 - 100	30 - 70	---
	S4	●	●	●	---	30 - 80	25 - 50	---

Schnittwertempfehlung für BULLtec®

Bei Verwendung des Systems BULLtec® 2.0 ist eine Reduktion der Schnittdaten von 30 - 40% zu beachten!

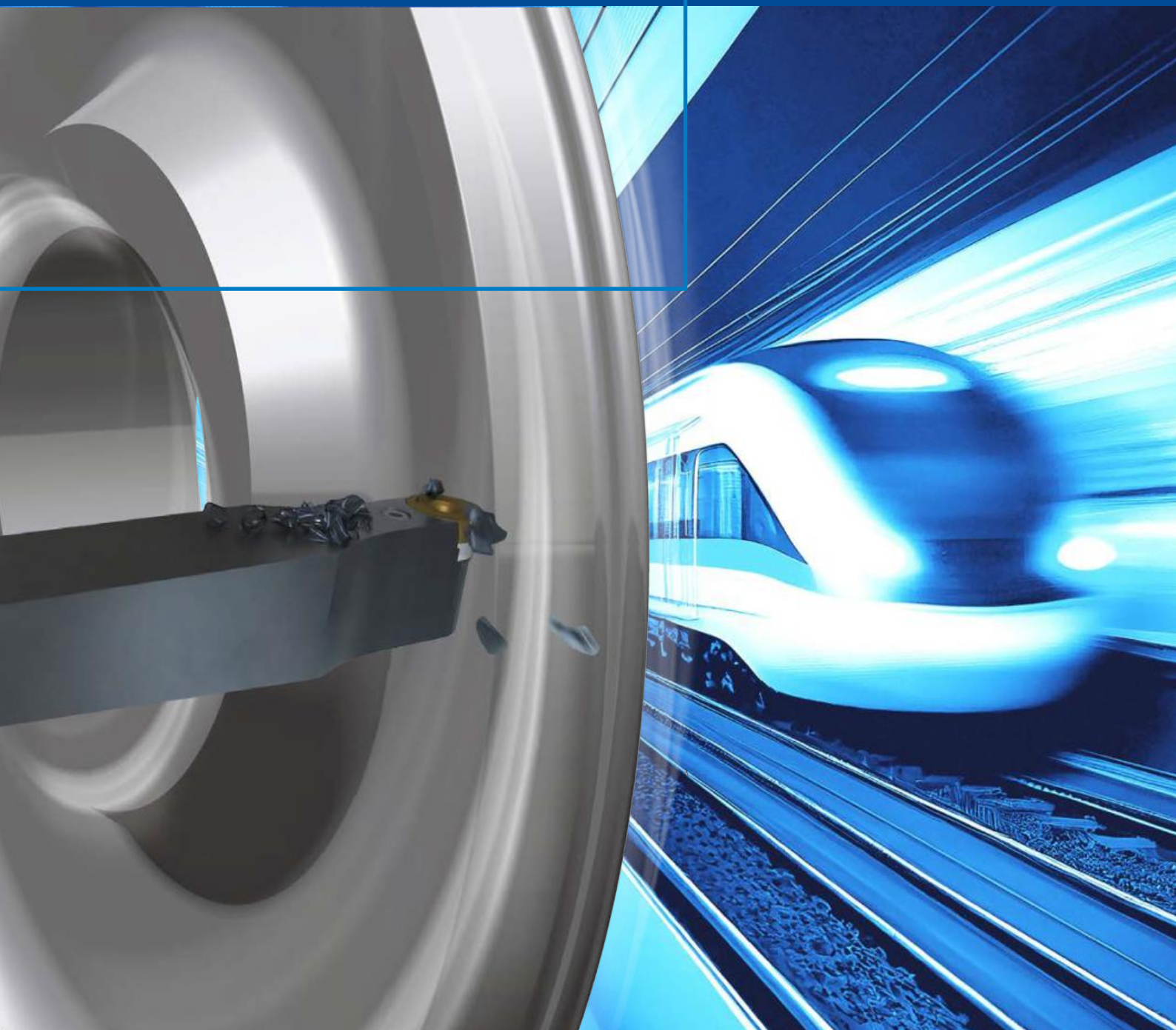
Cutting data recommendations for BULLtec®

When using the Bulltec® 2.0 system, a reduction in cutting data of 30 - 40% should be noted!

- empfohlene Anwendung recommended application
- alternative Anwendung um 30 - 50 % reduzieren
alternative application reduced by 30 - 50 %

boehlerit

火車輪加工
Railway wheel machining



Boehlerit – 硬質合金開發先驅

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hard facts for best results

生產基地

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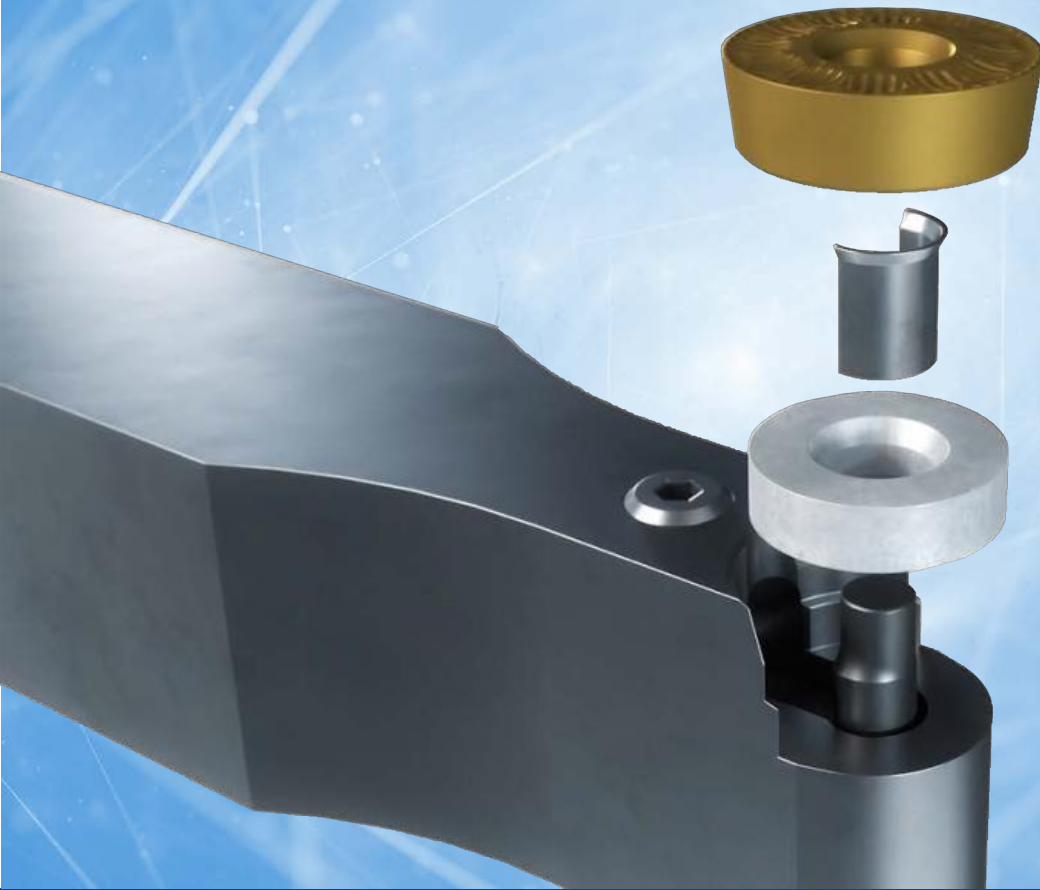
Boehlerit Kapfenberg (Headquarter)
in der Steiermark/Österreich Styria/Austria



Boehlerit Sert Metal
in Istanbul/Türkei Turkey



Boehlerit Deutschland
in Oberkochen Deutschland/Germany



火車輪加工

鐵路車輪的輪面和輪緣對於確保車輛的安全運行和舒適運行至關重要。Boehlerit 提供專門改造的刀具解決方案，用於翻轉磨損的輪對。一般來說，鐵路車輪加工分為新輪車削和修輪。

Railway wheel machining

The tread and flange of railroad wheels are crucial for the matter when it comes to ensuring safe operation and comfortable running of the vehicle. Boehlerit offers specially adapted tool solutions for overturning worn wheelsets. In general, railway wheel machining is divided into new wheel turning and wheel repairing.



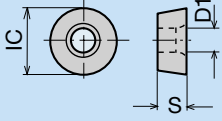











新車輪車削

在新的車輪車削中，所需的車輪（例如火車、貨車、地鐵）是使用複雜的刀具解決方案（圓形可轉位刀片）製造的。首先，透過鍛造和滾壓對車輪進行粗略預加工，然後使用Boehlerit專門改裝的刀具將其加工至最終輪廓。該工藝允許濕法和乾法生產。

New wheel turning

In new wheel turning the desired wheel (e.g. for trains, wagons, metro/subway) is manufactured using a sophisticated tooling solution (round indexable inserts). First, the wheels are roughly premachined by forging and rolling and afterwards they are machined to their final contour using specially adapted tools from Boehlerit. This process allows both wet and dry production.



	Bestellbezeichnung Item code	Schneidstoffsorte Cutting materials	Bestell-Nr. Order No.	Verfügbarkeit Availability	Vorschub Feed f [mm / U rev]	Schnitttiefe Cutting depth ap max. [mm]	Abmessungen [mm] Dimensions [mm]			
							IC	S	D1	
	Kniehebel Klemmung / Clamping via toggle lever									
	Feine Bearbeitung / Fine application									
	RCMX 2507M0-R25	LCP15T	5031805	●	0,50 - 1,50	2,0 - 7,0	25,00	7,90	7,20	
	RCMX 2507M0-R25	LCP25T	5055953	●	0,50 - 1,50	2,0 - 7,0	25,00	7,90	7,20	
	RCMX 3209M0-R25	LCP15T	5031806	●	0,50 - 1,50	3,0 - 10,0	32,00	9,52	9,50	
	Grobe Bearbeitung / Rough application									
	RCMX 2006M0	LCP15T	5029236	●	0,25 - 0,55	2,0 - 8,0	20,00	6,35	6,50	
	RCMX 2006M0	LCP25T	5055951	●	0,25 - 0,55	2,0 - 8,0	20,00	6,35	6,50	
	RCMX 2507M0	LCP15T	5029240	●	0,30 - 0,65	2,5 - 13,0	25,00	7,90	7,20	
	RCMX 2507M0	LCP25T	5055952	●	0,30 - 0,65	2,5 - 13,0	25,00	7,90	7,20	
	RCMX 3209M0	LCP15T	5031800	●	0,50 - 1,50	3,0 - 13,0	32,00	9,52	9,50	
	RCMX 3209M0	LCP25T	5055955	●	0,50 - 1,50	3,0 - 13,0	32,00	9,52	9,50	
		RCMX 2006M0	BCP10T	5213667	○	0,25 - 0,55	2,0 - 8,0	20,00	6,35	6,50
		RCMX 2006M0	BCP20T	5213668	○	0,25 - 0,55	2,0 - 8,0	20,00	6,35	6,50
		RCMX 2507M0	BCP10T	5213671	○	0,30 - 0,65	2,5 - 13,0	25,00	7,90	7,20
RCMX 2507M0		BCP20T	5213672	○	0,30 - 0,65	2,5 - 13,0	25,00	7,90	7,20	
RCMX 3209M0		BCP10T	5213675	○	0,50 - 1,50	3,0 - 13,0	32,00	9,52	9,50	
	RCMX 3209M0	BCP20T	5213678	○	0,50 - 1,50	3,0 - 13,0	32,00	9,52	9,50	
	RCMX 3009M0	BCP10T	5213673	○	0,50 - 1,50	3,0 - 13,0	30,00	9,52	10,00	
	RCMX 3009M0	BCP20T	5213674	○	0,50 - 1,50	3,0 - 13,0	30,00	9,52	10,00	
	RCMX 2507M0-R40	LCP25T	5055954	●	0,80 - 1,60	3,0 - 12,0	25,00	7,90	7,20	
	RCMX 3209M0-R40	LCP15T	5031804	●	0,80 - 1,60	4,0 - 16,0	32,00	9,52	9,50	
	RCMX 3209M0-R40	LCP25T	5055957	○	0,80 - 1,60	4,0 - 16,0	32,00	9,52	9,50	
	Spezial Klemmung / Special fixation									
	RCMH 3209M0-R40	LCP15T	5031799	●	0,80 - 1,60	4,0 - 16,0	32,00	9,52	10,00	
	RCMH 3209M0-R40	LCP25T	5055946	●	0,80 - 1,60	4,0 - 16,0	32,00	9,52	10,00	
		RCMR 3209M0-R25	LCP15T	5031796	●	0,50 - 1,50	3,0 - 10,0	32,00	9,52	12,00
RCMR 3209M0-R25		LCP25T	5055947	●	0,50 - 1,50	3,0 - 10,0	32,00	9,52	12,00	
	Grobe Bearbeitung / Rough application									
	RCMR 3209M0-R40	LCP15T	5031798	●	0,80 - 1,60	4,0 - 16,0	32,00	9,52	12,00	
	RCMR 3209M0-R40	LCP25T	5055948	●	0,80 - 1,60	4,0 - 16,0	32,00	9,52	12,00	

Bestellbeispiel Order example: 10 Stück 10 Pieces RCMX 2507M0-R25 oder or 5031805

● Verfügbar ab Lager Available from stock
○ Auf Anfrage On request

	Bestellbezeichnung Item code	Bestell - Nr. Order No.	Verfüg- barkeit Availability	Abmessungen [mm] Dimensions [mm]					Passende Wende- platten Suitable inserts
				H=HF	B	OAL	LH	WF	
	PRDCN 3232P20	6406284	●	32	32	170	32	16	RCMX 20..
	PRDCN 4040S25	6406285	●	40	40	250	42	20	RCMX 25..
	PRDCN 5050V32	6418209	●	50	50	400	52	25	RCMX 32..
	PRGCR 3232P20	6406296	○	32	32	170	-	40	RCMX 20..
	PRGCL 3232P20	6406290	●	32	32	170	-	40	
	PRGCR 4040S25	6406297	○	40	40	250	-	50	RCMX 25..
	PRGCL 4040S25	6406291	○	40	40	250	-	50	
	PRGCR 5050S32	5024775	●	50	50	250	-	50	RCMX 32..
	PRGCL 5050S32	5024774	●	50	50	250	-	50	

Ersatzteile für die Klemmhalter Spare parts for tool holder PR.C...

Schneidkanten- länge Cutting edge length	Schaftgröße Shank size												
		Unterlage Shim	Bestell-Nr. Order No.	Kniehebel Toggle lever	Bestell-Nr. Order No.	Spann- schraube Fixation screw	Bestell-Nr. Order No.	Spann- hülse shim pin	Bestell-Nr. Order No.	Montage- dorn Assembly punch	Bestell-Nr. Order No.	Inbus- schlüssel Allen key	Bestell-Nr. Order No.
20	3232	B05-R1747	6401858	D05-19189	6403975	A03-08235	6401282	E01-09008	6404741	V10-40000	6407855	V01-A0030	6407826
25	4040	B05-R2263	6401859	D05-23235	6403976	A03-10305	6401284	E01-11011	6404742	V10-30000	6407854	V01-A0040	6407828
32	5050	3832	6419722	8132	6420188	1612	6425578	4125	6419916	0025	6418986	5005	6407829

	Bestellbezeichnung Item code	Bestell - Nr. Order No.	Verfüg- barkeit Availability	Abmessungen [mm] Dimensions [mm]					Passende Wende- platten Suitable inserts
				H=HF	B	OAL	LH	WF	
	CRCCN 5050V32	5007550	○	50	50	400	42	25	RCM. 3209M0..

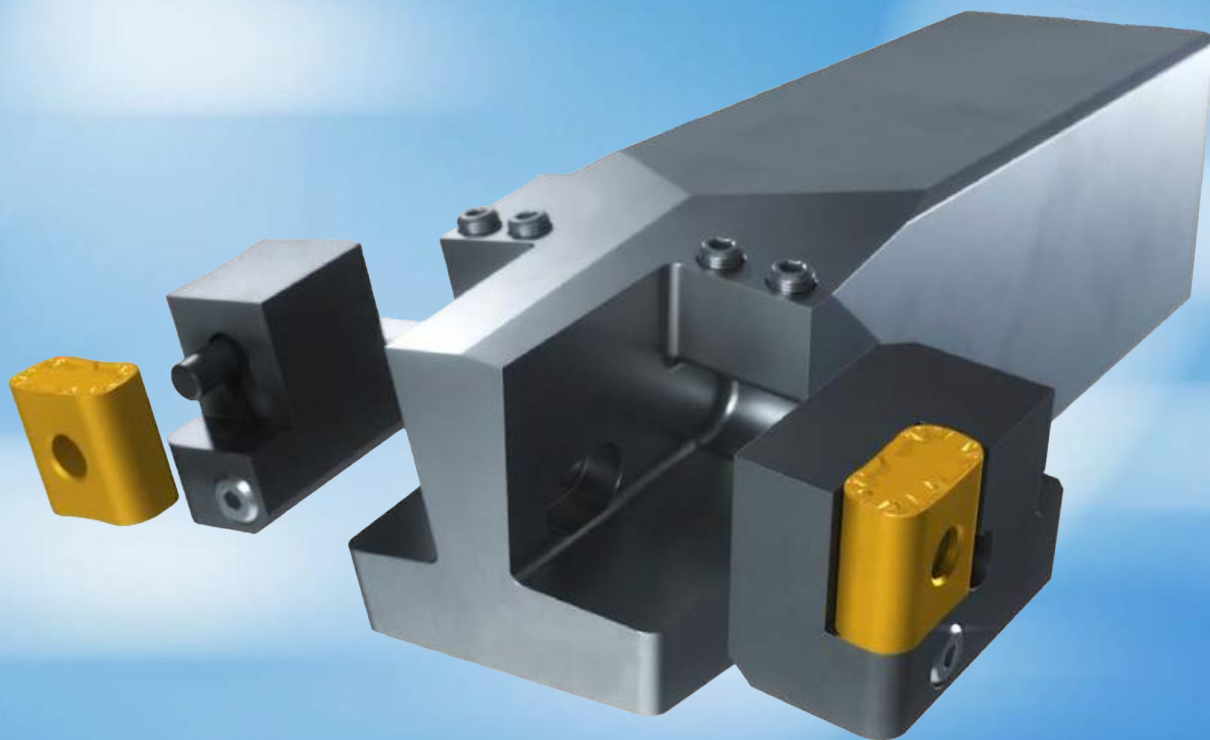
Ersatzteile für die Klemmhalter Spare parts for tool holder CRCCN 5050V32

Schneidkanten- länge Cutting edge length	Schaftgröße Shank size												
		Unterlage Shim	Bestell-Nr. Order No.	Spannpratze Clamp	Bestell-Nr. Order No.	Inbus- schraube Fixation screw	Bestell-Nr. Order No.	Senkkopf- schraube Shimscrew	Bestell-Nr. Order No.	Druckfeder Pressure spring	Bestell-Nr. Order No.	Inbus- schlüssel Allen key	Bestell-Nr. Order No.
32	5050	Bm46416	9076976	Bm46417	9076973	M8x20 DIN912	6412661	M6x16 DIN7991	9076982	0,5x5x30 DIN2098	9076983	V01-A0060 SW6	6407830
												V01-A0040 SW4	6407828

Bestellbeispiel Order Example:: 1 Stück 1 pieces PRDCN 3232P20 6406284

Rechtsausführung wie gezeichnet, Linksausführung spiegelbildlich
Righthand version as shown, lefthand version mirrorlike

- Verfügbar ab Lager Available from stock
- Auf Anfrage On request



鐵路車輪改造

鐵路車輪修復涉及翻轉磨損的輪組。根據磨損程度，這個過程可以重複幾次。帶有縱向板的刀具系統首先用於加工胎面，然後加工車輪輪廓和凸緣。應選擇盡可能最大的切削深度，以保持盡可能短的加工時間。然而，這在很大程度上取決於所用車輪的磨損狀況。Boehlerit生產具有高水平專業知識的重型加工刀具。Boehlerit的全面承諾一方面代表創新、持續的品質開發和專業知識，另一方面代表重型加工領域的悠久傳統。

Railway wheel reprofiling

Railway wheel repairing involves overturning worn wheel sets. This process can be repeated several times depending on the degree of wear. A tooling system with longitudinal plates is used to machine the tread first followed by the wheel profile and flange. Preferably, the biggest possible cutting depth should be selected to keep machining times as short as possible. However, this depends heavily on the wear condition of the used wheel. Boehlerit manufactures tools for heavy duty machining with a high level of expertise. Boehlerit's comprehensive commitment stands for innovation, continuous quality development and know-how on the one hand and for a long tradition in heavy duty machining on the other.

全新斷屑槽型

借助新的RWF（用於精加工操作的斷屑幾何形狀），Boehlerit為鐵路車輪修復的車削工藝提供了另一種優化。新開發的斷屑槽透過專門開發的倒角抑制機器的振動，從而確保在較低進給範圍內實現最佳斷屑。憑藉這種幾何形狀以及改進的牌號BCP10T和BCP20T，Boehlerit正在擴大產品組合。由於採用了新的成分和新開發的CVD塗層，因此可以應對高溫發展和硬度條件，並且由於金色閃亮的顏色也提供了理想的磨損檢測。

New innovative chip breaking geometry

With the new RWF – chip breaking geometry for finishing operations, Boehlerit offers another optimization in the turning process for railway wheel repairing. The new developed chipbreaker suppresses vibrations of the machine due to a specially developed chamfer and thus guarantees optimum chipbreaking in the lower infeed range. With this geometry and the modified grades BCP10T and BCP20T, Boehlerit is expanding the portfolio. Due to the new composition and a newly developed CVD – coating it is possible to cope with the high temperature developments as well as hardness conditions and additionally guarantees an ideal wear detection due to the golden shiny color.



LNUX -RWF



NEW



Radsatz

	Bestellbezeichnung Item code	Schneidstoffsorte Cutting materials	Bestell-Nr. Order No.	Verfügbarkeit Availability	Vorschub Feed f [mm / U rev]	Schnitttiefe Cutting depth ap max. [mm]	Abmessungen [mm] Dimensions [mm]			
							IC	S	D1	RE
	LNUX 191940SN-RWF	BCP10T	5213686	●	0,25 - 1,30	2 - 6	19,05	10,00	6,35	4,0
	LNUX 191940SN-RWF	BCP20T	5213687	●	0,25 - 1,30	2 - 6	19,05	10,00	6,35	4,0
	LNUX 191940SN-BRWT	LCP15T	5031791	●	0,30 - 1,30	2 - 7	19,05	10,00	6,35	4,0
	LNUX 191940SN-BRWT	LCP25T	5055942	●	0,30 - 1,30	2 - 7	19,05	10,00	6,35	4,0
	LNUX 191940SN-RWT	BCP10T	5213680	○	0,30 - 1,30	2 - 7	19,05	10,00	6,35	4,0
	LNUX 191940SN-RWT	BCP20T	5213681	○	0,30 - 1,30	2 - 7	19,05	10,00	6,35	4,0
	LNUX 191940SN-BRW	LCP15T	5031793	●	0,50 - 1,50	2 - 10	19,05	10,00	6,35	4,0
	LNUX 191940SN-BRW	LCP25T	5055941	●	0,50 - 1,50	2 - 10	19,05	10,00	6,35	4,0
	LNUX 191940SN-RW	BCP10T	5213684	○	0,50 - 1,50	2 - 10	19,05	10,00	6,35	4,0
	LNUX 191940SN-RW	BCP20T	5213685	○	0,50 - 1,50	2 - 10	19,05	10,00	6,35	4,0

NEW

NEW

NEW

	Bestellbezeichnung Item code	Schneidstoffsorte Cutting materials	Bestell-Nr. Order No.	Verfügbarkeit Availability	Vorschub Feed f [mm / U rev]	Schnitttiefe Cutting depth ap max. [mm]	Abmessungen [mm] Dimensions [mm]				
							L	IC	S	D1	RE
	LNUX 301940SN-RWF	BCP10T	5193622	●	0,40 - 1,70	4 - 17	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-RWF	BCP20T	5213689	●	0,40 - 1,70	4 - 17	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-BRW	LCP15T	5031452	●	0,50 - 1,70	4 - 14	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-BRW	LCP25T	5055944	●	0,50 - 1,70	4 - 14	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-RW	BCP10T	5213688	○	0,50 - 1,70	4 - 14	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-RW	BCP20T	5213692	○	0,50 - 1,70	4 - 14	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-BRWR	LCP15T	5031766	●	1,00 - 2,00	4 - 20	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-BRWR	LCP25T	5055943	○	1,00 - 2,00	4 - 20	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-RWR	BCP10T	5213690	○	1,00 - 2,00	4 - 20	30,00	19,05	12,00	6,35	4,0
	LNUX 301940SN-RWR	BCP20T	5213691	○	1,00 - 2,00	4 - 20	30,00	19,05	12,00	6,35	4,0

NEW

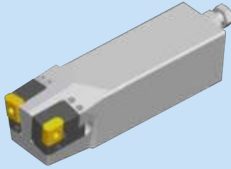
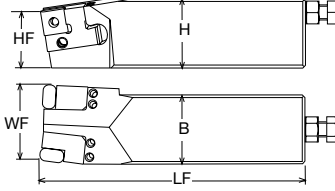
NEW


NEW

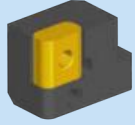
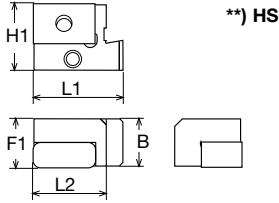
	Bestellbezeichnung Item code	Schneidstoffsorte Cutting materials	Bestell-Nr. Order No.	Verfügbarkeit Availability	Vorschub Feed f [mm / U rev]	Schnitttiefe Cutting depth ap max. [mm]	Abmessungen [mm] Dimensions [mm]				
							L	IC	S	D1	RE
	CNMX 190740-BRWT	LCP25T	5065810	●	0,30 - 1,30	4 - 12	19,05	19,05	7,93	7,80	4,0

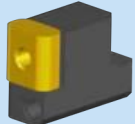
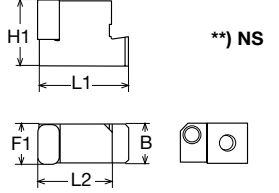
Bestellbeispiel: 10 Stück LNUX 191940SN-BRWT LCP15T or 5031791
Order example: 10 pieces LNUX 191940SN-BRWT LCP15T or 5031791





● Verfügbar ab Lager Available from stock
○ Auf Anfrage On request

	Grundhalter für Hegenscheidt-Maschine Basic holder for Hegenscheidt machine								Passende Kassetten Suitable cartridges
	Bestellbezeichnung Item Code	Bestell-Nr. Order No.	Verfügbarkeit Availability	B	H	LF	HF	WF	
	BRWT01-32 5555R	5196044	●	55	55	210	44	60	BRWC01...R BRWC02...L
	BRWT01-32 5555L	6401787	●	55	55	210	44	60	BRWC01...L BRWC02...R

Ersatzteile für die Klemmhalter Spare parts for Tool holder BRWT01-32 5555 R; BRWT01-32 5555 L							
							
Gewindestift Grub screw	Bestell -Nr. Order No.	Inbusschlüssel Allen key	Bestell -Nr. Order No.	6-kt-Schraube Hex-screw	Bestell -Nr. Order No.	6-kt-Mutter Hex nut	Bestell -Nr. Order No.
M6 x 16 ISO4028	5001133	V01-A0030	6407826	M12x50 DIN93388	9191977	M12 (Typ1) ISO 4032	5022893

	Kassetten Cartridges								Passende Platten Suitable inserts
	Bestellbezeichnung Item Code	Bestell-Nr. Order No.	Verfügbarkeit Availability	B	L1	L2	H1	F1	
 **) HS	BRWC01-LN19 3223R	6401782	●	22,5	42,4	35	32	23	LNUX 1919.
	BRWC01-LN19 3223L	6401781	●	22,5	42,4	35	32	23	
	BRWC01-LN30 3223R	6401784	●	22,5	42,4	35	32	23	LNUX 3019.
	BRWC01-LN30 3223L	6401783	●	22,5	42,4	35	32	23	

	Kassetten Cartridges								Passende Platten Suitable inserts
	Bestellbezeichnung Item Code	Bestell-Nr. Order No.	Verfügbarkeit Availability	B	L1	L2	H1	F	
 **) NS	BRWC02-LN19 3219R	6401786	●	18,5	42,4	35	32	19,1	LNUX 191940
	BRWC02-LN19 3219L	6401785	●	18,5	42,4	35	32	19,1	

Ersatzteile für die Kassetten Spare parts for Cartridges BRWC..						
						
Wendeschneidplatte f. Kasette Inserts for cartridge	Kniehebel Toogle Lever	Bestell -Nr. Order No.	Spannschraube Fixation screw	Bestell -Nr. Order No.	Inbusschlüssel Allen key	Bestell -Nr. Order No.
LNUX 191940, LNUX 301940	D02-18170	6403967	A03-08235	6401282	V01-A0030	6407826

*) Rechtsausführung wie gezeichnet, Linksausführung spiegelbildlich **) HS = Hauptschneide
 *) Righthand version drawn, lefthand version mirrorlike = Main cutting edge
 **) NS = Nebenschneide = Minor cutting edge
 ● Verfügbar ab Lager Available from stock
 ○ Auf Anfrage On request

Sorte Grade	ISO	Anwendungsbereich Application range	Werkstoffgruppe Material group							Bearbeitungsverfahren Application				Farbliche Darstellung der WSP je nach Beschichtung Color guide for inserts depending on coating
			P Stahl Steel	M Rostfrei Stainless	K Grauguss Grey cast iron	N NE-Metalle Non-ferrous metals	S Hochwärmest High tempera- ture materials	H Harte Werkstoffe Hard materials	T Drehen Turning	M Fräsen Milling	D Bohren Drilling	S Gewinde- bearbeitung Threading		
LCP15T	HC-P15		■							●				
	HC-K15				□					●				
LCP25T	HC-P25		■							●				
	HC-M25			□						●				
BCP10T	HC-P10		■							●				
	HC-K15				□					●				
BCP20T	HC-P20		■							●				
	HC-K25			□						●				

Anwendungsschwerpunkt
Application peak

 Gesamtbereich nach ISO 513
Full range to ISO 513

■ Hauptanwendung
Main application
 □ Weitere Anwendungen
Further applications
 ● Standardsorte
Standard grade

Schneidstoffsorten Cutting grades

● LCP15T (HC-P15, HC-K15)

Drehsorte für Stahlwerkstoffe mit einer hohen Zugfestigkeit und Bearbeitungstemperatur. Auch für das Gussdrehen geeignet.

● LCP25T (HC-P25, HC-M25)

(Universelle Drehsorte)
Hauptsorte zum Drehen von Stahlwerkstoffen und leicht zerspanbarem rostbeständigem Stahl, bei mittleren Schnittgeschwindigkeiten, auch bei unterbrochenem Schnitt. Diese Mehrbereichssorte zeichnet sich durch hohe Verschleißfestigkeit und ausgezeichnete Zähigkeitseigenschaften in einem breiten Einsatzspektrum aus.

● BCP10T (HC-P10, HC-K15)

Verschleißbeständige Sorte mit CVD-Beschichtung, sehr gut geeignet bei hohen Schnittgeschwindigkeiten und glattem Schnitt. Ideal auch für hohe Stückzahlserien.

● BCP20T (HC-P20, HC-K25)

Zum Drehen von universellen Stahlwerkstoffen. Sorte besteht aus einem P20-Substrat mit einer CVD-Beschichtung. Hervorragend bei langem konstantem Schnitt bei mittlerer bis hoher Schnittgeschwindigkeit. Für leicht unterbrochene Bearbeitung, als auch zum Bearbeiten von Schmiedehaut und Zunder geeignet.

● LCP15T (HC-P15, HC-K15)

Grade for steel materials with a tensile strength and high temperature. Suitable for stainless steel application

● LCP25T (HC-P25, HC-M25)

(Universal turning grade)
Main grade for machining steel materials and easily machinable stainless steels at medium cutting speeds, included interrupted cut. This general purpose grade is characterized by the properties of high wear resistance and excellent characteristics across a wide range of applications.

● BCP10T (HC-P10, HC-K15)

Wear resistant grade with CVD coating, very good suitable for high cutting speeds and smooth cut. Ideal also for high quantities.

● BCP20T (HC-P20, HC-K25)

For turning of universal steel materials. Grade is a P20 substrate with CVD coating. Excellent for long constant cuts, on medium to high cutting speeds. For slight broken machining as well as suitable for machining of forging skin and tinder.



Technische Hinweise

Technical hints

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Schnittwertempfehlungen für Drehen LCP15T und LCP25T

Turning data recommendations for LCP15T and LCP25T

Werkstoffgruppe Material group	Gliederung der Werkstoff-Hauptgruppen und Kennbuchstaben			Brinell Härte Brinell hardness HB	Schnittgeschwindigkeit Cutting speed v_c (m/min)	
	Werkstoff Material				LCP15T	LCP25T
						
P	Unlegierter Stahl ¹⁾ Unalloyed steel ¹⁾	ca. 0,15 %C	geglüht annealed	125	70 - 200	50 - 170
		≈ 0,15 %C	geglüht annealed	190		
		ca. 0,45 %C	geglüht annealed	250		
		≈ 0,45 %C	vergütet hardened and temp.	270		
		ca. 0,75 %C	geglüht annealed	300		
	Niedrig legierter Stahl ¹⁾ Low-alloy steel ¹⁾	geglüht annealed		180	60 - 170	40 - 140
		vergütet hardened and temp.		275		
		vergütet hardened and temp.		300		
		vergütet hardened and temp.		350		
	Hochlegierter Stahl und hochlegierter Werkzeugstahl ¹⁾ High-alloy steel and high alloy tool steel ¹⁾	geglüht annealed		200	50 - 150	30 - 120
		gehärtet und angelassen hardened and temp.		325		
		Nichtrostender Stahl ¹⁾ Stainless steel ¹⁾	ferritisch/martensitisch geglüht ferritic/martensitic annealed			200
martensitisch vergütet martensitic hardened and temp.				240		
K	Grauguss Grey cast iron	perlitisch/ferritisch perlitic/ferritic		180	60 - 200	-
		perlitisch (martensitisch) perlitic (martensitic)		260		
	Gusseisen mit Kugelgraphit Nodular graphite cast iron	ferritisch ferritic		160		
		perlitisch perlitic		250		
	Temperguss Malleable cast iron	ferritisch ferritic		130		
		perlitisch perlitic		230		
M	Nichtrostender Stahl ¹⁾ Stainless steel ¹⁾	austenitisch ²⁾ , abgeschreckt austenitic ²⁾ , quenched		180	-	40 - 100

¹⁾ und Stahlguss and cast steel

 = Nassbearbeitung wet machining

 = Trockenbearbeitung dry machining

Schnittwertempfehlungen für Drehen BCP10T und BCP20T

Turning data recommendations for BCP10T and BCP20T

Werkstoffgruppe Material group	Gliederung der Werkstoff-Hauptgruppen und Kennbuchstaben		Brinell Härte Brinell hardness HB	Schnittgeschwindigkeit Cutting speed v _c (m/min)		
				BCP10T	BCP20T	
	Werkstoff Material					
P	Unlegierter Stahl ¹⁾ Unalloyed steel ¹⁾	ca. 0,15 %C gegläht ≈ 0,15 %C annealed	125	90 - 220	70 - 200	
		ca. 0,45 %C gegläht ≈ 0,45 %C annealed	190			
		ca. 0,45 %C vergütet ≈ 0,45 %C hardened and temp.	250			
		ca. 0,75 %C gegläht ≈ 0,75 %C annealed	270			
		ca. 0,75 %C vergütet ≈ 0,75 %C hardened and temp.	300			
	Niedrig legierter Stahl ¹⁾ Low-alloy steel ¹⁾	geglüht annealed	180	80 - 190	60 - 160	
		vergütet hardened and temp.	275			
		vergütet hardened and temp.	300			
		vergütet hardened and temp.	350			
	Hochlegierter Stahl und hochlegierter Werkzeugstahl ¹⁾ High-alloy steel and high alloy tool steel ¹⁾	geglüht annealed	200	70 - 170	50 - 140	
		gehärtet und angelassen hardened and temp.	325			
	Nichtrostender Stahl ¹⁾ Stainless steel ¹⁾	ferritisch/martensitisch ge- glüht ferritic/martensitic annealed	200	70 - 170	50 - 140	
		martensitisch vergütet martensitic hardened and temp.	240			
	K	Grauguss Grey cast iron	perlitisch/ferritisch perlitic/ferritic	180	80 - 220	-
			perlitisch (martensitisch) perlitic (martensitic)	260		
Gusseisen mit Kugelgraphit Nodular graphite cast iron		ferritisch ferritic	160			
		perlitisch perlitic	250			
Temperguss Malleable cast iron		ferritisch ferritic	130			
	perlitisch perlitic	230				
M	Nichtrostender Stahl ¹⁾ Stainless steel ¹⁾	austenitisch ²⁾ , abgeschreckt austenitic ²⁾ , quenched	180	-	60 - 120	

¹⁾ und Stahlguss
and cast steel

Trockenbearbeitung
Dry machining

Nassbearbeitung
Wet machining

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