

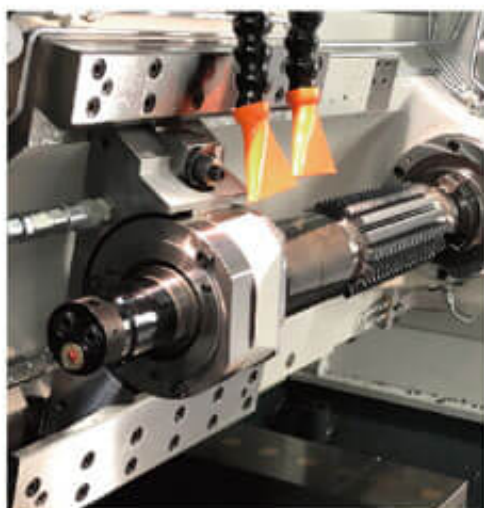
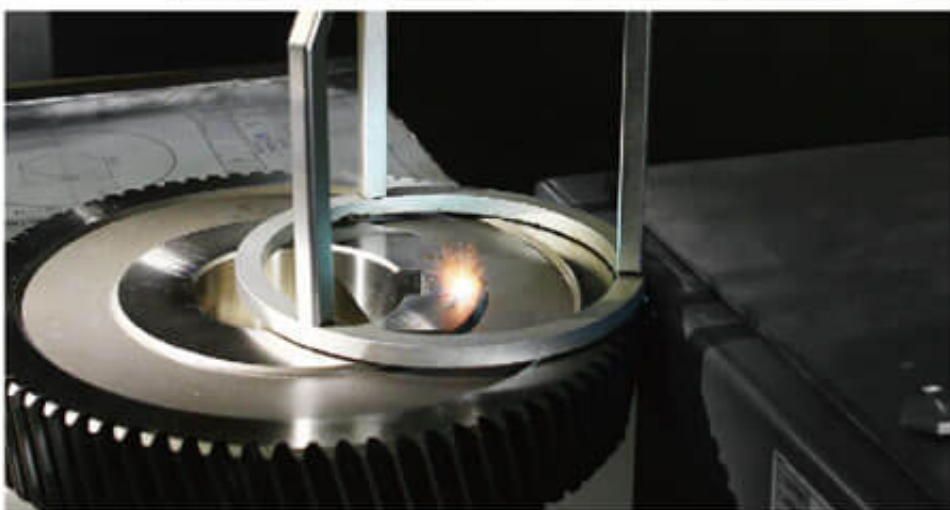
CATALOG **BSG** SINCE 1987



DESIGN INNOVATION

Gearbox for single screw extrudes
單螺桿齒輪箱





COMPANY PRESENTATION

BSG founded in 1987 in pursuit of constant innovation and breakthroughs is committed to gearbox design and fabrication and its application to all sorts of rubber and plastic machines, steel and iron, green field, energy and automatic equipment. Our premium parts, bulk, technology and craft meet the AGMA and DIN standards. We adopt the advanced processing equipment made in Germany and integrate our production lines into one. Upholding the demand-oriented motto, we make equipment with high performance demanded by our clients.

Our products are with the BSG design spirit that blends the look and rigidity for magnificence and taste. The high-quality gearbox is the accomplishment fulfilled by the BSG teamwork committed to details. Each component is secured to meet the standards via the precision gauge instruments to maximize the potency of the product.

BSG upholds the four values of Advanced craft, Innovative design, Quality and services, Exceptional performance. Our team is full of passion and committed constant advancement via learning for ongoing perfection and enrichment of the gearbox. We are dedicated to craft and aesthetics of our gearbox, optimize the performance and experience, and fulfill the demand of our clients for high performance.

公司介紹

BSG 自 1987 年創業以來，不斷追求創新與突破，致力專精於齒輪箱設計、製造、應用於各種橡塑膠機械、鋼鐵、環保、能源及自動化設備。嚴選零件原料與技術工藝皆符合 DIN 德國標準，採用先進德國加工設備、整合一貫化生產製造，堅持以客戶需求導向，滿足客戶對高性能的需求。

充滿 BSG 嶄新品牌設計語彙交融並蓄了外觀及剛性，呈現獨特的氣派與穩重並在極具質感的外表下，高品質的齒輪箱的源自於百象團隊對細節的專注，零件經過精密量測儀器嚴格的品質檢驗，確保零件均符合標準，提昇產品能發揮最佳效能。

秉持著「淬煉工藝、設計創新、品質服務、極致性能」四大價值，成為 BSG 的核心精神。我們團隊做到熱情、持續學習精進，不斷地完善和豐富它的內涵。創造齒輪箱成為細心雕琢的美感工藝、演譯極致性能的使用體驗，完成客戶對高性能需求的承諾。

TECHNICAL INFORMATION

Our gears are designed according to the AGMA standards and use helical teeth design in all of our product to reduce noise level. The outer casing of our gearboxes is made of FCD 50, and internal gears are made of SCM440, gear shafts are made of SNCM220. In addition, all of our gearboxes uses Japanese made bearings to ensure product stability and durability.

Finally, please note that we reserve the right to modify or change designs. We constantly update and improve our products to meet our customers' needs and provide the best user experience.

All Gearbox comes standard with internal tubing and external circulation cooling unit, filler cap with breather, filter, pump, oil level gauge, and pressure meter.

The gearbox is required to have a circulation system to provide cooling to the gear oil. The gear oil are to prevent damages to gear teeth and bearings within the gearbox. Filter is require to be cleaned or replace during every oil change service. All gearbox will be shipped without gear oil.

Initial run-in period should be within 300 operation hours. After 300 operation hours, user should perform an oil change service.

1. Fill oil to oil level gauges, then switch on oil pump to clear out the air within the circulation system.
2. Turn off oil pump.
3. Refill gear oil to the oil level gauges.

技術特點

百象機械的齒輪箱是依據 AGMA 的標準進行設計的並採用斜齒輪的設計以利降低噪音。齒輪箱外殼材質皆採用 FCD 50 球墨鑄鐵、內部齒輪材質則為 SCM420、齒輪軸為 SNCM220。我們的齒輪箱全部採用日本製軸承、以確保產品的穩定性及耐用度。

我們公司保有所有變更設計的權利。我們會不斷更新和改進產品以滿足客戶之需求、並提供最好的使用體驗。

所有齒輪箱居配備內部油路及外部循環冷卻系統、填油口帶有透氣閥、過濾器、泵浦、油位鏡、及壓力表。齒輪箱設置冷卻循環系統有利降低齒輪箱及齒輪油溫度作用於延長齒輪壽命且保護軸承。每次保養週期需清潔或更換過濾器。

首次運轉 300 小時需進行首次換油保養

1. 將油注入注油孔至油視鏡水平並開啟泵浦運轉五分鐘。
2. 將循環系統內部空氣排出。
3. 關閉泵浦並補足少缺的油量。

潤滑油	試用室溫	-30°C ~ -10°C	-15°C ~ +10°C	0°C ~ +30°C	+25°C ~ +50°C
	黏度等級	ISO VG 150	ISO VG 220	ISO VG 320	ISO VG 460
	AGIP	BLASIA 150	BLASIA 220	BLASIA 320	BLASIA 460
	ESSO	SPARTAN EP150	SPARTAN EP 220	SPARTAN EP 320	SPARTAN EP 460
	IP	MELLANA 150	MELLANA 220	MELLANA 320	MELLANA 460
	MOBIL	MOBILGEAR 629	MOBILGEAR 630	MOBILGEAR 632	MOBILGEAR 634
	OMALA 150	OMALA 150	OMALA 220	OMALA 320	OMALA 460

Gearbox for Single Screw Extruder (2 Stage)

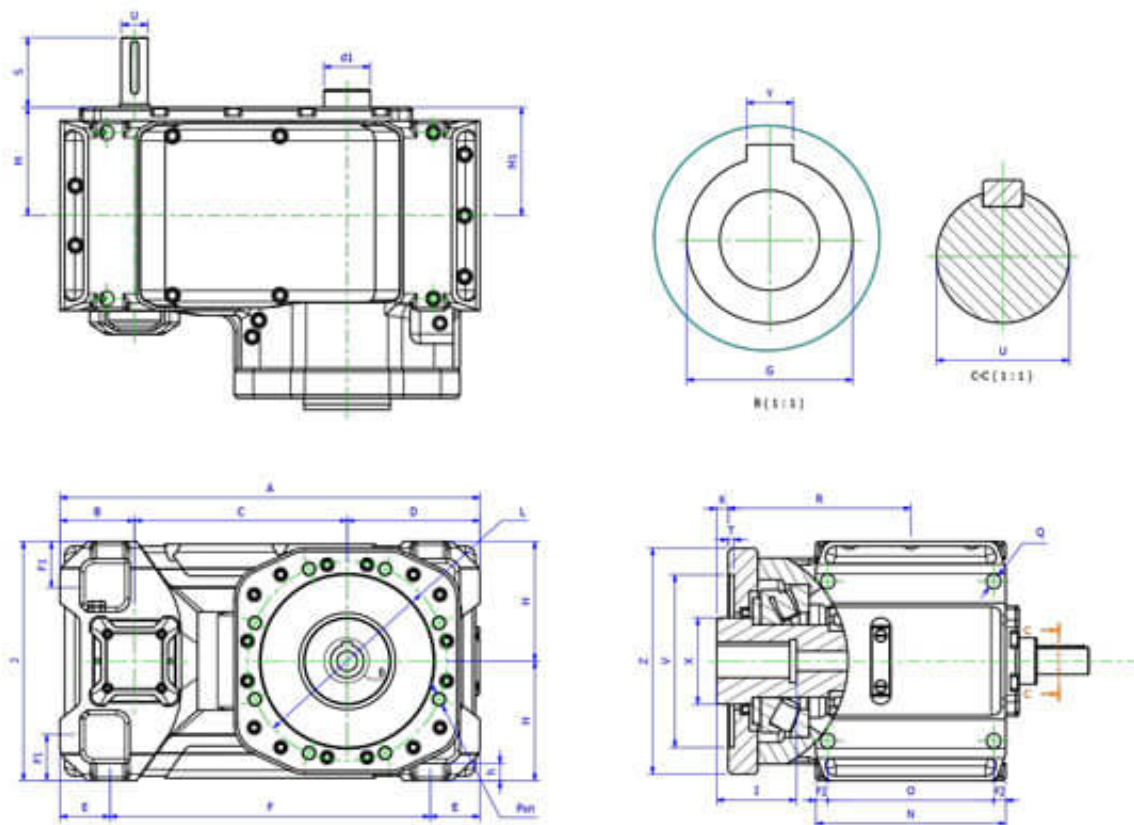
單螺桿齒輪箱 三軸式





Gearbox for Single Screw Extruder (2 Stage)

單螺桿齒輪箱 三軸式



Overall Dimensions 外觀尺寸表

Model 型號	A	B	C	D	d1	E	E1	F	F1	F2	G	H	h	I
NEX-112-3S	407	80	202	125	35	40	40	275	40	12	28	112	16	70
APEX-125-3S	455	90	225	140	50	60	50	345	45	17	28	125	18	80
APEX-140-3S	512	100	252	160	55	66	56	390	48	18	42	140	18	110
APEX-160-3S	565	100	285	180	55	63	63	439	50	15.5	45	160	20	100
APEX-180-3S	632	112	320	200	70	70	70	492	60	18	50	180	26	120
APEX-200-3S	725	140	360	225	85	95	80	550	70	25	60	200	31	135
APEX-225-3S	795	140	405	250	85	90	90	615	80	22.5	70	225	36	150
EX-250-3S	890	160	450	280	100	100	100	690	90	26	80	250	42	130
NEX-280-3S	1000	180	505	315	100	112	112	776	100	30	90	280	48	140
NEX-320-3S	1125	200	570	355	130	125	125	437.5	112	35	100	320	50	180
NEX-360-3S	1265	225	640	400	160	140	140	492	125	40	125	360	55	180
NEX-400-3S	1420	250	720	450	180	160	160	550	140	45	140	400	60	220

Model 型號	J	K	L	M	M1	N	n	O	P	Q	R	S	T
NEX-112-3S	224	8	170	106	106	196	8	160	M12	Ø14	180	56	9
APEX-125-3S	250	8	205	107	107	214	8	180	M12	Ø16	205	63	9
APEX-140-3S	280	8	230	118	118	236	8	200	M12	Ø18	230	70	9
APEX-160-3S	320	17	260	128	128	256	8	225	M20	Ø20	250	90	9
APEX-180-3S	360	17	300	143	143	280	8	250	M20	Ø22	275	100	9
APEX-200-3S	400	18	330	165	165	330	8	280	M20	Ø24	320	110	8
APEX-225-3S	450	45	330	180	180	360	12	315	M20	Ø27	355	120	8
EX-250-3S	500	20	400	203.5	203.5	407	12	355	M24	Ø30	405	130	7
NEX-280-3S	560	20	450	230	230	460	12	400	M24	Ø33	445	140	7
NEX-320-3S	640	20	500	260	260	520	12	450	M24	Ø36	510	170	14
NEX-360-3S	720	24	600	290	290	580	12	500	M30	Ø39	584	180	10
NEX-400-3S	800	24	680	340	345	650	12	560	M36	Ø42	640	200	10

- Weights and oil volume are approximate measures 重量與油量僅為預估值
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- Service Factor 安全係數 (Fs)
- Technical data is calculated based on $F_s = 1$ (AGMA)
- For regular applications we recommend selecting $F_s > 1.2$
- For heavy duty application we recommend $F_s > 1.5$
- 數據列表所參考的安全規範為 $F_s = 1$ (AGMA)
- 一般應用建議安全係數為 $F_s > 1.5$

Overall Dimensions 外觀尺寸表

Model 型號	U	V	Y	X	Z	Thrust Bearing	Weights (KG) 重量	Oil (KG) 油量
NEX-112-3S	22	150	10	70	200	29412E	82	4
APEX-125-3S	28	180	10	80	230	29415E	115	5.5
APEX-140-3S	32	200	12	90	270	29417E	160	6.5
APEX-160-3S	35	215	14	110	300	29420E	222	10
APEX-180-3S	40	260	14	130	340	29424E	328	14
APEX-200-3S	45	290	18	140	360	29428E	475	19
APEX-225-3S	50	290	20	160	410	29430E	604	23
EX-250-3S	55	365	22	170	450	29434E	859	33
NEX-280-3S	60	400	24	180	500	29436E	1266	45
NEX-320-3S	70	450	20	200	600	29440E	1789	75
NEX-360-3S	80	520	22	215	680	29452E	2595	106
NEX-400-3S	90	600	26	300	750	29456E	3725	135

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Datasheets 數據列表

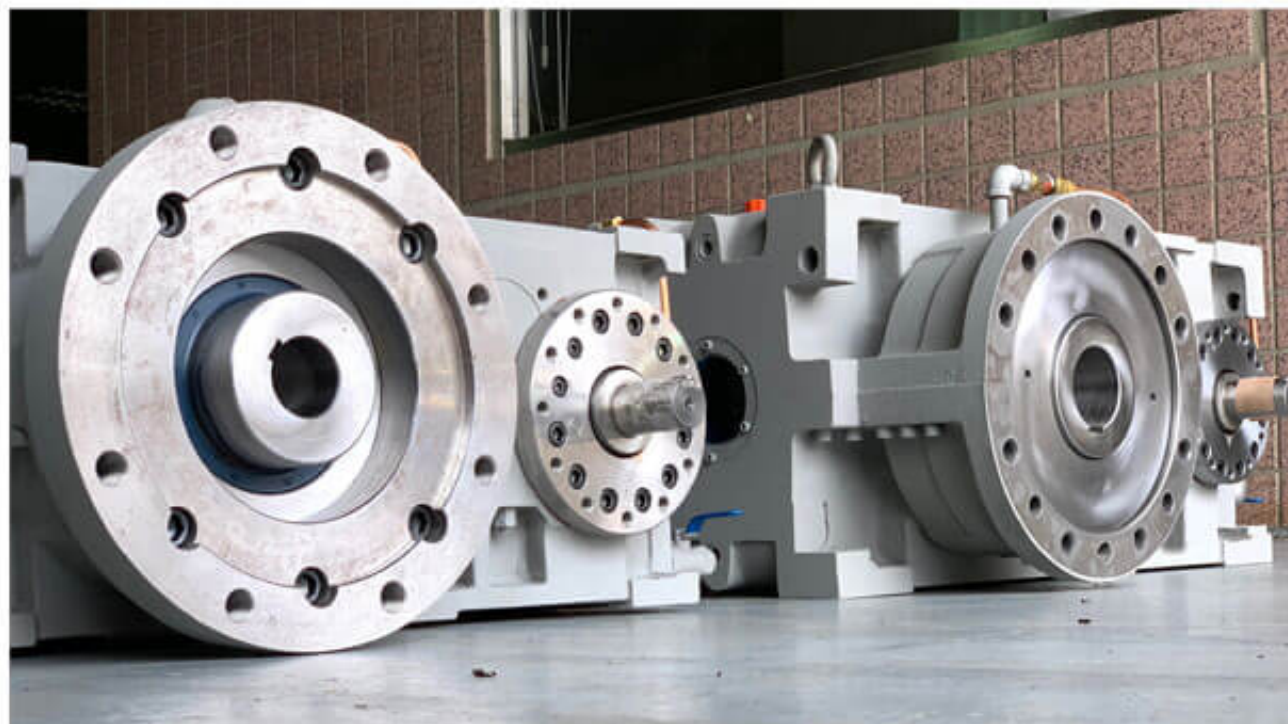
Model/ 型號	I Ratio 減速比	n1 [min-1] 輸入軸轉速	n2 [min-1] 輸出軸轉速	Pn** [kW] 額定馬力	Mt(Nm) 額定扭矩 Fs=1
NEX-112-3S	6.3	1800	286	51	1708
	10	1500	150	35	2252
	16	1000	63	15	2310
APEX-125-3S	6.3	1800	286	70	2330
	10	1500	150	50	3189
	16	1000	63	21	3220
APEX-140-3S	6.3	1800	286	97	3250
	10	1500	150	71	4489
	16	1000	63	29	4430
APEX-160-3S	6.3	1800	286	138	4598
	10	1500	150	102	6470
	16	1000	63	43	6601
APEX-180-3S	6.3	1800	286	191	6371
	10	1500	150	147	9350
	16	1000	63	58	8845
APEX-200-3S	6.3	1800	286	266	8900
	10	1500	150	195	12435
	16	1000	63	83	12688
APEX-225-3S	6.3	1800	286	392	13111
	10	1500	150	275	17480
	16	1000	63	116	17765
EX-250-3S	6.3	1800	286	511	17088
	10	1500	150	374	23779
	16	1000	63	159	24276
NEX-280-3S	6.3	1800	286	735	24551
	10	1500	150	551	35070
	16	1000	63	230	35117
NEX-320-3S	6.3	1800	286	1044	34882
	10	1500	150	790	50276
	16	1000	63	335	51172
NEX-360-3S	6.3	1800	286	1492	49849
	10	1500	150	1141	72622
	16	1000	63	463	70768
NEX-400-3S	6.3	1800	286	2092	69919
	10	1500	150	1564	99568
	16	1000	63	664	101433

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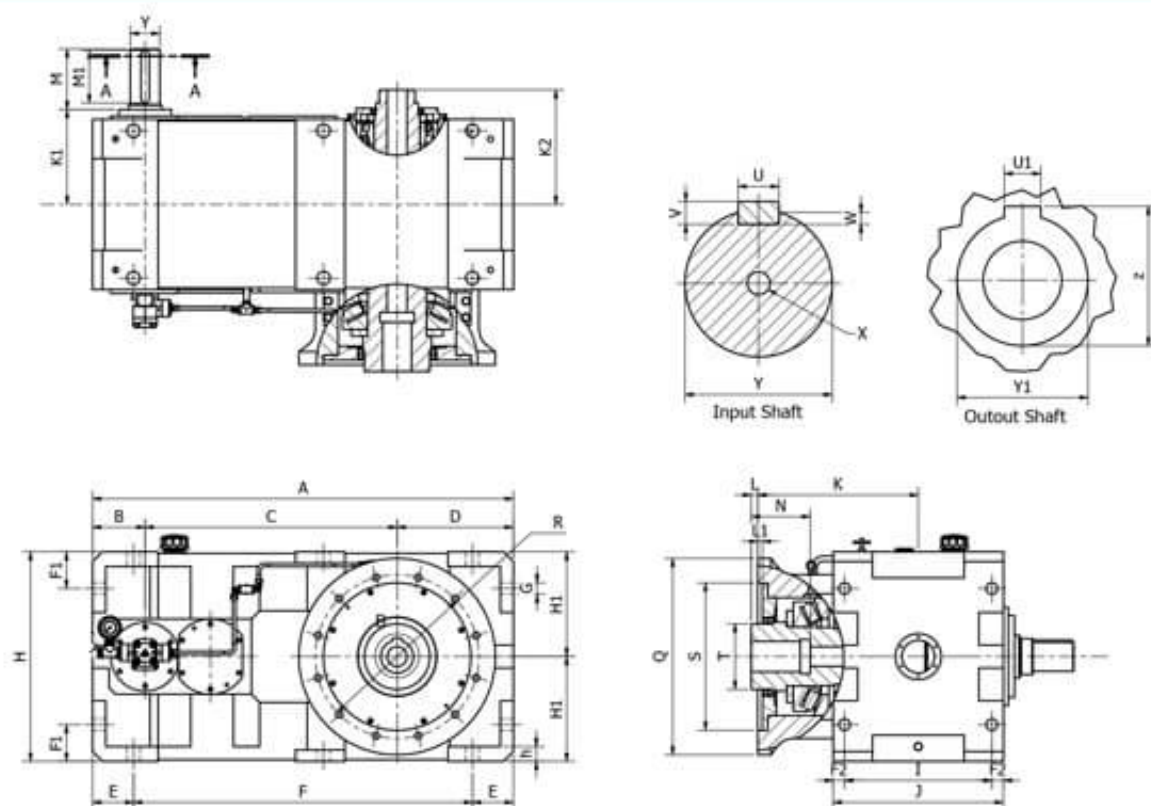
Gearbox For Single Screw Extruder (Three Stage)

單螺桿機齒輪箱 四軸式



Gearbox For Single Screw Extruder (Three Stage)

單螺桿機齒輪箱 四軸式



Overall Dimensions 外觀尺寸表

Model/ 型號	A	B	C	D	E	F	F1	F2	G	H	H1	h	I	J	K	K1	K2	L	L1	M	M1
NEX-125-4S	525	80	305	140	50	408	45	12	14	250	125	17	180	204	205	80	135	8	5	56	50
NEX-140-4S	592	90	342	160	56.5	459	48	13	15	280	140	18	200	226	230	90	145	8	5	63	55
NEX-160-4S	665	100	385	180	63	539	50	15.5	17	320	160	21	225	256	250	130	160	17	6	70	60
NEX-180-4S	744	112	432	200	70	604	60	18	20	360	180	26	250	286	275	140	190	17	6	80	70
NEX-200-4S	835	125	485	225	80	675	70	20	24	400	200	31	280	320	320	190	245	18	6	90	80
EX-225-4S	953	140	545	250	90	755	80	22.5	27	450	225	36	315	360	355	210	270	18	6	100	90
EX-250-4S	1050	160	610	280	100	850	90	26	30	500	250	42	355	407	405	235	300	20	8	112	100
EX-280-4S	1180	180	685	315	112	956	100	30	33	560	280	48	400	460	445	260	320	20	8	125	110
EX-320-4S	1325	200	770	355	125	1035	112	35	36	630	315	50	450	520	490	290	350	20	8	140	130
EX-360-4S	1490	225	865	400	140	1210	125	40	39	710	355	55	500	580	560	322	390	24	10	160	150
EX-400-4S	1670	250	970	450	160	1350	140	45	42	800	400	60	560	650	640	370	425	24	10	180	170

Model/ 型號	N	Q	R	S	T	U	U1	V	W	X	Y	Y1	Z	Oil (KG) 油量	Weights (KG) 重量
NEX-125-4S	80	230	205	180	80	8	10	8	4.5	M8	22	32	31.3	6	127
NEX-140-4S	80	260	230	200	90	10	10	8	4.5	M8	24	38	38.3	7.2	169
NEX-160-4S	100	300	260	230	110	10	12	8	4.5	M10	28	42	48.8	10	261
NEX-180-4S	110	350	300	260	130	12	14	10	5	M10	32	48	53.8	17	350
NEX-200-4S	120	380	330	290	140	14	18	12	6	M10	40	60	64.3	28	490
EX-225-4S	140	400	350	310	160	14	20	13	6	M12	45	70	74.9	30	656
EX-250-4S	140	450	400	365	170	16	22	13	6	M12	50	80	85.3	48	900
EX-280-4S	140	500	450	400	180	18	25	16	6	M16	55	90	95.4	66	1300
EX-320-4S	140	600	500	450	190	20	28	18	7	M16	60	100	106	98	1890
EX-360-4S	160	680	600	520	200	22	28	18	9	M20	70	110	116	138	2820
EX-400-4S	180	750	680	600	220	25	32	20	10	M20	80	125	137	155	4020

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NEX-125-4S	10	1800	180	232	12325
	16	1500	94	125	12748
	20	1000	50	68	12933
NEX-140-4S	10	1800	180	311	16502
	16	1500	94	173	17592
	20	1000	50	92	17511
NEX-160-4S	10	1800	180	444	23570
	16	1500	94	240	24402
	20	1000	50	130	24808
NEX-180-4S	10	1800	180	613	32522
	16	1500	94	341	34731
	20	1000	50	186	35600
NEX-200-4S	10	1800	180	899	47680
	16	1500	94	499	50842
	20	1000	50	273	52099
EX-225-4S	10	1800	180	1258	66716
	16	1500	94	720	73328
	20	1000	50	371	70911
EX-250-4S	10	1800	180	1847	97962
	16	1500	94	992	101058
	20	1000	50	542	103572
EX-280-4S	10	1800	180	613	32522
	16	1500	94	341	34731
	20	1000	50	186	35600
EX-320-4S	10	1800	180	899	47680
	16	1500	94	499	50842
	20	1000	50	273	52099
EX-360-4S	10	1800	180	1258	66716
	16	1500	94	720	73328
	20	1000	50	371	70911
EX-400-4S	10	1800	180	1847	97962
	16	1500	94	992	101058
	20	1000	50	542	103572

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General terms of sales

• Quotations

All quotations are only valid for 30 days unless otherwise specified.

• Order Confirmations

All orders are valid once payment terms and technical drawings have been signed or stamped and returned via email or fax.

• Delivery

All delivery times are as listed in the quote. If there are any delays or if the order is completed before the due date, sales will contact the buyer to make other arrangements.

• Shipment

All orders are quoted based on Incoterms Ex-works, unless specified otherwise.

• Packaging

Standard packaging is included in the quotation. Special requests will be charged additionally.

• Return of Goods

Returns will not be accepted unless authorized by BSG Gear Ltd.

• Warranty

The standard warranty period is 12 months from the date of delivery, unless specified otherwise in the quotation. Any warranty service required must be acknowledged by the buyer within this period of time. If goods are found to be faulty due to materials or manufacturing, all replacement or repair will be free of charge. Standard warranty service will involve shipping spare parts to the buyer for replacement with guided help. Any alternative should be discussed with the manufacturer. The warranty will be invalid if goods have been used incorrectly, tampered with, or damaged by third parties, or if they were installed improperly. The standard warranty period is 12 months from the date of delivery, unless specified otherwise in the quotation. Any warranty service required must be acknowledged by the buyer within this period of time. If goods are found to be faulty due to materials or manufacturing, faulty merchandise shall be ship back to seller's workshop freight fare prepaid. All replacement or repair will be free of charge. Standard warranty service will involve shipping spare parts to the buyer for replacement with guided help. Any alternative should be discussed with the manufacturer. The warranty will be invalid if goods have been used incorrectly, tampered with, or damaged by third parties, or if they were installed improperly.

• Payment

The standard payment terms are 50% in advance and 50% before shipping. All payments should be made using the same company details as specified in the quotation. Payments will only be accounted for once they have been accepted into the supplier's account.

交易條件

• 報價

所有報價僅在 30 天內有效。

• 訂單確認

所有訂單將以收到預付款和技術圖紙簽字或蓋章後，並通過電子郵件 / 傳真回傳確認後才生效。

• 交貨

交貨時間依照報價單上的交期進行。如果延遲或提前完成訂單，銷售人員將與買方聯繫進行其他安排。

• 裝運

所有訂單的報價基於交易條件 EXW，除非另外說明。

• 包裝

報價中已包含標準包裝。如有特殊要求，將額外收費。

• 退貨

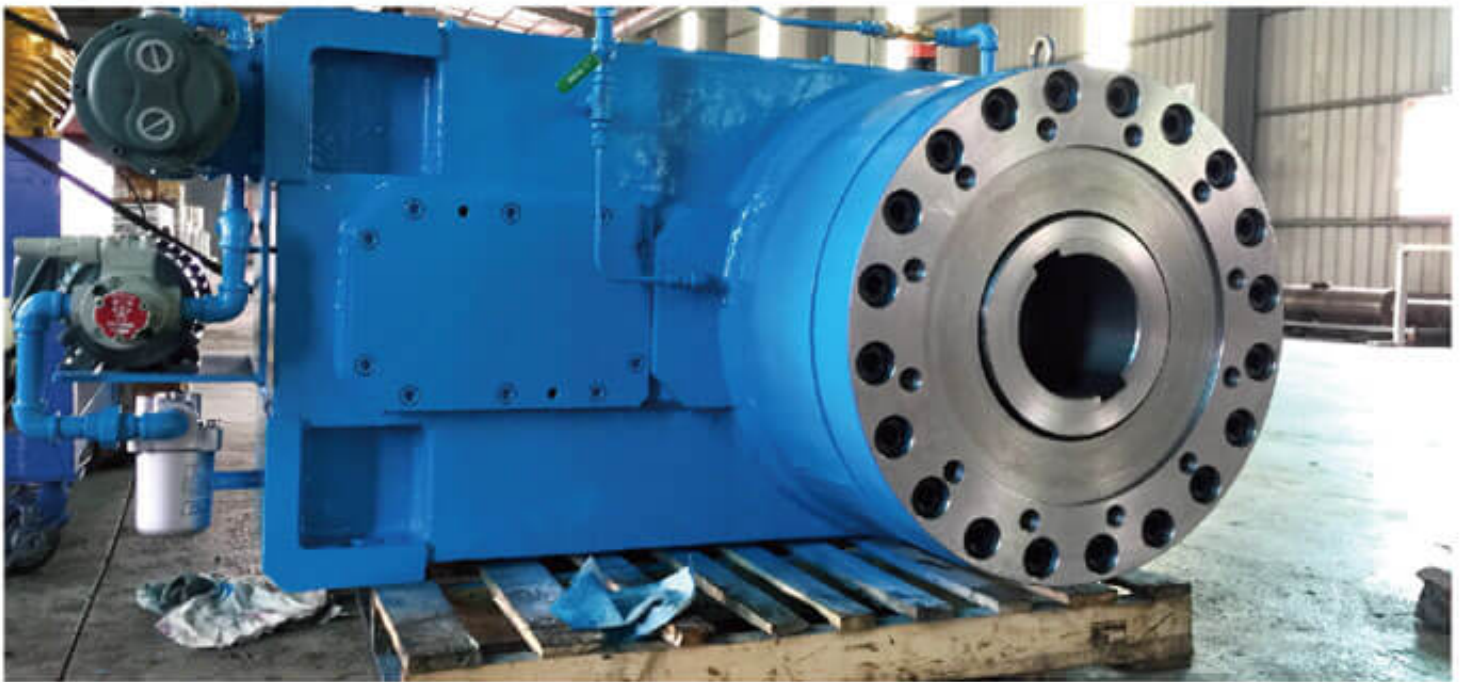
除非經本公司授權，否則不接受任何退貨。

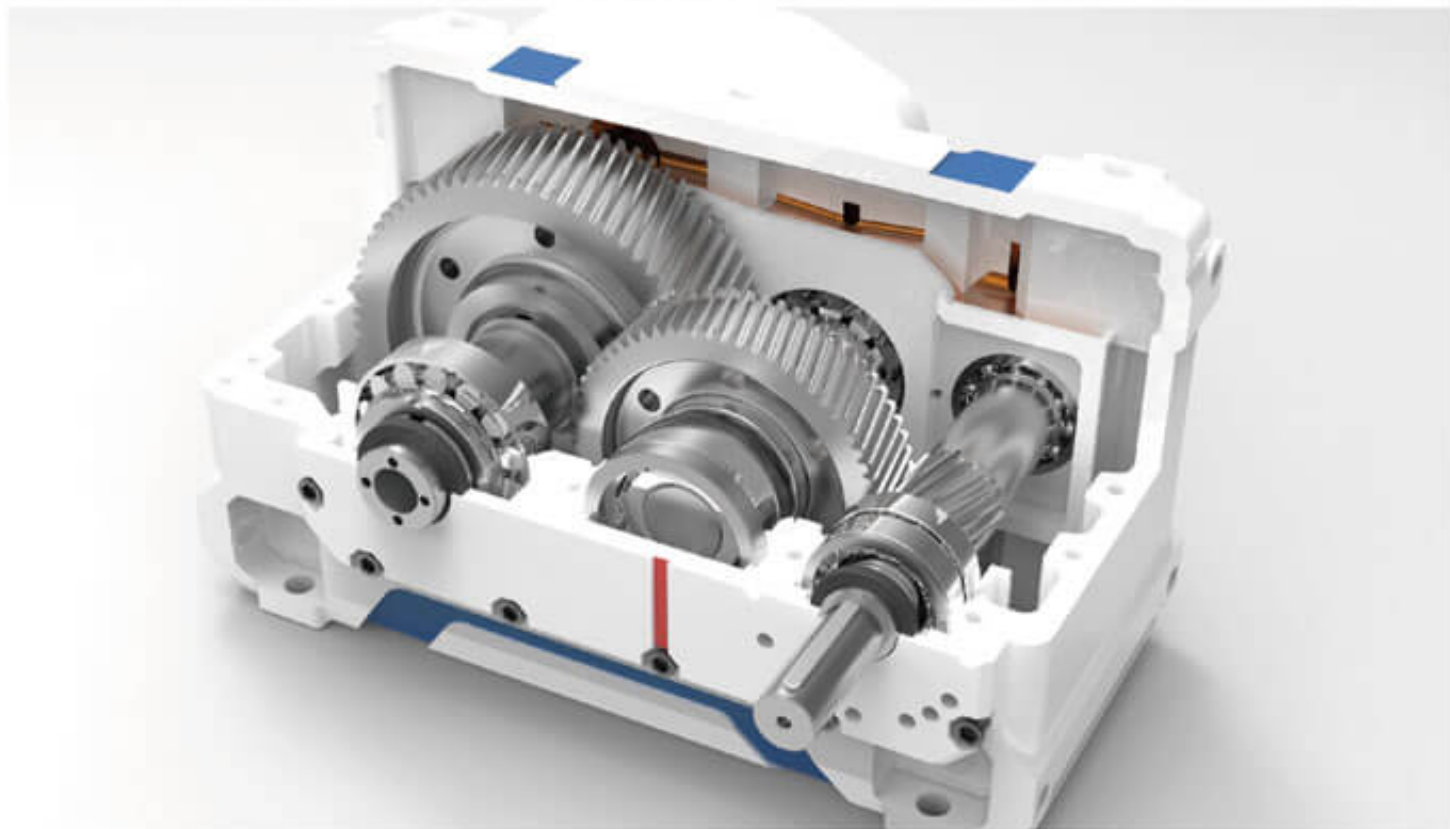
• 保固期

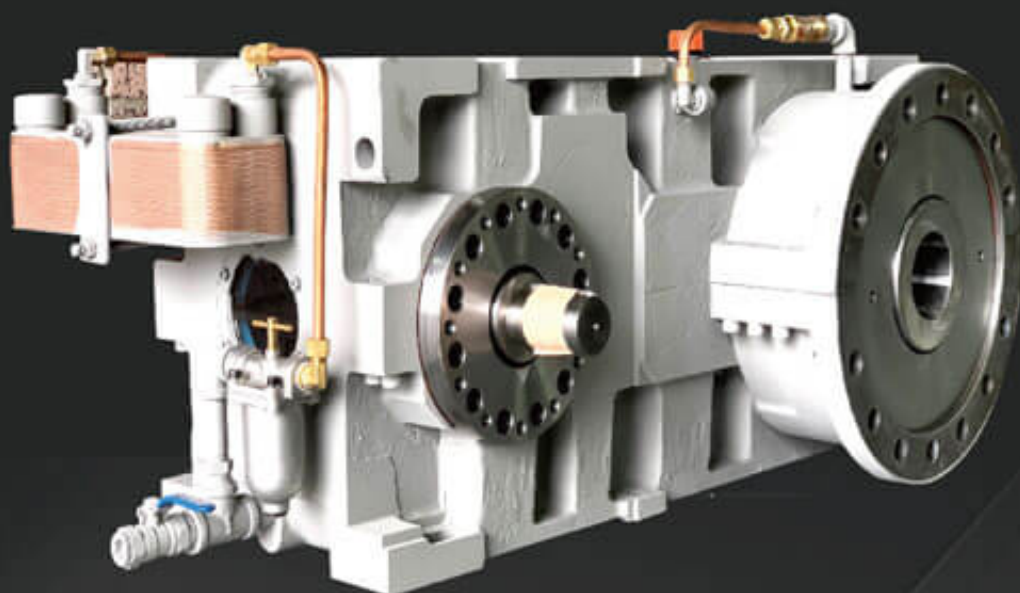
標準保固期為交貨後 12 個月內，除非報價中另有說明。任何保固服務必須在此期限內收到買方通知。如果產品因材料或生產原因出現故障，所有更換或維修服務將為免費。標準保固服務方式為賣方提供備品給予客戶進行替換並提供遠端技術指導。任何其他替代方案應與製造商討論。如果產品被認定為不當使用、被擅自改動、或安裝不當所導致損壞，以上將不列為保固範圍。除非報價中另有說明，標準保固期為交貨後 12 個月內，任何保固服務必須在此期限內收到買方通知。如果產品因材料或生產原因出現故障，故障品應由買方自費運送至賣方工廠，替代品或維修服務將為免費。任何其他替代方案應與製造商討論。如果產品被認定為不當使用、被擅自改動、或安裝不當所導致損壞，以上將不列為保固範圍。

• 付款條件

標準付款條件為 50% 預付款和 50% 出貨前結清。所有付款應與報價單中公司名相符。







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